

# RoHS対応型 温度ヒューズ

## Thermal Cutoffs (Conform with RoHS Directive)

2005. 08



# K-F Series

### 用語説明 Explanation of Terminology

公称動作温度 Tf  
Rated functioning temperature Tf

安全規格で定められた動作温度。  
電安法 ±7  
その他 +0,-10  
Tf is operating temperature defined by the safety standard.  
DENAN ±7  
The other standards +0,-10

動作温度  
Functioning temperature

1分間に0.5 上昇するオイルバス中で温度ヒューズが動作した時の温度であり、使用する際の目安である。  
It is temperature at which thermal cutoffs operate in the oil bath which goes up 0.5/min. And it is a criterion for using cutoffs.

TH

定格電流を168時間流し続けても動作しない最高保持温度。  
The maximum holding temp at which no fuse will start working even if rated current was continuously flown for 168 hours.

TM

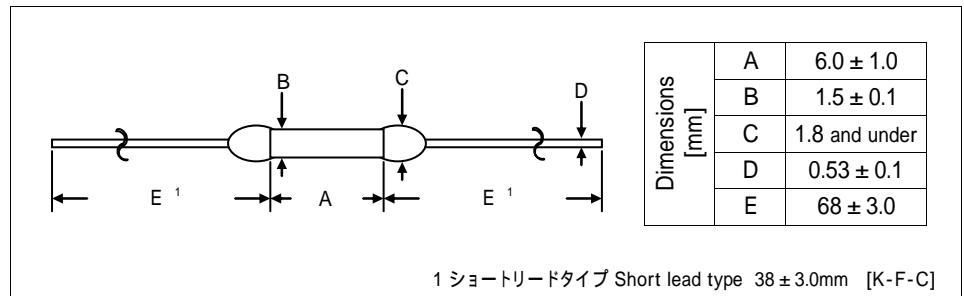
動作した温度ヒューズが10分間再導通しない最高温度。  
The maximum temp at which no re-conduction will be caused for 10 minutes for thermal cutoffs.

Approval No.

UL, C-UL ; E73591  
VDE ; 40005100, 40009857

### 注意事項 Cautions

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Design, Specifications are subject to change without notice.  
Please exchange specifications, before adoption.



| 製品名<br>Type No.  | 公称動作温度<br>Tf [ ] | 動作温度<br>Functioning temperature [ ] | 電気定格 Rating |                   |                   | TH [ ] | TM [ ] | 規格認証 Approved <sup>2</sup> |     |      |     |
|------------------|------------------|-------------------------------------|-------------|-------------------|-------------------|--------|--------|----------------------------|-----|------|-----|
|                  |                  |                                     | AC/DC       | 電圧<br>Voltage [V] | 電流<br>Current [A] |        |        | UL<br>C-UL                 | VDE | BEAB | CCC |
| K06F             | 65               | 61 ± 3                              | AC          | 250               | 1.0               | 55     | 200    |                            |     |      |     |
| K2F              | 102              | 98 ± 3                              | AC          | 250               | 1.0               | 80     | 200    |                            |     |      |     |
|                  |                  |                                     | DC          | 125               | 2.0               | 75     |        |                            |     |      | -   |
| K11 <sup>3</sup> | 115              | 112 ± 2                             | AC          | 250               | 1.0               | 95     | 160    |                            |     |      |     |
|                  |                  |                                     | DC          | 50                | 3.0               | 90     |        |                            |     |      | -   |
| K3F              | 115              | 111 ± 2                             | AC          | 250               | 1.0               | 99     | 200    |                            |     |      |     |
|                  |                  |                                     | DC          | 125               | 2.0               | 95     |        |                            |     |      | -   |
| K4F              | 127              | 123 ± 2                             | AC          | 250               | 1.0               | 110    | 200    |                            |     |      |     |
|                  |                  |                                     | DC          | 125               | 2.0               | 110    |        |                            |     |      | -   |
| K13F             | 133              | 129 ± 3                             | AC          | 250               | 1.0               | 110    | 200    |                            |     |      |     |
|                  |                  |                                     | DC          | 125               | 2.0               | 105    |        |                            |     |      | -   |
| K5F              | 136              | 131 ± 2                             | AC          | 250               | 1.0               | 115    | 200    |                            |     |      |     |
|                  |                  |                                     | DC          | 125               | 2.0               | 105    |        |                            |     |      | -   |
| K6F              | 139              | 134 ± 2                             | AC          | 250               | 1.0               | 120    | 200    |                            |     |      |     |
|                  |                  |                                     | DC          | 125               | 1.5               | 120    |        |                            |     |      | -   |
| K7F              | 145              | 140 ± 2                             | AC          | 250               | 1.0               | 125    | 200    |                            |     |      |     |
|                  |                  |                                     | DC          | 125               | 2.0               | 125    |        |                            |     |      | -   |
|                  |                  |                                     | DC          | 50                | 3.0               | 120    |        |                            |     |      |     |

<sup>2</sup> 電安法は全製品AC250V定格認可済み  
All products are approved by DENAN (AC250V)

認可 Approved

<sup>3</sup> 現行品 (RoHS対応型)  
The conventional product (Conform with RoHS Directive)

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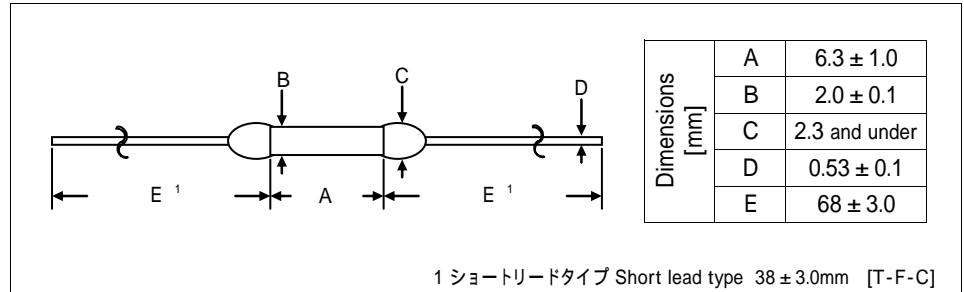
# RoHS対応型 温度ヒューズ

## Thermal Cutoffs (Conform with RoHS Directive)

2005. 08



# T-F Series



### 用語説明 Explanation of Terminology

公称動作温度 Tf  
Rated functioning temperature Tf

安全規格で定められた動作温度。  
電安法 ±7  
その他 +0,-10  
Tf is operating temperature defined by the safety standard.  
DENAN ±7  
The other standards +0,-10

動作温度  
Functioning temperature

1分間に0.5 上昇するオイルバス中で温度ヒューズが動作した時の温度であり、使用する際の目安である。  
It is temperature at which thermal cutoffs operate in the oil bath which goes up 0.5/min. And it is a criterion for using cutoffs.

TH

定格電流を168時間流し続けても動作しない最高保持温度。  
The maximum holding temp at which no fuse will start working even if rated current was continuously flown for 168 hours.

TM

動作した温度ヒューズが10分間再導通しない最高温度。  
The maximum temp at which no re-conduction will be caused for 10 minutes for thermal cutoffs.

Approval No.

UL, C-UL ; E73591  
VDE ; 40005277, 40009915

### 注意事項 Cautions

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Please exchange specifications, before adoption.

| 製品名<br>Type No.   | 公称動作<br>温度<br>Tf [ ] | 動作温度<br>Functioning<br>temperature<br>[ ] | 電気定格 Rating |                      |                      |     | TH<br>[ ] | TM<br>[ ] | 規格認証 Approved <sup>2</sup> |     |      |     |
|-------------------|----------------------|---|-------------|----------------------|----------------------|-----|-----------|-----------|----------------------------|-----|------|-----|
|                   |                      |   | AC/<br>DC   | 電圧<br>Voltage<br>[V] | 電流<br>Current<br>[A] |     |           |           | UL<br>C-UL                 | VDE | BEAB | CCC |
| T06F              | 65                   | 61 ± 3                                    | AC          | 250                  | 1.0                  | 50  | 200       |           |                            |     |      |     |
| T0F               | 76                   | 72 ± 3                                    | AC          | 250                  | 1.0                  | 55  | 200       |           |                            |     |      |     |
|                   |                      |   | DC          | 125                  | 2.0                  | 55  |           |           |                            |     |      |     |
| VS08 <sup>3</sup> | 86                   | 81 ± 2                                    | AC          | 250                  | 1.0                  | 60  | 95        |           |                            |     |      |     |
|                   |                      |   | DC          | 50                   | 2.5                  | 50  |           |           |                            |     |      |     |
| T2F               | 102                  | 98 ± 3                                    | AC          | 250                  | 2.0                  | 75  | 200       |           |                            |     |      |     |
|                   |                      |   | DC          | 125                  | 3.0                  | 70  |           |           |                            |     |      |     |
| VS11 <sup>3</sup> | 117                  | 112 ± 2                                   | AC          | 250                  | 1.0                  | 95  | 160       |           |                            |     |      |     |
|                   |                      |   | DC          | 50                   | 3.0                  | 95  |           |           |                            |     |      |     |
| T3F               | 115                  | 111 ± 2                                   | AC          | 250                  | 2.0                  | 95  | 200       |           |                            |     |      |     |
|                   |                      |   | DC          | 125                  | 3.0                  | 90  |           |           |                            |     |      |     |
| T4F               | 127                  | 123 ± 2                                   | AC          | 250                  | 2.0                  | 110 | 200       |           |                            |     |      |     |
|                   |                      |   | DC          | 125                  | 3.0                  | 110 |           |           |                            |     |      |     |
| T13F              | 133                  | 129 ± 3                                   | AC          | 250                  | 2.0                  | 105 | 200       |           |                            |     |      |     |
|                   |                      |   | DC          | 50                   | 4.0                  | 80  |           |           |                            |     |      |     |
| T5F               | 136                  | 131 ± 2                                   | AC          | 250                  | 2.0                  | 105 | 200       |           |                            |     |      |     |
|                   |                      |   | DC          | 125                  | 3.0                  | 95  |           |           |                            |     |      |     |
| T6F               | 139                  | 134 ± 2                                   | AC          | 250                  | 2.0                  | 120 | 200       |           |                            |     |      |     |
|                   |                      |   | DC          | 125                  | 3.0                  | 110 |           |           |                            |     |      |     |
| T7F               | 145                  | 140 ± 2                                   | AC          | 250                  | 1.0                  | 125 | 200       |           |                            |     |      |     |
|                   |                      |   | DC          | 125                  | 2.5                  | 125 |           |           |                            |     |      |     |
|                   |                      |   | DC          | 50                   | 3.0                  | 115 |           |           |                            |     |      |     |

<sup>2</sup> 電安法は全製品AC250V定格認可済み  
All products are approved by DENAN (AC250V)

認可 Approved

<sup>3</sup> 現行品 (RoHS対応型)  
The conventional product (Conform with RoHS Directive)

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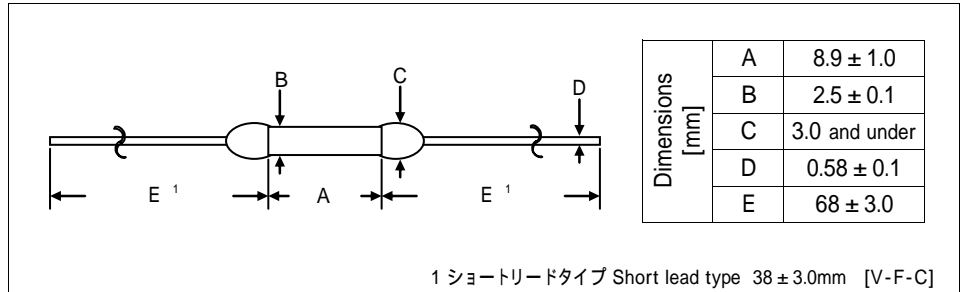
# RoHS対応型 温度ヒューズ

## Thermal Cutoffs (Conform with RoHS Directive)

2005. 08



# V-F Series



| Dimensions<br>[mm] | A | 8.9 ± 1.0     |
|--------------------|---|---------------|
|                    | B | 2.5 ± 0.1     |
|                    | C | 3.0 and under |
|                    | D | 0.58 ± 0.1    |
|                    | E | 68 ± 3.0      |

### 用語説明 Explanation of Terminology

公称動作温度 Tf  
Rated functioning temperature Tf

安全規格で定められた動作温度。  
電安法 ±7  
その他 +0,-10  
Tf is operating temperature defined by the safety standard.  
DENAN ±7  
The other standards +0,-10

動作温度  
Functioning temperature

1分間に0.5 上昇するオイルバス中で温度ヒューズが動作した時の温度であり、使用する際の目安である。  
It is temperature at which thermal cutoffs operate in the oil bath which goes up 0.5/min. And it is a criterion for using cutoffs.

TH

定格電流を168時間流し続けても動作しない最高保持温度。  
The maximum holding temp at which no fuse will start working even if rated current was continuously flown for 168 hours.

TM

動作した温度ヒューズが10分間再導通しない最高温度。  
The maximum temp at which no re-conduction will be caused for 10 minutes for thermal cutoffs.

Approval No.

UL, C-UL ; E73591  
VDE ; 40004916, 40009713

### 注意事項 Cautions

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| 製品名<br>Type No.   | 公称動作<br>温度<br>Tf [ ° ] | 動作温度<br>Functioning<br>temperature<br>[ ° ] | 電気定格 Rating |                      |                      |     | TH<br>[ ° ] | TM<br>[ ° ] | 規格認証 Approved <sup>2</sup> |     |      |     |
|-------------------|------------------------|---|-------------|----------------------|----------------------|-----|-------------|-------------|----------------------------|-----|------|-----|
|                   |                        |   | AC/<br>DC   | 電圧<br>Voltage<br>[V] | 電流<br>Current<br>[A] |     |             |             | UL<br>C-UL                 | VDE | BEAB | CCC |
| V06F              | 65                     | 61 ± 3                                      | AC          | 250                  | 3.0                  | 50  | 200         |             |                            |     |      |     |
| V0F               | 76                     | 72 ± 3                                      | AC          | 250                  | 2.0                  | 50  | 200         |             |                            |     |      |     |
|                   |                        |   | DC          | 125                  | 3.5                  | 50  |             |             |                            |     |      |     |
| V086 <sup>3</sup> | 86                     | 81 ± 2                                      | AC          | 250                  | 2.0                  | 60  | 95          |             |                            |     |      |     |
|                   |                        |   | DC          | 50                   | 4.0                  | 45  |             |             |                            |     |      |     |
| V2F               | 102                    | 98 ± 3                                      | AC          | 250                  | 3.0                  | 75  | 200         |             |                            |     |      |     |
|                   |                        |   | DC          | 125                  | 4.0                  | 70  |             |             |                            |     |      |     |
| V110 <sup>3</sup> | 117                    | 112 ± 2                                     | AC          | 250                  | 2.0                  | 95  | 160         |             |                            |     |      |     |
|                   |                        |   | DC          | 50                   | 5.0                  | 85  |             |             |                            |     |      |     |
| V3F               | 115                    | 111 ± 2                                     | AC          | 250                  | 3.0                  | 95  | 200         |             |                            |     |      |     |
|                   |                        |   | DC          | 125                  | 4.0                  | 90  |             |             |                            |     |      |     |
| V4F               | 127                    | 123 ± 2                                     | AC          | 250                  | 3.0                  | 110 | 200         |             |                            |     |      |     |
|                   |                        |   | DC          | 125                  | 4.0                  | 105 |             |             |                            |     |      |     |
| V13F              | 133                    | 129 ± 3                                     | AC          | 250                  | 3.0                  | 100 | 200         |             |                            |     |      |     |
|                   |                        |   | DC          | 50                   | 5.0                  | 80  |             |             |                            |     |      |     |
| V5F               | 136                    | 131 ± 2                                     | AC          | 250                  | 3.0                  | 100 | 200         |             |                            |     |      |     |
|                   |                        |   | DC          | 125                  | 4.0                  | 85  |             |             |                            |     |      |     |
| V6F               | 139                    | 134 ± 2                                     | AC          | 250                  | 3.0                  | 115 | 200         |             |                            |     |      |     |
|                   |                        |   | DC          | 125                  | 4.0                  | 100 |             |             |                            |     |      |     |
| V7F               | 145                    | 140 ± 2                                     | AC          | 250                  | 3.0                  | 125 | 200         |             |                            |     |      |     |
|                   |                        |   | DC          | 125                  | 4.5                  | 110 |             |             |                            |     |      |     |

<sup>2</sup> 電安法は全製品AC250V定格認可済み  
All products are approved by DENAN (AC250V)

認可 Approved

<sup>3</sup> 現行品 (RoHS対応型)  
The conventional product (Conform with RoHS Directive)

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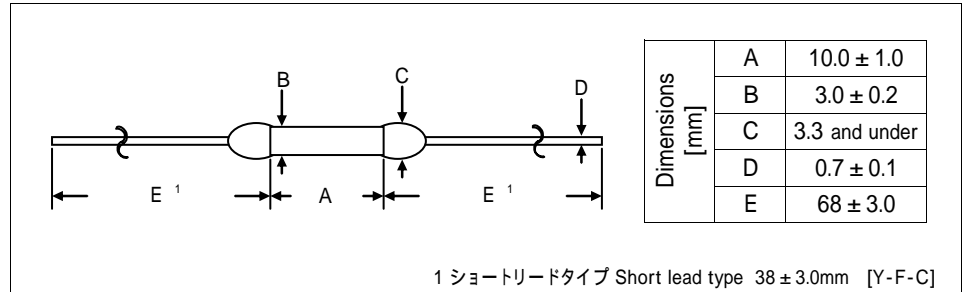
# RoHS対応型 温度ヒューズ

## Thermal Cutoffs (Conform with RoHS Directive)

2005. 08



# Y-F Series



### 用語説明 Explanation of Terminology

公称動作温度 Tf  
Rated functioning temperature Tf

安全規格で定められた動作温度。  
電安法 ±7  
その他 +0,-10  
Tf is operating temperature defined by the safety standard.  
DENAN ±7  
The other standards +0,-10

動作温度  
Functioning temperature

1分間に0.5 上昇するオイルバス中で温度ヒューズが動作した時の温度であり、使用する際の目安である。  
It is temperature at which thermal cutoffs operate in the oil bath which goes up 0.5/min. And it is a criterion for using cutoffs.

TH

定格電流を168時間流し続けても動作しない最高保持温度。  
The maximum holding temp at which no fuse will start working even if rated current was continuously flown for 168 hours.

TM

動作した温度ヒューズが10分間再導通しない最高温度。  
The maximum temp at which no re-conduction will be caused for 10 minutes for thermal cutoffs.

Approval No.

UL, C-UL ; E73591  
VDE ; 40005099, 40009685

### 注意事項 Cautions

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| 製品名<br>Type No. | 公称動作<br>温度<br>Tf [ ] | 動作温度<br>Functioning<br>temperature<br>[ ] | 電気定格 Rating |                      |                      |     | TH<br>[ ] | TM<br>[ ] | 規格認証 Approved <sup>2</sup> |     |      |     |
|-----------------|----------------------|---|-------------|----------------------|----------------------|-----|-----------|-----------|----------------------------|-----|------|-----|
|                 |                      |   | AC/<br>DC   | 電圧<br>Voltage<br>[V] | 電流<br>Current<br>[A] |     |           |           | UL<br>C-UL                 | VDE | BEAB | CCC |
| Y06F            | 65                   | 61 ± 3                                    | AC          | 250                  | 4.0                  | 45  | 200       |           |                            |     |      |     |
| Y0F             | 76                   | 72 ± 3                                    | AC          | 250                  | 5.0                  | 55  | 200       |           |                            |     |      |     |
|                 |                      |   | DC          | 125                  | 5.5                  | 55  |           |           |                            |     |      |     |
| Y1F             | 86                   | 81 ± 2                                    | AC          | 250                  | 5.0                  | 60  | 200       |           |                            |     |      |     |
|                 |                      |   | DC          | 125                  | 5.5                  | 55  |           |           |                            |     |      |     |
| Y2F             | 102                  | 98 ± 3                                    | AC          | 250                  | 5.0                  | 70  | 200       |           |                            |     | 4A   |     |
|                 |                      |   | DC          | 125                  | 5.5                  | 65  |           |           |                            |     |      |     |
| Y3 <sup>3</sup> | 117                  | 112 ± 2                                   | AC          | 250                  | 3.0                  | 95  | 180       |           |                            |     |      |     |
|                 |                      |   | AC          | 125                  | 5.0                  | 95  |           |           |                            |     |      |     |
| Y3F             | 115                  | 111 ± 2                                   | AC          | 250                  | 5.0                  | 90  | 200       |           |                            |     | 4A   |     |
|                 |                      |   | DC          | 125                  | 5.5                  | 85  |           |           |                            |     |      |     |
| Y4F             | 127                  | 123 ± 2                                   | AC          | 250                  | 5.0                  | 100 | 200       |           |                            |     |      |     |
|                 |                      |   | DC          | 125                  | 5.5                  | 95  |           |           |                            |     |      |     |
| Y13F            | 133                  | 129 ± 3                                   | AC          | 250                  | 5.0                  | 100 | 200       |           |                            |     |      |     |
|                 |                      |   | DC          | 125                  | 5.5                  | 85  |           |           |                            |     |      |     |
| Y5F             | 136                  | 131 ± 2                                   | AC          | 250                  | 5.0                  | 105 | 200       |           |                            |     |      |     |
|                 |                      |   | DC          | 125                  | 5.5                  | 90  |           |           |                            |     |      |     |
| Y6F             | 139                  | 134 ± 2                                   | AC          | 250                  | 5.0                  | 115 | 200       |           |                            |     | 4A   |     |
|                 |                      |   | DC          | 125                  | 5.5                  | 95  |           |           |                            |     |      |     |
| Y7F             | 145                  | 140 ± 2                                   | AC          | 250                  | 5.0                  | 125 | 200       |           |                            |     | 3.5A |     |
|                 |                      |   | DC          | 125                  | 5.5                  | 110 |           |           |                            |     |      |     |

2 電安法は全製品AC250V定格認可済み  
All products are approved by DENAN (AC250V)

認可 Approved

3 現行品 (RoHS対応型)  
The conventional product (Conform with RoHS Directive)

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# RoHS対応型 温度ヒューズ

## Thermal Cutoffs (Conform with RoHS Directive)

2005. 08



# L-F Series

### 用語説明 Explanation of Terminology

公称動作温度 Tf  
Rated functioning temperature Tf

安全規格で定められた動作温度。  
電安法 ±7  
その他 +0,-10  
Tf is operating temperature defined by the safety standard.  
DENAN ±7  
The other standards +0,-10

動作温度  
Functioning temperature

1分間に0.5 上昇するオイルバス中で温度ヒューズが動作した時の温度であり、使用する際の目安である。  
It is temperature at which thermal cutoffs operate in the oil bath which goes up 0.5/min. And It is a criterion for using cutoffs.

TH

定格電流を168時間流し続けても動作しない最高保持温度。  
The maximum holding temp at which no fuse will start working even if rated current was continuously flown for 168 hours.

TM

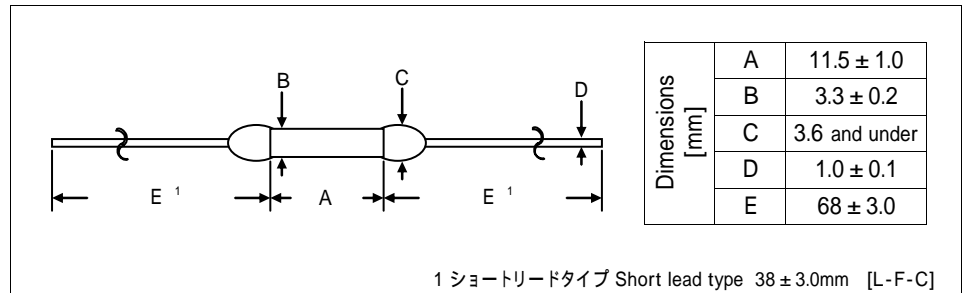
動作した温度ヒューズが10分間再導通しない最高温度。  
The maximum temp at which no re-conduction will be caused for 10 minutes for thermal cutoffs.

Approval No.

UL, C-UL ; E73591  
VDE ; 40004945

### 注意事項 Cautions

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| 製品名<br>Type No. | 公称動作温度<br>Tf [ ] | 動作温度<br>Functioning temperature [ ] | 電気定格 Rating |                   |                   |     | TH [ ] | TM [ ] | 規格認証 Approved <sup>2</sup> |     |      |     |
|-----------------|------------------|-------------------------------------|-------------|-------------------|-------------------|-----|--------|--------|----------------------------|-----|------|-----|
|                 |                  |                                     | AC/DC       | 電圧<br>Voltage [V] | 電流<br>Current [A] |     |        |        | UL C-UL                    | VDE | BEAB | CCC |
| L06F            | 65               | 61 ± 3                              | AC          | 250               | 4.0               | 50  | 200    |        |                            |     |      |     |
| L1 <sup>3</sup> | 84               | 81 ± 2                              | AC          | 250               | 4.0               | 60  | 95     |        |                            |     |      |     |
|                 |                  |                                     |             | 125               | 5.0               | 60  |        |        |                            |     | -    |     |
| L3 <sup>3</sup> | 115              | 112 ± 2                             | AC          | 250               | 5.0               | 95  | 160    |        |                            |     |      |     |
|                 |                  |                                     |             | 125               | 7.0               | 95  |        |        |                            |     | -    |     |
| L3F             | 115              | 111 ± 2                             | AC          | 250               | 5.0               | 95  | 200    |        |                            |     |      |     |
|                 |                  |                                     | DC          | 50                | 8.0               | 80  |        |        |                            |     |      |     |
| L6F             | 139              | 134 ± 2                             | AC          | 250               | 5.0               | 115 | 200    |        |                            |     |      |     |
|                 |                  |                                     | DC          | 50                | 8.5               | 90  |        |        |                            |     |      |     |
| L7F             | 145              | 140 ± 2                             | AC          | 250               | 5.0               | 125 | 200    |        |                            |     |      |     |
|                 |                  |                                     | DC          | 50                | 10.0              | 100 |        |        |                            |     |      |     |

<sup>2</sup> 電安法は全製品AC250V定格認可済み  
All products are approved by DENAN (AC250V)

認可 Approved

<sup>3</sup> 現行品 (RoHS対応型)  
The conventional product (Conform with RoHS Directive)

Anzen Dengu Co.,Ltd

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# RoHS対応型 温度ヒューズ

## Thermal Cutoffs (Conform with RoHS Directive)

2005. 08

# T6D Series

電池パック保護部品(Protective device for batteries)

### 用語説明 Explanation of Terminology

公称動作温度 Tf  
Rated functioning temperature Tf

安全規格で定められた動作温度。  
電安法 ±7  
その他 +0,-10  
Tf is operating temperature defined by the safety standard.  
DENAN ±7  
The other standards +0,-10

動作温度  
Functioning temperature

1分間に0.5 上昇するオイルバス中で温度ヒューズが動作した時の温度であり、使用する際の目安である。  
It is temperature at which thermal cutoffs operate in the oil bath which goes up 0.5/min. And it is a criterion for using cutoffs.

TH

定格電流を168時間流し続けても動作しない最高保持温度。  
The maximum holding temp at which no fuse will start working even if rated current was continuously flown for 168 hours.

TM

動作した温度ヒューズが10分間再導通しない最高温度。  
The maximum temp at which no re-conduction will be caused for 10 minutes for thermal cutoffs.

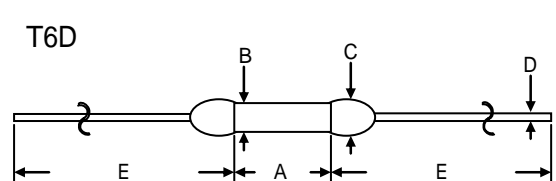
Approval No.

UL, C-UL ; E73591  
VDE ; 40009915


### 注意事項 Cautions

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T6D



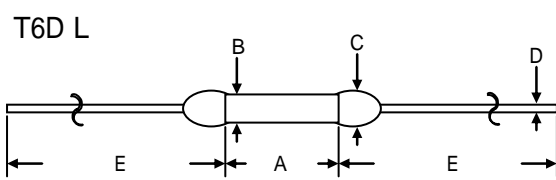
| Dimensions [mm] | A | 5.0 ± 1.0     |
|-----------------|---|---------------|
|                 | B | 2.0 ± 0.1     |
|                 | C | 2.3 and under |
|                 | D | 0.7 ± 0.1     |
|                 | E | 38 ± 3.0      |




| 公称動作温度 Tf [ ] | 動作温度 Functioning temperature [ ] | 電気定格 Rating |                |                | 規格認証 Approved |        |         |     |
|---------------|----------------------------------|-------------|----------------|----------------|---------------|--------|---------|-----|
|               |                                  | AC/DC       | 電圧 Voltage [V] | 電流 Current [A] | TH [ ]        | TM [ ] | UL C-UL | VDE |
| 139           | 134 ± 2                          | DC          | 50             | 9.0            | 80            | 200    |         |     |

認可 Approved

T6D L



| Dimensions [mm] | A | 6.3 ± 1.0     |
|-----------------|---|---------------|
|                 | B | 2.0 ± 0.1     |
|                 | C | 2.3 and under |
|                 | D | 0.7 ± 0.1     |
|                 | E | 38 ± 3.0      |



| 公称動作温度 Tf [ ] | 動作温度 Functioning temperature [ ] | 電気定格 Rating |                |                | 規格認証 Approved |        |         |     |
|---------------|----------------------------------|-------------|----------------|----------------|---------------|--------|---------|-----|
|               |                                  | AC/DC       | 電圧 Voltage [V] | 電流 Current [A] | TH [ ]        | TM [ ] | UL C-UL | VDE |
| 139           | 134 ± 2                          | DC          | 50             | 8.0            | 90            | 200    |         |     |
|               |                                  |             |                | 9.0            | 85            |        |         |     |

認可 Approved

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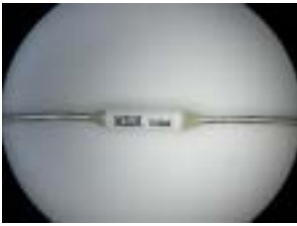
e-mail [dengu@gd5.so-net.ne.jp](mailto:dengu@gd5.so-net.ne.jp)



# RoHS対応型 温度ヒューズ

## Thermal Cutoffs (Conform with RoHS Directive)

2005. 08



### K-X Series

#### 用語説明 Explanation of Terminology

公称動作温度 Tf  
Rated functioning temperature Tf

安全規格で定められた動作温度。  
電安法 ±7

その他 +0,-10

Tf is operating temperature defined by the safety standard.

DENAN ±7

The other standards +0,-10

動作温度  
Functioning temperature

1分間に0.5 上昇するオイルバス中で温度ヒューズが動作した時の温度であり、使用する際の目安である。  
It is temperature at which thermal cutoffs operate in the oil bath which goes up 0.5/min. And it is a criterion for using cutoffs.

TM

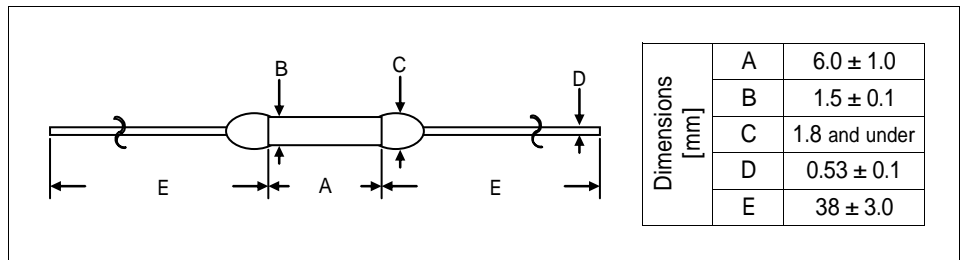
動作した温度ヒューズが10分間再導通しない最高温度。  
The maximum temp at which no re-conduction will be caused for 10 minutes for thermal cutoffs.

Approval No.

UL, C-UL ; E73591  
VDE ; 40005100, 40009857

#### 注意事項 Cautions

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Please exchange specifications, before adoption.



| 製品名<br>Type No. | 公称動作温度<br>Tf [ °C ] | 動作温度<br>Functioning temperature [ °C ] | 電気定格 Rating |                   |                   | TM [ °C ] | 規格認証 Approved <sup>1</sup> |     |      |     |
|-----------------|---------------------|--|-------------|-------------------|-------------------|-----------|----------------------------|-----|------|-----|
|                 |                     |  | AC/DC       | 電圧<br>Voltage [V] | 電流<br>Current [A] |           | UL<br>C-UL                 | VDE | BEAB | CCC |
| K06X            | 65                  | 61 ± 3                                 | AC          | 250               | 1.0               | 200       |                            |     |      |     |
| K2X             | 102                 | 98 ± 3                                 | AC          | 250               | 1.0               | 200       |                            |     |      | -   |
|                 |                     |  | DC          | 125               | 2.0               |           |                            |     |      |     |
| K3X             | 115                 | 111 ± 2                                | AC          | 250               | 1.0               | 200       |                            |     |      | -   |
|                 |                     |  | DC          | 125               | 2.0               |           |                            |     |      |     |
| K4X             | 127                 | 123 ± 2                                | AC          | 250               | 1.0               | 200       |                            |     |      | -   |
|                 |                     |  | DC          | 125               | 2.0               |           |                            |     |      |     |
| K13X            | 133                 | 129 ± 3                                | AC          | 250               | 1.0               | 200       |                            |     |      | -   |
|                 |                     |  | DC          | 125               | 2.0               |           |                            |     |      |     |
| K5X             | 136                 | 131 ± 2                                | AC          | 250               | 1.0               | 200       |                            |     |      | -   |
|                 |                     |  | DC          | 125               | 2.0               |           |                            |     |      |     |
| K6X             | 139                 | 134 ± 2                                | AC          | 250               | 1.0               | 200       |                            |     |      | -   |
|                 |                     |  | DC          | 125               | 1.5               |           |                            |     |      |     |
| K7X             | 145                 | 140 ± 2                                | AC          | 250               | 1.0               | 200       |                            |     |      | -   |
|                 |                     |  | DC          | 125               | 2.0               |           |                            |     |      |     |

<sup>1</sup> 電安法は全製品AC250V定格認可済み  
All products are approved by DENAN (AC250V)

認可 Approved

<sup>2</sup> 現行品 (RoHS対応型)  
The conventional product (Conform with RoHS Directive)

\*基板実装対応型温度ヒューズ Thermal cutoffs suitable for board mounting.

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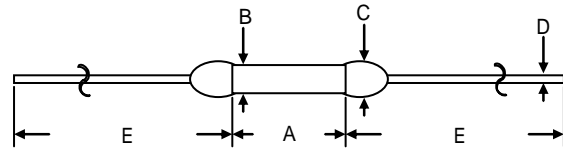
# RoHS対応型 温度ヒューズ

## Thermal Cutoffs (Conform with RoHS Directive)

2005. 08



### T-X Series



| Dimensions<br>[mm] | A | 6.3 ± 1.0     |
|--------------------|---|---------------|
|                    | B | 2.0 ± 0.1     |
|                    | C | 2.3 and under |
|                    | D | 0.53 ± 0.1    |
|                    | E | 38 ± 3.0      |

#### 用語説明 Explanation of Terminology

公称動作温度 Tf  
Rated functioning temperature Tf

安全規格で定められた動作温度。  
電安法 ±7  
その他 +0,-10  
Tf is operating temperature defined by the safety standard.  
DENAN ±7  
The other standards +0,-10

動作温度  
Functioning temperature

1分間に0.5 上昇するオイルバス中で温度ヒューズが動作した時の温度であり、使用する際の目安である。  
It is temperature at which thermal cutoffs operate in the oil bath which goes up 0.5/min. And it is a criterion for using cutoffs.

TM

動作した温度ヒューズが10分間再導通しない最高温度。  
The maximum temp at which no re-conduction will be caused for 10 minutes for thermal cutoffs.

Approval No.

UL, C-UL ; E73591  
VDE ; 40005277, 40009915

#### 注意事項 Cautions

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| 製品名<br>Type No.  | 公称動作温度<br>Tf [ ] | 動作温度<br>Functioning temperature [ ] | 電気定格 Rating |                   |                   | TM [ ] | 規格認証 Approved <sup>1</sup> |     |      |     |
|------------------|------------------|-------------------------------------|-------------|-------------------|-------------------|--------|----------------------------|-----|------|-----|
|                  |                  |                                     | AC/DC       | 電圧<br>Voltage [V] | 電流<br>Current [A] |        | UL<br>C-UL                 | VDE | BEAB | CCC |
| T06X             | 65               | 61 ± 3                              | AC          | 250               | 1.0               | 200    |                            |     |      |     |
| T0X              | 76               | 72 ± 3                              | AC          | 250               | 1.0               | 200    |                            |     |      |     |
|                  |                  |                                     | DC          | 125               | 2.0               |        |                            |     |      |     |
| T1X              | 86               | 81 ± 2                              | AC          | 250               | 1.0               | 200    |                            |     |      |     |
|                  |                  |                                     | DC          | 125               | 2.0               |        |                            |     |      |     |
| T2X              | 102              | 98 ± 3                              | AC          | 250               | 2.0               | 200    |                            |     |      |     |
|                  |                  |                                     | DC          | 50                | 2.5               |        |                            |     |      |     |
| P11 <sup>2</sup> | 117              | 112 ± 2                             | AC          | 250               | 1.0               | 160    |                            |     |      |     |
|                  |                  |                                     | DC          | 50                | 2.5               |        |                            |     |      |     |
| T3X              | 115              | 111 ± 2                             | AC          | 250               | 2.0               | 200    |                            |     |      |     |
|                  |                  |                                     | DC          | 125               | 3.0               |        |                            |     |      |     |
| T4X              | 127              | 123 ± 2                             | AC          | 250               | 2.0               | 200    |                            |     |      |     |
|                  |                  |                                     | DC          | 125               | 3.0               |        |                            |     |      |     |
| T13X             | 133              | 129 ± 3                             | AC          | 250               | 2.0               | 200    |                            |     |      |     |
|                  |                  |                                     | DC          | 50                | 4.0               |        |                            |     |      |     |
| T5X              | 136              | 131 ± 2                             | AC          | 250               | 2.0               | 200    |                            |     |      |     |
|                  |                  |                                     | DC          | 125               | 3.0               |        |                            |     |      |     |
| T6X              | 139              | 134 ± 2                             | AC          | 250               | 2.0               | 200    |                            |     |      |     |
|                  |                  |                                     | DC          | 50                | 4.0               |        |                            |     |      |     |
| T7X              | 145              | 140 ± 2                             | AC          | 250               | 1.0               | 200    |                            |     |      |     |
|                  |                  |                                     | DC          | 125               | 2.5               |        |                            |     |      |     |
|                  |                  |                                     | DC          | 50                | 3.0               |        |                            |     |      |     |

<sup>1</sup> 電安法は全製品AC250V定格認可済み  
All products are approved by DENAN (AC250V)

認可 Approved

<sup>2</sup> 現行品 (RoHS対応型)  
The conventional product (Conform with RoHS Directive)

\*基板実装対応型温度ヒューズ Thermal cutoffs suitable for board mounting.

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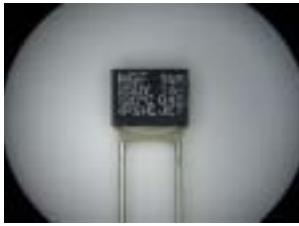
e-mail [dengu@gd5.so-net.ne.jp](mailto:dengu@gd5.so-net.ne.jp)



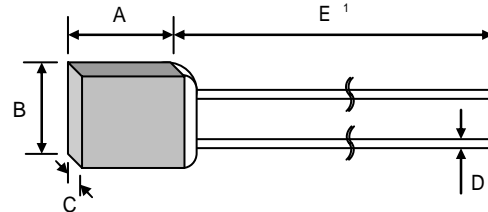
# RoHS対応型 温度ヒューズ

## Thermal Cutoffs (Conform with RoHS Directive)

2005. 08



# N-F Series



| Dimensions<br>[mm] | A | 4.1 ± 0.5  |
|--------------------|---|------------|
|                    | B | 5.2 ± 0.5  |
|                    | C | 2.0 ± 0.3  |
|                    | D | 0.53 ± 0.1 |
|                    | E | 36 ± 3.0   |

1 ロングリードタイプ Long lead type 68 ± 3.0mm [N-F-L]

### 用語説明 Explanation of Terminology

公称動作温度 Tf  
Rated functioning temperature Tf

安全規格で定められた動作温度。  
電安法 ±7  
その他 +0,-10  
Tf is operating temperature defined by the safety standard.  
DENAN ±7  
The other standards +0,-10

動作温度  
Functioning temperature

1分間に0.5 上昇するオイルバス中で温度ヒューズが動作した時の温度であり、使用する際の目安である。  
It is temperature at which thermal cutoffs operate in the oil bath which goes up 0.5/min. And it is a criterion for using cutoffs.

TH

定格電流を168時間流し続けても動作しない最高保持温度。  
The maximum holding temp at which no fuse will start working even if rated current was continuously flown for 168 hours.

TM

動作した温度ヒューズが10分間再導通しない最高温度。  
The maximum temp at which no re-conduction will be caused for 10 minutes for thermal cutoffs.

Approval No.

UL, C-UL ; E73591  
VDE ; 40009789

### 注意事項 Cautions

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Design, Specifications are subject to change without notice.  
Please exchange specifications, before adoption.

| 製品名<br>Type No. | 公称動作温度<br>Tf [ ] | 動作温度<br>Functioning temperature [ ] | 電気定格 Rating |                   |                   | TH [ ] | TM [ ] | 規格認証 Approved <sup>2</sup> |     |      |     |
|-----------------|------------------|-------------------------------------|-------------|-------------------|-------------------|--------|--------|----------------------------|-----|------|-----|
|                 |                  |                                     | AC/DC       | 電圧<br>Voltage [V] | 電流<br>Current [A] |        |        | UL<br>C-UL                 | VDE | BEAB | CCC |
| N06F            | 65               | 61 ± 3                              | AC          | 250               | 1.0               | 55     | 200    |                            |     |      |     |
| N0F             | 76               | 72 ± 3                              | AC          | 250               | 1.0               | 55     | 200    |                            |     |      |     |
|                 |                  |                                     |             | 125               | 2.0               | 55     |        |                            |     |      |     |
| N1 <sup>3</sup> | 86               | 81 ± 2                              | AC          | 250               | 1.0               | 60     | 95     |                            |     |      |     |
|                 |                  |                                     |             | 50                | 2.5               | 60     |        |                            |     |      |     |
| N2F             | 102              | 98 ± 3                              | AC          | 250               | 1.0               | 80     | 200    |                            |     |      |     |
|                 |                  |                                     |             | 125               | 2.5               | 75     |        |                            |     |      |     |
| N3 <sup>3</sup> | 117              | 112 ± 2                             | AC          | 250               | 1.0               | 85     | 180    |                            |     |      |     |
|                 |                  |                                     |             | 50                | 3.0               | 85     |        |                            |     |      |     |
| N3F             | 115              | 111 ± 2                             | AC          | 250               | 1.0               | 95     | 200    |                            |     |      |     |
|                 |                  |                                     |             | 125               | 2.5               | 90     |        |                            |     |      |     |
| N4F             | 127              | 123 ± 2                             | AC          | 250               | 1.0               | 105    | 200    |                            |     |      |     |
|                 |                  |                                     |             | 125               | 2.5               | 100    |        |                            |     |      |     |
| N4F             | 127              | 123 ± 2                             | DC          | 50                | 3.0               | 95     | 200    |                            |     |      |     |
|                 |                  |                                     |             | 250               | 1.0               | 105    |        |                            |     |      |     |
| N13F            | 133              | 129 ± 3                             | AC          | 250               | 1.0               | 105    | 200    |                            |     |      |     |
|                 |                  |                                     |             | 125               | 2.5               | 100    |        |                            |     |      |     |
| N5F             | 136              | 131 ± 2                             | AC          | 250               | 1.0               | 110    | 200    |                            |     |      |     |
|                 |                  |                                     |             | 125               | 2.5               | 105    |        |                            |     |      |     |
| N5F             | 136              | 131 ± 2                             | DC          | 50                | 3.0               | 95     | 200    |                            |     |      |     |
|                 |                  |                                     |             | 250               | 1.0               | 120    |        |                            |     |      |     |
| N6F             | 139              | 134 ± 2                             | AC          | 250               | 1.0               | 120    | 200    |                            |     |      |     |
|                 |                  |                                     |             | 125               | 2.5               | 115    |        |                            |     |      |     |
| N6F             | 139              | 134 ± 2                             | DC          | 50                | 3.0               | 110    | 200    |                            |     |      |     |
|                 |                  |                                     |             | 250               | 1.0               | 125    |        |                            |     |      |     |
| N7F             | 145              | 140 ± 2                             | AC          | 250               | 1.0               | 125    | 200    |                            |     |      |     |
|                 |                  |                                     |             | 125               | 2.5               | 120    |        |                            |     |      |     |
| N7F             | 145              | 140 ± 2                             | DC          | 50                | 3.0               | 120    | 200    |                            |     |      |     |
|                 |                  |                                     |             | 250               | 1.0               | 125    |        |                            |     |      |     |

<sup>2</sup> 電安法は全製品AC250V定格認可済み  
All products are approved by DENAN (AC250V)

認可 Approved

<sup>3</sup> 現行品 (RoHS対応型)  
The conventional product (Conform with RoHS Directive)

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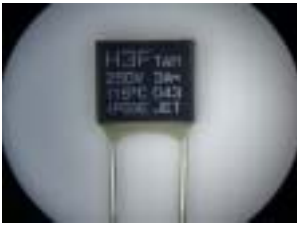
TEL : 042-560-0744 FAX : 042-560-0732

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# RoHS対応型 温度ヒューズ

## Thermal Cutoffs (Conform with RoHS Directive)

2005. 08



### 用語説明 Explanation of Terminology

公称動作温度 Tf  
Rated functioning temperature Tf

安全規格で定められた動作温度。  
電安法 ±7  
その他 +0,-10  
Tf is operating temperature defined by the safety standard.  
DENAN ±7  
The other standards +0,-10

動作温度  
Functioning temperature

1分間に0.5 上昇するオイルバス中で温度ヒューズが動作した時の温度であり、使用する際の目安である。  
It is temperature at which thermal cutoffs operate in the oil bath which goes up 0.5/min. And it is a criterion for using cutoffs.

TH

定格電流を168時間流し続けても動作しない最高保持温度。  
The maximum holding temp at which no fuse will start working even if rated current was continuously flown for 168 hours.

TM

動作した温度ヒューズが10分間再導通しない最高温度。  
The maximum temp at which no re-conduction will be caused for 10 minutes for thermal cutoffs.

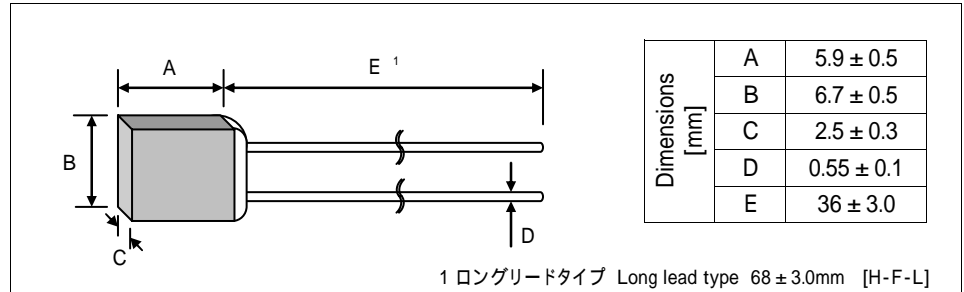
Approval No.

UL, C-UL ; E73591  
VDE ; 40009806

### 注意事項 Cautions

設計・仕様について予告なく変更する場合があります。  
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Design, Specifications are subject to change without notice.  
Please exchange specifications, before adoption.

# H-F Series



| 製品名<br>Type No.   | 公称動作温度<br>Tf [ °C ] | 動作温度<br>Functioning temperature [ °C ] | 電気定格 Rating |                   |                   | TH [ °C ] | TM [ °C ] | 規格認証 Approved <sup>2</sup> |     |      |     |
|-------------------|---------------------|--|-------------|-------------------|-------------------|-----------|-----------|----------------------------|-----|------|-----|
|                   |                     |  | AC/DC       | 電圧<br>Voltage [V] | 電流<br>Current [A] |           |           | UL<br>C-UL                 | VDE | BEAB | CCC |
| H06F              | 65                  | 61 ± 3                                 | AC          | 250               | 2.5               | 50        | 200       |                            |     |      |     |
| H0F               | 76                  | 72 ± 3                                 | AC          | 250               | 2.5               | 50        | 200       |                            |     |      |     |
| H086 <sup>3</sup> | 86                  | 81 ± 2                                 | AC          | 125               | 3.0               | 50        |           |                            |     |      | -   |
| H2F               | 102                 | 98 ± 3                                 | AC          | 250               | 2.0               | 60        | 95        |                            |     |      |     |
| H2F               | 102                 | 98 ± 3                                 | DC          | 250               | 3.0               | 75        | 200       |                            |     |      |     |
|                   |                     |  |             | 125               | 3.5               | 65        |           |                            |     |      |     |
| H110 <sup>3</sup> | 117                 | 112 ± 2                                | AC          | 50                | 4.0               | 60        |           |                            |     |      | -   |
| H3F               | 115                 | 111 ± 2                                | AC          | 250               | 2.0               | 85        | 180       |                            |     |      |     |
|                   |                     |  |             | 125               | 3.0               | 95        |           |                            |     |      |     |
| H3F               | 115                 | 111 ± 2                                | DC          | 250               | 3.5               | 90        | 200       |                            |     |      |     |
|                   |                     |  |             | 50                | 4.0               | 90        |           |                            |     |      |     |
| H4F               | 127                 | 123 ± 2                                | AC          | 250               | 4.0               | 95        | 200       |                            |     |      |     |
|                   |                     |  |             | 125               | 3.0               | 100       |           |                            |     |      |     |
| H4F               | 127                 | 123 ± 2                                | DC          | 250               | 3.5               | 95        | 200       |                            |     |      |     |
|                   |                     |  |             | 50                | 4.0               | 95        |           |                            |     |      |     |
| H13F              | 133                 | 129 ± 3                                | AC          | 250               | 3.0               | 100       | 200       |                            |     |      |     |
|                   |                     |  |             | 125               | 3.5               | 95        |           |                            |     |      |     |
| H13F              | 133                 | 129 ± 3                                | DC          | 250               | 4.0               | 95        | 200       |                            |     |      |     |
|                   |                     |  |             | 50                | 3.0               | 100       |           |                            |     |      |     |
| H5F               | 136                 | 131 ± 2                                | AC          | 250               | 3.5               | 95        | 200       |                            |     |      |     |
|                   |                     |  |             | 125               | 3.0               | 100       |           |                            |     |      |     |
| H5F               | 136                 | 131 ± 2                                | DC          | 250               | 4.0               | 90        | 200       |                            |     |      |     |
|                   |                     |  |             | 50                | 3.5               | 95        |           |                            |     |      |     |
| H6F               | 139                 | 134 ± 2                                | AC          | 250               | 2.5               | 110       | 200       |                            |     |      |     |
|                   |                     |  |             | 125               | 3.5               | 105       |           |                            |     |      |     |
| H6F               | 139                 | 134 ± 2                                | DC          | 250               | 4.0               | 100       | 200       |                            |     |      |     |
|                   |                     |  |             | 50                | 2.0               | 115       |           |                            |     |      |     |
| H7F               | 145                 | 140 ± 2                                | AC          | 250               | 3.5               | 110       | 200       |                            |     |      |     |
|                   |                     |  |             | 125               | 2.0               | 115       |           |                            |     |      |     |
| H7F               | 145                 | 140 ± 2                                | DC          | 250               | 4.0               | 105       | 200       |                            |     |      |     |
|                   |                     |  |             | 50                | 3.5               | 110       |           |                            |     |      |     |

<sup>2</sup> 電安法は全製品AC250V定格認可済み  
All products are approved by DENAN (AC250V)

認可 Approved

<sup>3</sup> 現行品 (RoHS対応型)  
The conventional product (Conform with RoHS Directive)

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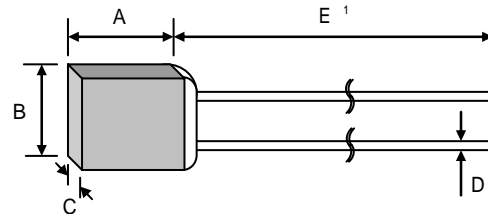
# RoHS対応型 温度ヒューズ

## Thermal Cutoffs (Conform with RoHS Directive)

2005. 08



# E-F Series



| Dimensions<br>[mm] | A | 8.5 ± 0.5 |
|--------------------|---|-----------|
|                    | B | 6.6 ± 0.5 |
|                    | C | 2.5 ± 0.3 |
|                    | D | 0.7 ± 0.1 |
|                    | E | 36 ± 3.0  |

1 ロングリードタイプ Long lead type 65 ± 3.0mm [E-F-L]

### 用語説明 Explanation of Terminology

公称動作温度 Tf  
Rated functioning temperature Tf

安全規格で定められた動作温度。  
電安法 ±7  
その他 +0,-10  
Tf is operating temperature defined by the safety standard.  
DENAN ±7  
The other standards +0,-10

動作温度  
Functioning temperature

1分間に0.5 上昇するオイルバス中で温度ヒューズが動作した時の温度であり、使用する際の目安である。  
It is temperature at which thermal cutoffs operate in the oil bath which goes up 0.5/min. And it is a criterion for using cutoffs.

TH

定格電流を168時間流し続けても動作しない最高保持温度。  
The maximum holding temp at which no fuse will start working even if rated current was continuously flown for 168 hours.

TM

動作した温度ヒューズが10分間再導通しない最高温度。  
The maximum temp at which no re-conduction will be caused for 10 minutes for thermal cutoffs.

Approval No.

UL, C-UL ; E73591  
VDE ; 40009796

### 注意事項 Cautions

設計・仕様について予告なく変更する場合があります。  
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Design, Specifications are subject to change without notice.  
Please exchange specifications, before adoption.

| 製品名<br>Type No. | 公称動作温度<br>Tf [ °C ] | 動作温度<br>Functioning temperature [ °C ] | 電気定格 Rating |                   |                   |     | TH [ °C ] | TM [ °C ] | 規格認証 Approved <sup>2</sup> |     |      |     |
|-----------------|---------------------|--|-------------|-------------------|-------------------|-----|-----------|-----------|----------------------------|-----|------|-----|
|                 |                     |  | AC/DC       | 電圧<br>Voltage [V] | 電流<br>Current [A] |     |           |           | UL<br>C-UL                 | VDE | BEAB | CCC |
| E06F            | 65                  | 61 ± 3                                 | AC          | 250               | 3.0               | 50  | 200       |           |                            |     |      |     |
| E0F             | 76                  | 72 ± 3                                 | AC          | 250               | 3.0               | 55  | 200       |           |                            |     |      |     |
|                 |                     |  |             | 125               | 4.0               | 55  |           |           |                            |     |      |     |
| E1F             | 86                  | 81 ± 2                                 | AC          | 250               | 3.0               | 65  | 200       |           |                            |     |      |     |
|                 |                     |  |             | 125               | 4.0               | 60  |           |           |                            |     |      |     |
| E2F             | 102                 | 98 ± 3                                 | AC          | 250               | 3.0               | 70  | 200       |           |                            |     |      |     |
|                 |                     |  | DC          | 50                | 6.0               | 60  |           |           |                            |     |      |     |
| E3 <sup>3</sup> | 117                 | 112 ± 2                                | AC          | 250               | 3.0               | 85  | 180       |           |                            |     |      |     |
|                 |                     |  |             | 125               | 5.0               | 85  |           |           |                            |     |      |     |
| E3F             | 115                 | 111 ± 2                                | AC          | 250               | 3.0               | 90  | 200       |           |                            |     |      |     |
|                 |                     |  | DC          | 50                | 6.0               | 85  |           |           |                            |     |      |     |
| E4F             | 127                 | 123 ± 2                                | AC          | 250               | 3.0               | 95  | 200       |           |                            |     |      |     |
|                 |                     |  | DC          | 50                | 6.0               | 90  |           |           |                            |     |      |     |
| E13F            | 133                 | 129 ± 3                                | AC          | 250               | 3.0               | 95  | 200       |           |                            |     |      |     |
|                 |                     |  | DC          | 50                | 6.0               | 85  |           |           |                            |     |      |     |
| E5F             | 136                 | 131 ± 2                                | AC          | 250               | 3.0               | 95  | 200       |           |                            |     |      |     |
|                 |                     |  | DC          | 50                | 6.0               | 90  |           |           |                            |     |      |     |
| E6F             | 139                 | 134 ± 2                                | AC          | 250               | 3.0               | 105 | 200       |           |                            |     |      |     |
|                 |                     |  | DC          | 50                | 6.0               | 100 |           |           |                            |     |      |     |
| E7F             | 145                 | 140 ± 2                                | AC          | 250               | 3.0               | 115 | 200       |           |                            |     |      |     |
|                 |                     |  | DC          | 50                | 6.0               | 105 |           |           |                            |     |      |     |

<sup>2</sup> 電安法は全製品AC250V定格認可済み  
All products are approved by DENAN (AC250V)

認可 Approved

<sup>3</sup> 現行品 (RoHS対応型)  
The conventional product (Conform with RoHS Directive)

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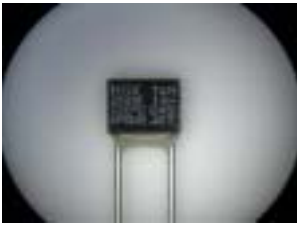
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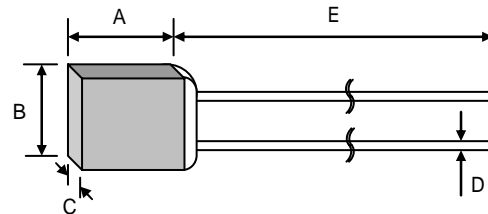
# RoHS対応型 温度ヒューズ

## Thermal Cutoffs (Conform with RoHS Directive)

2005. 08



# N-X Series



| Dimensions [mm] | A          | 4.1 ± 0.5 |
|-----------------|------------|-----------|
| B               | 5.2 ± 0.5  |           |
| C               | 2.0 ± 0.3  |           |
| D               | 0.53 ± 0.1 |           |
| E               | 36 ± 3.0   |           |

### 用語説明 Explanation of Terminology

公称動作温度 Tf  
Rated functioning temperature Tf

安全規格で定められた動作温度。  
電安法 ±7  
その他 +0,-10  
Tf is operating temperature defined by the safety standard.  
DENAN ±7  
The other standards +0,-10

動作温度  
Functioning temperature

1分間に0.5 上昇するオイルバス中で温度ヒューズが動作した時の温度であり、使用する際の目安である。  
It is temperature at which thermal cutoffs operate in the oil bath which goes up 0.5/min. And it is a criterion for using cutoffs.

TM

動作した温度ヒューズが10分間再導通しない最高温度。  
The maximum temp at which no re-conduction will be caused for 10 minutes for thermal cutoffs.

Approval No.

UL, C-UL ; E73591  
VDE ; 40009789

### 注意事項 Cautions

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Please exchange specifications, before adoption.

| 製品名<br>Type No.  | 公称動作温度<br>Tf [ °C ] | 動作温度<br>Functioning temperature [ °C ] | 電気定格 Rating |                   |                   | TM [ °C ] | 規格認証 Approved <sup>1</sup> |     |      |     |
|------------------|---------------------|--|-------------|-------------------|-------------------|-----------|----------------------------|-----|------|-----|
|                  |                     |  | AC/DC       | 電圧<br>Voltage [V] | 電流<br>Current [A] |           | UL<br>C-UL                 | VDE | BEAB | CCC |
| N06X             | 65                  | 61 ± 3                                 | AC          | 250               | 1.0               | 200       |                            |     |      |     |
| N0X              | 76                  | 72 ± 3                                 | AC          | 250               | 1.0               | 200       |                            |     |      |     |
|                  |                     |  |             | 125               | 2.0               |           |                            |     |      |     |
| N1X              | 86                  | 81 ± 2                                 | AC          | 250               | 1.0               | 200       |                            |     |      |     |
|                  |                     |  |             | 125               | 2.0               |           |                            |     |      |     |
| N2X              | 102                 | 98 ± 3                                 | AC          | 250               | 1.0               | 200       |                            |     |      |     |
|                  |                     |  |             | 125               | 2.5               |           |                            |     |      |     |
| NP3 <sup>2</sup> | 117                 | 111 ± 2                                | AC          | 250               | 1.0               | 180       |                            |     |      |     |
|                  |                     |  |             | DC                | 50                |           |                            |     |      |     |
| N3X              | 115                 | 111 ± 2                                | AC          | 250               | 1.0               | 200       |                            |     |      |     |
|                  |                     |  |             | DC                | 50                |           |                            |     |      |     |
| N4X              | 127                 | 123 ± 2                                | AC          | 250               | 1.0               | 200       |                            |     |      |     |
|                  |                     |  |             | DC                | 50                |           |                            |     |      |     |
| N13X             | 133                 | 129 ± 3                                | AC          | 250               | 1.0               | 200       |                            |     |      |     |
|                  |                     |  |             | DC                | 50                |           |                            |     |      |     |
| N5X              | 136                 | 131 ± 2                                | AC          | 250               | 1.0               | 200       |                            |     |      |     |
|                  |                     |  |             | DC                | 50                |           |                            |     |      |     |
| N6X              | 139                 | 134 ± 2                                | AC          | 250               | 1.0               | 200       |                            |     |      |     |
|                  |                     |  |             | DC                | 50                |           |                            |     |      |     |
| N7X              | 145                 | 140 ± 2                                | AC          | 250               | 1.0               | 200       |                            |     |      |     |
|                  |                     |  |             | DC                | 50                |           |                            |     |      |     |

<sup>1</sup> 電安法は全製品AC250V定格認可済み  
All products are approved by DENAN (AC250V)

認可 Approved

<sup>2</sup> 現行品 (RoHS対応型)  
The conventional product (Conform with RoHS Directive)

\*基板実装対応型温度ヒューズ Thermal cutoffs suitable for board mounting.

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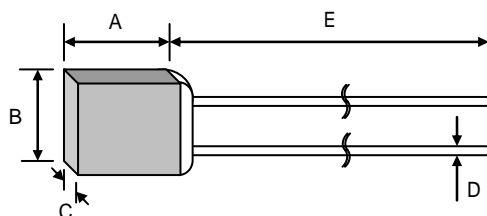
# RoHS対応型 温度ヒューズ

## Thermal Cutoffs (Conform with RoHS Directive)

2005. 08



# H-X Series



| Dimensions<br>[mm] | A | 5.9 ± 0.5  |
|--------------------|---|------------|
|                    | B | 6.7 ± 0.5  |
|                    | C | 2.5 ± 0.3  |
|                    | D | 0.55 ± 0.1 |
|                    | E | 36 ± 3.0   |

### 用語説明 Explanation of Terminology

公称動作温度 Tf  
Rated functioning temperature Tf

安全規格で定められた動作温度。  
電安法 ±7  
その他 +0,-10  
Tf is operating temperature defined by the safety standard.  
DENAN ±7  
The other standards +0,-10

動作温度  
Functioning temperature

1分間に0.5 上昇するオイルバス中で温度ヒューズが動作した時の温度であり、使用する際の目安である。  
It is temperature at which thermal cutoffs operate in the oil bath which goes up 0.5/min. And it is a criterion for using cutoffs.

TM

動作した温度ヒューズが10分間再導通しない最高温度。  
The maximum temp at which no re-conduction will be caused for 10 minutes for thermal cutoffs.

Approval No.

UL, C-UL ; E73591  
VDE ; 40009806

### 注意事項 Cautions

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Design, Specifications are subject to change without notice.  
Please exchange specifications, before adoption.

| 製品名<br>Type No.   | 公称動作温度<br>Tf [ °C ] | 動作温度<br>Functioning temperature [ °C ] | 電気定格 Rating |                   |                   | TM [ °C ] | 規格認証 Approved <sup>1</sup> |     |      |     |
|-------------------|---------------------|--|-------------|-------------------|-------------------|-----------|----------------------------|-----|------|-----|
|                   |                     |  | AC/DC       | 電圧<br>Voltage [V] | 電流<br>Current [A] |           | UL<br>C-UL                 | VDE | BEAB | CCC |
| H06X              | 65                  | 61 ± 3                                 | AC          | 250               | 2.5               | 200       |                            |     |      |     |
| H0X               | 76                  | 72 ± 3                                 | AC          | 250               | 2.5               | 200       |                            |     |      |     |
|                   |                     |  |             | 125               | 3.0               |           |                            |     |      |     |
| H1X               | 86                  | 81 ± 2                                 | AC          | 250               | 2.5               | 200       |                            |     |      |     |
|                   |                     |  |             | 125               | 3.0               |           |                            |     |      |     |
| H2X               | 102                 | 98 ± 3                                 | AC          | 250               | 3.0               | 200       |                            |     |      |     |
|                   |                     |  | DC          | 50                | 4.0               |           |                            |     |      |     |
| P110 <sup>2</sup> | 117                 | 112 ± 2                                | AC          | 250               | 2.0               | 180       |                            |     |      |     |
|                   |                     |  | DC          | 50                | 3.5               |           |                            |     |      |     |
| H3X               | 115                 | 111 ± 2                                | AC          | 250               | 3.0               | 200       |                            |     |      |     |
|                   |                     |  | DC          | 50                | 4.0               |           |                            |     |      |     |
| H4X               | 127                 | 123 ± 2                                | AC          | 250               | 3.0               | 200       |                            |     |      |     |
|                   |                     |  | DC          | 50                | 4.0               |           |                            |     |      |     |
| H13X              | 133                 | 129 ± 3                                | AC          | 250               | 3.0               | 200       |                            |     |      |     |
|                   |                     |  | DC          | 50                | 4.0               |           |                            |     |      |     |
| H5X               | 136                 | 131 ± 2                                | AC          | 250               | 3.0               | 200       |                            |     |      |     |
|                   |                     |  | DC          | 50                | 4.0               |           |                            |     |      |     |
| H6X               | 139                 | 134 ± 2                                | AC          | 250               | 2.5               | 200       |                            |     |      |     |
|                   |                     |  | DC          | 50                | 4.0               |           |                            |     |      |     |
| H7X               | 145                 | 140 ± 2                                | AC          | 250               | 2.0               | 200       |                            |     |      |     |
|                   |                     |  | DC          | 50                | 4.0               |           |                            |     |      |     |

<sup>1</sup> 電安法は全製品AC250V定格認可済み  
All products are approved by DENAN (AC250V)

認可 Approved

<sup>2</sup> 現行品 (RoHS対応型)  
The conventional product (Conform with RoHS Directive)

\*基板実装対応型温度ヒューズ Thermal cutoffs suitable for board mounting.

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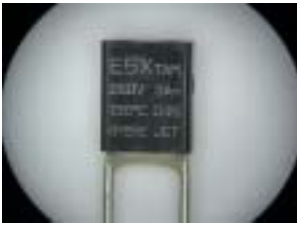
TEL : 042-560-0744 FAX : 042-560-0732

URL <http://www.anzendengu.co.jp/>  
e-mail [dengu@gd5.so-net.ne.jp](mailto:dengu@gd5.so-net.ne.jp)

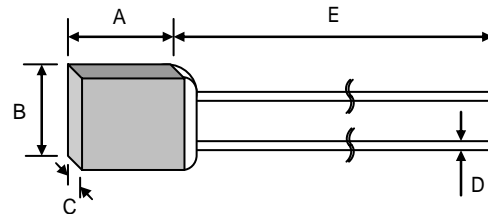
# RoHS対応型 温度ヒューズ

## Thermal Cutoffs (Conform with RoHS Directive)

2005. 08



# E-X Series



| Dimensions<br>[mm] | A | 8.5 ± 0.5 |
|--------------------|---|-----------|
|                    | B | 6.6 ± 0.5 |
|                    | C | 2.5 ± 0.3 |
|                    | D | 0.8 ± 0.1 |
|                    | E | 36 ± 3.0  |

### 用語説明 Explanation of Terminology

公称動作温度 Tf  
Rated functioning temperature Tf

安全規格で定められた動作温度。  
電安法 ±7  
その他 +0,-10  
Tf is operating temperature defined by the safety standard.  
DENAN ±7  
The other standards +0,-10

動作温度  
Functioning temperature

1分間に0.5 上昇するオイルバス中で温度ヒューズが動作した時の温度であり、使用する際の目安である。  
It is temperature at which thermal cutoffs operate in the oil bath which goes up 0.5/min. And it is a criterion for using cutoffs.

TM

動作した温度ヒューズが10分間再導通しない最高温度。  
The maximum temp at which no re-conduction will be caused for 10 minutes for thermal cutoffs.

Approval No.

UL, C-UL ; E73591  
VDE ; 40009796

### 注意事項 Cautions

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Design, Specifications are subject to change without notice.  
Please exchange specifications, before adoption.

| 製品名<br>Type No.  | 公称動作温度<br>Tf [ °C ] | 動作温度<br>Functioning temperature [ °C ] | 電気定格 Rating |                   |                   | TM [ °C ] | 規格認証 Approved <sup>1</sup> |     |      |     |
|------------------|---------------------|--|-------------|-------------------|-------------------|-----------|----------------------------|-----|------|-----|
|                  |                     |  | AC/DC       | 電圧<br>Voltage [V] | 電流<br>Current [A] |           | UL<br>C-UL                 | VDE | BEAB | CCC |
| E06X             | 65                  | 61 ± 3                                 | AC          | 250               | 3.0               | 200       |                            |     |      |     |
| E0X              | 76                  | 72 ± 3                                 | AC          | 250               | 3.0               | 200       |                            |     |      | -   |
|                  |                     |  |             | 125               | 4.0               |           |                            |     |      |     |
| E1X              | 86                  | 81 ± 2                                 | AC          | 250               | 3.0               | 200       |                            |     |      | -   |
|                  |                     |  |             | 125               | 4.0               |           |                            |     |      |     |
| E2X              | 102                 | 98 ± 3                                 | AC          | 250               | 3.0               | 200       |                            |     |      | -   |
|                  |                     |  | DC          | 125               | 5.5               |           |                            |     |      |     |
| EP3 <sup>3</sup> | 117                 | 112 ± 2                                | AC          | 250               | 3.0               | 180       |                            |     |      | -   |
|                  |                     |  |             | 125               | 4.0               |           |                            |     |      |     |
| E3X              | 115                 | 111 ± 2                                | AC          | 250               | 3.0               | 200       |                            |     |      | -   |
|                  |                     |  | DC          | 125               | 5.5               |           |                            |     |      |     |
| E4X              | 127                 | 123 ± 2                                | AC          | 250               | 3.0               | 200       |                            |     |      | -   |
|                  |                     |  | DC          | 125               | 5.5               |           |                            |     |      |     |
| E13X             | 133                 | 129 ± 3                                | AC          | 250               | 3.0               | 200       |                            |     |      | -   |
|                  |                     |  | DC          | 125               | 5.5               |           |                            |     |      |     |
| E5X              | 136                 | 131 ± 2                                | AC          | 250               | 3.0               | 200       |                            |     |      | -   |
|                  |                     |  | DC          | 125               | 5.5               |           |                            |     |      |     |
| E6X              | 139                 | 134 ± 2                                | AC          | 250               | 3.0               | 200       |                            |     |      | -   |
|                  |                     |  | DC          | 125               | 5.5               |           |                            |     |      |     |
| E7X              | 145                 | 140 ± 2                                | AC          | 250               | 3.0               | 200       |                            |     |      | -   |
|                  |                     |  | DC          | 125               | 5.5               |           |                            |     |      |     |

<sup>1</sup> 電安法は全製品AC250V定格認可済み  
All products are approved by DENAN (AC250V)

認可 Approved

<sup>2</sup> 現行品 (RoHS対応型)  
The conventional product (Conform with RoHS Directive)

\*基板実装対応型温度ヒューズ<sup>1</sup> Thermal cutoffs suitable for board mounting.

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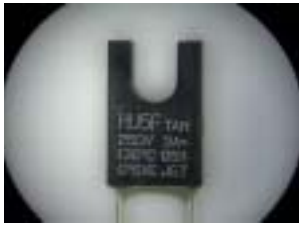
URL <http://www.anzendengu.co.jp/>  
e-mail [dengu@gd5.so-net.ne.jp](mailto:dengu@gd5.so-net.ne.jp)



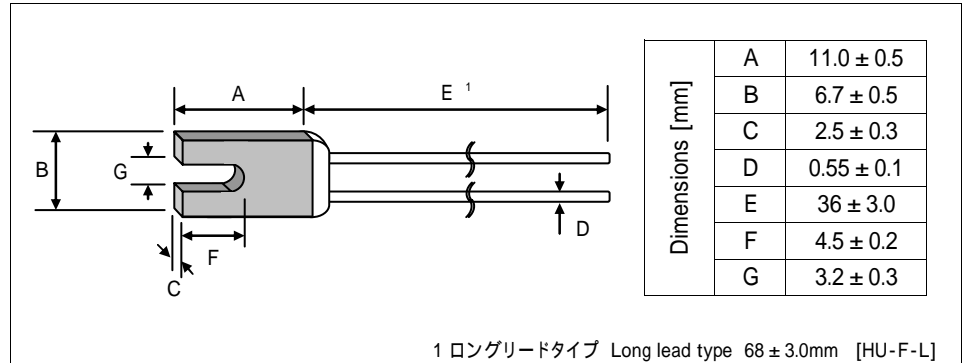
# RoHS対応型 温度ヒューズ

## Thermal Cutoffs (Conform with RoHS Directive)

2005. 08



# HU-F Series



### 用語説明 Explanation of Terminology

公称動作温度 Tf  
Rated functioning temperature Tf

安全規格で定められた動作温度。  
電安法 ±7

その他 +0,-10

Tf is operating temperature defined by the safety standard.

DENAN ±7

The other standards +0,-10

### 動作温度

Functioning temperature

1分間に0.5 上昇するオイルバス中で温度ヒューズが動作した時の温度であり、使用する際の目安である。  
It is temperature at which thermal cutoffs operate in the oil bath which goes up 0.5/min. And it is a criterion for using cutoffs.

### TH

定格電流を168時間流し続けても動作しない最高保持温度。  
The maximum holding temp at which no fuse will start working even if rated current was continuously flown for 168 hours.

### TM

動作した温度ヒューズが10分間再導通しない最高温度。  
The maximum temp at which no re-conduction will be caused for 10 minutes for thermal cutoffs.

### Approval No.

UL, C-UL ; E73591  
VDE ; 40009806

### 注意事項 Cautions

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Design, Specifications are subject to change without notice.  
Please exchange specifications, before adoption.

| 製品名<br>Type No.    | 公称動作温度<br>Tf [ °C ] | 動作温度<br>Functioning temperature [ °C ] | 電気定格 Rating |                   |                   |     | TH [ °C ] | TM [ °C ] | 規格認証 Approved <sup>2</sup> |     |      |     |
|--------------------|---------------------|--|-------------|-------------------|-------------------|-----|-----------|-----------|----------------------------|-----|------|-----|
|                    |                     |  | AC/DC       | 電圧<br>Voltage [V] | 電流<br>Current [A] |     |           |           | UL<br>C-UL                 | VDE | BEAB | CCC |
| HU06F              | 65                  | 61 ± 3                                 | AC          | 250               | 2.5               | 50  | 200       |           |                            |     |      |     |
| HU0F               | 76                  | 72 ± 3                                 | AC          | 250               | 2.5               | 50  | 200       |           |                            |     |      | -   |
| HU1F               | 86                  | 81 ± 2                                 | AC          | 250               | 2.5               | 60  | 200       |           |                            |     |      | -   |
|                    |                     |  |             | 125               | 3.0               | 60  |           |           |                            |     |      |     |
| HU2F               | 102                 | 98 ± 3                                 | AC          | 250               | 3.0               | 75  | 200       |           |                            |     |      | -   |
|                    |                     |  |             | 125               | 3.5               | 65  |           |           |                            |     |      |     |
| DC                 | 50                  | 4.0                                    | 60          |                   |                   |     |           |           |                            |     |      | -   |
|                    |                     |  |             |                   |                   |     |           |           |                            |     |      |     |
| H110A <sup>3</sup> | 117                 | 112 ± 2                                | AC          | 250               | 2.0               | 85  | 180       |           |                            |     |      |     |
| HU3F               | 115                 | 111 ± 2                                | AC          | 250               | 3.0               | 95  | 200       |           |                            |     |      | -   |
|                    |                     |  |             | 125               | 3.5               | 90  |           |           |                            |     |      |     |
| DC                 | 50                  | 4.0                                    | 90          |                   |                   |     |           |           |                            |     |      | -   |
|                    |                     |  |             |                   |                   |     |           |           |                            |     |      |     |
| HU4F               | 127                 | 123 ± 2                                | AC          | 250               | 3.0               | 100 | 200       |           |                            |     |      | -   |
|                    |                     |  |             | 125               | 3.5               | 95  |           |           |                            |     |      |     |
| DC                 | 50                  | 4.0                                    | 95          |                   |                   |     |           |           |                            |     |      | -   |
|                    |                     |  |             |                   |                   |     |           |           |                            |     |      |     |
| HU13F              | 133                 | 129 ± 3                                | AC          | 250               | 3.0               | 100 | 200       |           |                            |     |      | -   |
|                    |                     |  |             | 125               | 3.5               | 95  |           |           |                            |     |      |     |
| DC                 | 50                  | 4.0                                    | 95          |                   |                   |     |           |           |                            |     |      | -   |
|                    |                     |  |             |                   |                   |     |           |           |                            |     |      |     |
| HU5F               | 136                 | 131 ± 2                                | AC          | 250               | 3.0               | 100 | 200       |           |                            |     |      | -   |
|                    |                     |  |             | 125               | 3.5               | 95  |           |           |                            |     |      |     |
| DC                 | 50                  | 4.0                                    | 90          |                   |                   |     |           |           |                            |     |      | -   |
|                    |                     |  |             |                   |                   |     |           |           |                            |     |      |     |
| HU6F               | 139                 | 134 ± 2                                | AC          | 250               | 2.5               | 110 | 200       |           |                            |     |      | -   |
|                    |                     |  |             | 125               | 3.5               | 105 |           |           |                            |     |      |     |
| DC                 | 50                  | 4.0                                    | 100         |                   |                   |     |           |           |                            |     |      | -   |
|                    |                     |  |             |                   |                   |     |           |           |                            |     |      |     |
| HU7F               | 145                 | 140 ± 2                                | AC          | 250               | 2.0               | 115 | 200       |           |                            |     |      | -   |
|                    |                     |  |             | 125               | 3.5               | 110 |           |           |                            |     |      |     |
| DC                 | 50                  | 4.0                                    | 105         |                   |                   |     |           |           |                            |     |      | -   |
|                    |                     |  |             |                   |                   |     |           |           |                            |     |      |     |

<sup>2</sup> 電安法は全製品AC250V定格認可済み  
All products are approved by DENAN (AC250V)

認可 Approved

<sup>3</sup> 現行品 (RoHS対応型)  
The conventional product (Conform with RoHS Directive)

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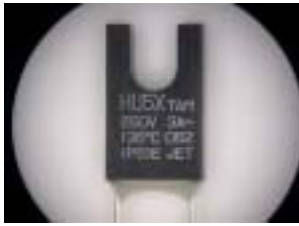
東京都武蔵村山市伊奈平2-34-1

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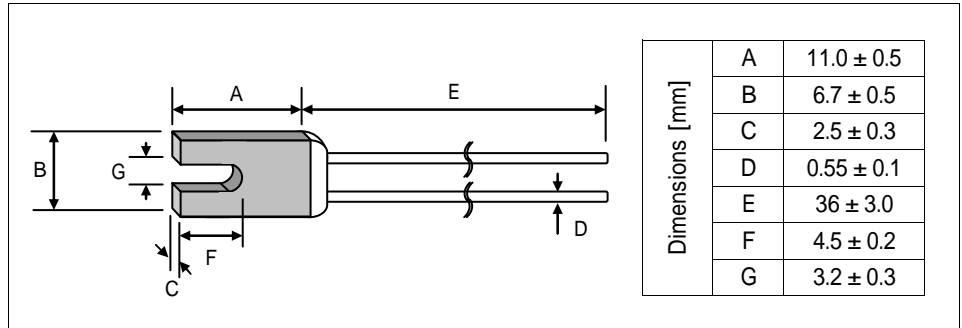
# RoHS対応型 温度ヒューズ

## Thermal Cutoffs (Conform with RoHS Directive)

2005. 08



# HU-X Series



### 用語説明 Explanation of Terminology

公称動作温度 Tf  
Rated functioning temperature Tf

安全規格で定められた動作温度。  
電安法 ±7  
その他 +0,-10  
Tf is operating temperature defined by the safety standard.  
DENAN ±7  
The other standards +0,-10

動作温度  
Functioning temperature

1分間に0.5 上昇するオイルバス中で温度ヒューズが動作した時の温度であり、使用する際の目安である。  
It is temperature at which thermal cutoffs operate in the oil bath which goes up 0.5/min. And it is a criterion for using cutoffs.

TM

動作した温度ヒューズが10分間再導通しない最高温度。  
The maximum temp at which no re-conduction will be caused for 10 minutes for thermal cutoffs.

Approval No.

UL, C-UL ; E73591  
VDE ; 40009806

### 注意事項 Cautions

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| 製品名<br>Type No.    | 公称動作温度<br>Tf [ °C ] | 動作温度<br>Functioning temperature [ °C ] | 電気定格 Rating |                   |                   | TM [ °C ] | 規格認証 Approved <sup>1</sup> |     |      |     |
|--------------------|---------------------|--|-------------|-------------------|-------------------|-----------|----------------------------|-----|------|-----|
|                    |                     |  | AC/DC       | 電圧<br>Voltage [V] | 電流<br>Current [A] |           | UL<br>C-UL                 | VDE | BEAB | CCC |
| HU06X              | 65                  | 61 ± 3                                 | AC          | 250               | 2.5               | 200       |                            |     |      |     |
| HU0X               | 76                  | 72 ± 3                                 | AC          | 250               | 2.5               | 200       |                            |     |      | -   |
|                    |                     |  |             | 125               | 3.0               |           |                            |     |      |     |
| HU1X               | 86                  | 81 ± 2                                 | AC          | 250               | 2.5               | 200       |                            |     |      | -   |
|                    |                     |  |             | 125               | 3.0               |           |                            |     |      |     |
| HU2X               | 102                 | 98 ± 3                                 | AC          | 250               | 3.0               | 200       |                            |     |      | -   |
|                    |                     |  |             | 125               | 3.5               |           |                            |     |      |     |
|                    |                     |  | DC          | 50                | 4.0               |           |                            |     |      |     |
| P110A <sup>2</sup> | 117                 | 112 ± 2                                | AC          | 250               | 2.0               | 180       |                            |     |      |     |
|                    |                     |  | DC          | 50                | 3.5               |           |                            |     |      |     |
| HU3X               | 115                 | 111 ± 2                                | AC          | 250               | 3.0               | 200       |                            |     |      | -   |
|                    |                     |  |             | 125               | 3.5               |           |                            |     |      |     |
|                    |                     |  | DC          | 50                | 4.0               |           |                            |     |      |     |
| HU4X               | 127                 | 123 ± 2                                | AC          | 250               | 3.0               | 200       |                            |     |      | -   |
|                    |                     |  |             | 125               | 3.5               |           |                            |     |      |     |
|                    |                     |  | DC          | 50                | 4.0               |           |                            |     |      |     |
| HU13X              | 133                 | 129 ± 3                                | AC          | 250               | 3.0               | 200       |                            |     |      | -   |
|                    |                     |  |             | 125               | 3.5               |           |                            |     |      |     |
|                    |                     |  | DC          | 50                | 4.0               |           |                            |     |      |     |
| HU5X               | 136                 | 131 ± 2                                | AC          | 250               | 3.0               | 200       |                            |     |      | -   |
|                    |                     |  |             | 125               | 3.5               |           |                            |     |      |     |
|                    |                     |  | DC          | 50                | 4.0               |           |                            |     |      |     |
| HU6X               | 139                 | 134 ± 2                                | AC          | 250               | 2.5               | 200       |                            |     |      | -   |
|                    |                     |  |             | 125               | 3.5               |           |                            |     |      |     |
|                    |                     |  | DC          | 50                | 4.0               |           |                            |     |      |     |
| HU7X               | 145                 | 140 ± 2                                | AC          | 250               | 2.0               | 200       |                            |     |      | -   |
|                    |                     |  |             | 125               | 3.5               |           |                            |     |      |     |
|                    |                     |  | DC          | 50                | 4.0               |           |                            |     |      |     |

<sup>1</sup> 電安法は全製品AC250V定格認可済み  
All products are approved by DENAN (AC250V)

認可 Approved

<sup>2</sup> 現行品 (RoHS対応型)  
The conventional product (Conform with RoHS Directive)

\*基板実装対応型温度ヒューズ Thermal cutoffs suitable for board mounting.

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# RoHS対応型 温度ヒューズ付抵抗器 F5K シリーズ

## Thermal Cutoff/Resistor Assemblies F5K series(Conform with RoHS Directive)



### 特長 Features

- ・F5Kは温度ヒューズと巻線抵抗器を組み合わせ一体化した製品です。
- ・F5Kは鉛・カドミウムを含まない製品です。(RoHS対応製品)
- ・F5Kは過負荷等の異常時に優れた遮断特性を發揮します。
- ・特に突入電流に対し優れた特性を有し、突入電流防止に最適です。
- ・F5K Thermal Cutoff /Resistor Assembly is a product which is made of thermal Cutoff and resistor.
- ・F5K don't contain the substances regulated by RoHS directive.
- ・F5K has excellent thermal cutoff characteristics against abnormal overload condition and excellent characteristics against inrush current.

### 取得規格 Approved Standards

・UL c-UL: E 73591



・CSA :LR60621



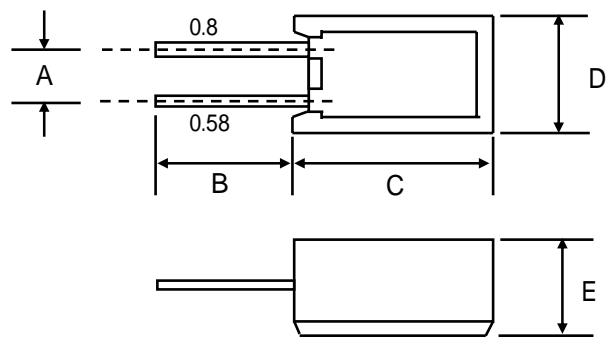
・TÜV : J 50052212 (F5K x x x J11)

J 50052868 (F5K x x x J13)

R 50036019 (F5K x x x J14)



### 寸法 Dimensions



|   |           |
|---|-----------|
| A | 5 ± 1     |
| B | 3.5+1-0.5 |
| C | 25 ± 1    |
| D | 13 ± 1    |
| E | 9 ± 1     |

Unit : mm

### 定格 Ratings

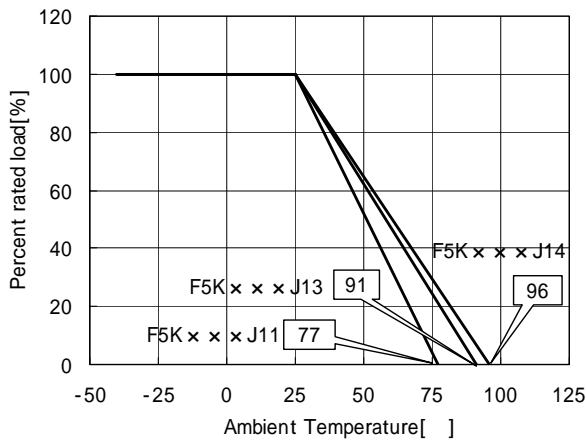
| 品名<br>Product Name | 公称抵抗値<br>Nominal Resistance<br>(公称抵抗値記号)<br>(Nominal Resistance Code)      | 抵抗値許容差<br>Resistance<br>Tolerance | 定格電力<br>Power rating<br>(25 ) | 温度ヒューズ     |                 |                           |                           |
|--------------------|--|-----------------------------------|-------------------------------|------------|-----------------|---------------------------|---------------------------|
|                    |  |                                   |                               | 型式<br>Type | 公称動作温度<br>TF・Tf | 定格電圧<br>Voltage<br>Rating | 定格電流<br>Current<br>Rating |
| F5K x x x J11      | 1.8 (1R8)<br>2.2 (2R2)<br>3.3 (3R3)<br>3.9 (3R9)<br>4.7 (4R7)<br>5.1 (5R1) | ± 5%                              | 1.3W                          | V110       | 117             | AC250V                    | 2A                        |
| F5K x x x J13      | 5.6 (5R6)<br>6.8 (6R8)<br>8.2 (8R2)<br>10 (100)<br>12 (120)                |                                   | 1.6W                          | V5F        | 136             | AC250V                    | 3A                        |
| F5K x x x J14      | 15 (150)<br>22 (220)<br>33 (330)<br>39 (390)<br>47 (470)                   |                                   | 2.1W                          | V7F        | 145             | AC250V                    | 3A                        |

x x x は公称抵抗値記号      x x x : Nominal Resistance Code

# RoHS対応型 温度ヒューズ付抵抗器 F5K シリーズ

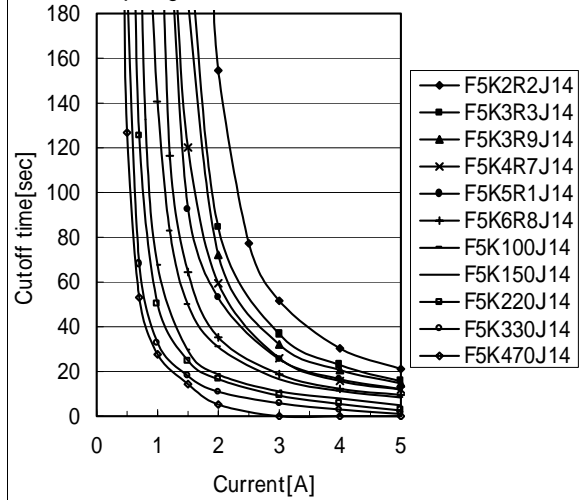
## Thermal Cutoff/Resistor Assemblies F5K series(Conform with RoHS Directive)

負荷軽減曲線 Derating Curve

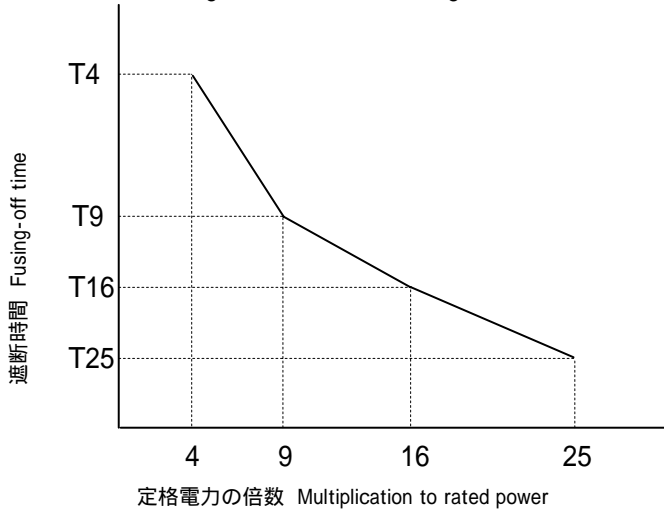


遮断特性(F5KxxxJ14)

Interrupting Characteristics (F5KxxxJ14)



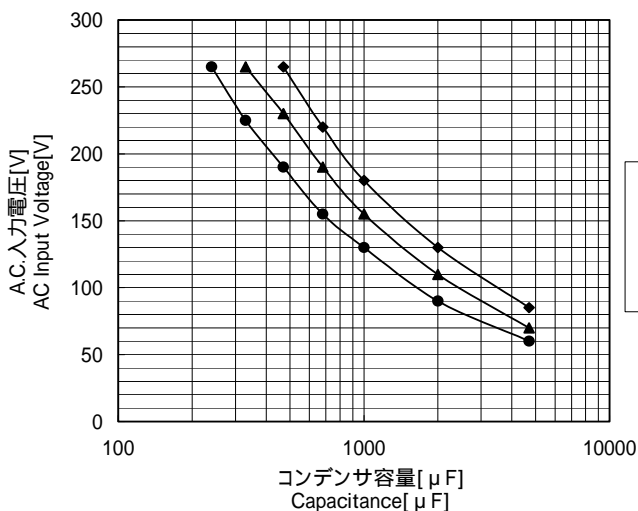
遮断性能 Fusing-off time vs. Wattage



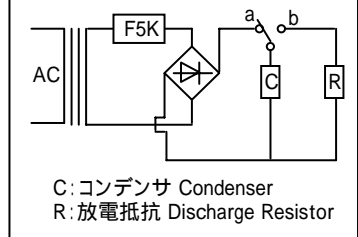
| 遮断時間(秒以内)                         |    |     |     |
|-----------------------------------|----|-----|-----|
| Fusing-off time - max. sec. at 25 |    |     |     |
| T4                                | T9 | T16 | T25 |
| 1時間以内<br>1 hour or less           | 90 | 55  | 40  |

耐インラッシュ特性 In-rush Resistance Characteristics

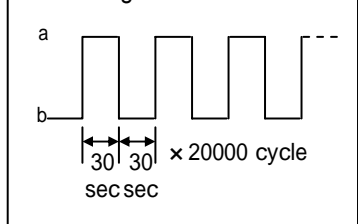
ON/OFF: 30sec/30sec 20000cycle



試験回路 Test Circuit



Switching time chart



# RoHS対応型 温度ヒューズ付抵抗器 F5K シリーズ

## Thermal Cutoff/Resistor Assemblies F5K series(Conform with RoHS Directive)

### 性能 Performance

| 試験項目<br>Test Characteristics           | 試験方法<br>Test Method   |   | 規格<br>Specifications  |  |           |                          |  |                    |     |      |     |            |              |      |       |   |             |               |  |
|--|---|---|---|--|-----------|--------------------------|--|--------------------|-----|------|-----|------------|--------------|------|-------|---|-------------|---------------|--|
| 抵抗値<br>Resistance value                | リード端子間に下表の直流電圧を印加して測定する。<br>The following DC voltage is applied across lead terminals for measurements. <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th colspan="2">公称抵抗値範囲[ Ω ]</th> <th>最高印加電圧[V]</th> </tr> <tr> <th colspan="2">Nominal resistance range</th> <th>Max. applied Volt.</th> </tr> </thead> <tbody> <tr> <td>1以上</td> <td>10未満</td> <td rowspan="2">0.3</td> </tr> <tr> <td>1 and over</td> <td>less than 10</td> </tr> <tr> <td>10以上</td> <td>100未満</td> <td rowspan="2">1</td> </tr> <tr> <td>10 and over</td> <td>less than 100</td> </tr> </tbody> </table> |   | 公称抵抗値範囲[ Ω ]  |  | 最高印加電圧[V] | Nominal resistance range |  | Max. applied Volt. | 1以上 | 10未満 | 0.3 | 1 and over | less than 10 | 10以上 | 100未満 | 1 | 10 and over | less than 100 | ±5%以内であること。<br>Resistance shall be within ±5% of nominal resistance value. |
| 公称抵抗値範囲[ Ω ]                           |   | 最高印加電圧[V]   |   |  |           |                          |  |                    |     |      |     |            |              |      |       |   |             |               |  |
| Nominal resistance range               |   | Max. applied Volt.  |   |  |           |                          |  |                    |     |      |     |            |              |      |       |   |             |               |  |
| 1以上                                    | 10未満  | 0.3   |   |  |           |                          |  |                    |     |      |     |            |              |      |       |   |             |               |  |
| 1 and over                             | less than 10  |   |   |  |           |                          |  |                    |     |      |     |            |              |      |       |   |             |               |  |
| 10以上                                   | 100未満   | 1   |   |  |           |                          |  |                    |     |      |     |            |              |      |       |   |             |               |  |
| 10 and over                            | less than 100   |   |   |  |           |                          |  |                    |     |      |     |            |              |      |       |   |             |               |  |
| 動作温度<br>Fusing-off temperature         | F5Kを毎分0.5 温度上昇するオイル中に浸漬し、F5Kが動作したときのオイルの温度を測定する。<br>測定開始温度は公称動作温度-10 、検知電流は0.1A以下とする。<br>F5K is immersed in oil of which temperature is increased by 0.5 per minute. When F5K is fused off, the oil temperature is measured. Starting temperature of temperature increasing is 10 below the rated functioning temperature.  |   | F5K × × × J11 : 117+0-7<br>F5K × × × J13 : 136+0-7<br>F5K × × × J14 : 145+0-7 |  |           |                          |  |                    |     |      |     |            |              |      |       |   |             |               |  |
| 絶縁抵抗<br>Insulation resistance          | ボデー・リード端子間<br>Between body and lead terminals   | F5K上に巻き付けた金属箔とリード端子間にDC500Vを1分間印加して測定する。<br>DC500V is applied between metal foil, wrapped around F5K body, and lead terminals for 1 minute.   | 1000M 以上であること。<br>Insulation resistance shall be 1000M or above.              |  |           |                          |  |                    |     |      |     |            |              |      |       |   |             |               |  |
|  | 両リード端子間<br>Between both lead terminals  | 動作試験後にリード端子間にDC500Vを1分間印加して測定する。<br>After fusing-off temperature test, DC500V is applied for 1 minute between lead terminals for measurement. | 0.2M 以上であること。<br>Insulation resistance shall be 0.2M or above.                |  |           |                          |  |                    |     |      |     |            |              |      |       |   |             |               |  |
| 抵抗温度係数<br>T.C.R                        | 常温 / 70 up<br>Nominal temperature / 70 up   |   | ± 250ppm/   |  |           |                          |  |                    |     |      |     |            |              |      |       |   |             |               |  |
| 短時間過負荷<br>Short time overload          | 定格電力 × 10倍を5秒間印加<br>Power rating × 10, for 5 sec.   |   | ± (2%+0.05 )  |  |           |                          |  |                    |     |      |     |            |              |      |       |   |             |               |  |
| はんだ耐熱性<br>Resistance to soldering heat | 265 ± 5 , 10 sec.   |   | ± (1%+0.05 )  |  |           |                          |  |                    |     |      |     |            |              |      |       |   |             |               |  |
| はんだ付け性<br>Solderability                | 230 ± 5 , 5 sec.  |   | 95%以上が新しいはんだで覆われていること。<br>95% Coverage min.                                   |  |           |                          |  |                    |     |      |     |            |              |      |       |   |             |               |  |
| 端子強度<br>Terminal strength              | 引張り Direct load : 20N, 1 min<br>曲げ Bending test : 90 1 cycle  |   | 断線、ゆるみ、破損が生じないこと。<br>No mechanical damages                                    |  |           |                          |  |                    |     |      |     |            |              |      |       |   |             |               |  |
| 耐湿性<br>Moisture resistance             | 40 湿度90 ~ 95%RH 1000時間<br>40 , 90 ~ 95%RH, 1000h  |   | ± (2%+0.05 )  |  |           |                          |  |                    |     |      |     |            |              |      |       |   |             |               |  |
| 負荷寿命特性<br>Load life                    | 定格負荷1000時間、1.5時間ON/0.5時間OFFの周期<br>Rating voltage 1000h, 1.5h ON/0.5h OFF cycle  |   | ± (3%+0.05 )  |  |           |                          |  |                    |     |      |     |            |              |      |       |   |             |               |  |

Anzen Dengu Co., Ltd

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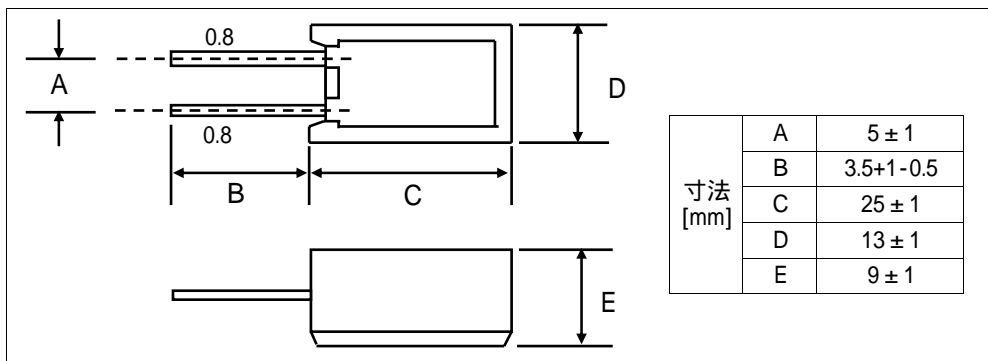
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## 5 K シリーズ



本セメント抵抗器は鉛、カドミウムを含有しない製品です。  
(RoHS対応製品)



| 品名          | 公称抵抗値[ ]<br>(公称抵抗値記号) | 抵抗値<br>許容差            | 定格電力 | 最高使用<br>電圧 | 最高過負荷<br>電圧 | 抵抗温度<br>係数    | 定格周囲<br>温度 | 使用温度<br>範囲      |
|-------------|-----------------------|-----------------------|------|------------|-------------|---------------|------------|-----------------|
| 5K × × × JA | 1.8(1R8)              | ± 5%<br>(管理値<br>± 3%) | 5W   | DC350V     | DC700V      | ± 250<br>ppm/ | + 70       | - 40 ~<br>+ 200 |
|             | 2.2(2R2)              |                       |      |            |             |               |            |                 |
|             | 3.3(3R3)              |                       |      |            |             |               |            |                 |
|             | 3.9(3R9)              |                       |      |            |             |               |            |                 |
|             | 4.7(4R7)              |                       |      |            |             |               |            |                 |
|             | 5.1(5R1)              |                       |      |            |             |               |            |                 |
|             | 5.6(5R6)              |                       |      |            |             |               |            |                 |
|             | 6.8(6R8)              |                       |      |            |             |               |            |                 |
|             | 8.2(8R2)              |                       |      |            |             |               |            |                 |
|             | 10(100)               |                       |      |            |             |               |            |                 |
|             | 12(120)               |                       |      |            |             |               |            |                 |
|             | 15(150)               |                       |      |            |             |               |            |                 |
|             | 22(220)               |                       |      |            |             |               |            |                 |
|             | 33(330)               |                       |      |            |             |               |            |                 |
| 39(390)     |                       |                       |      |            |             |               |            |                 |
| 47(470)     |                       |                       |      |            |             |               |            |                 |

× × × は公称抵抗値記号

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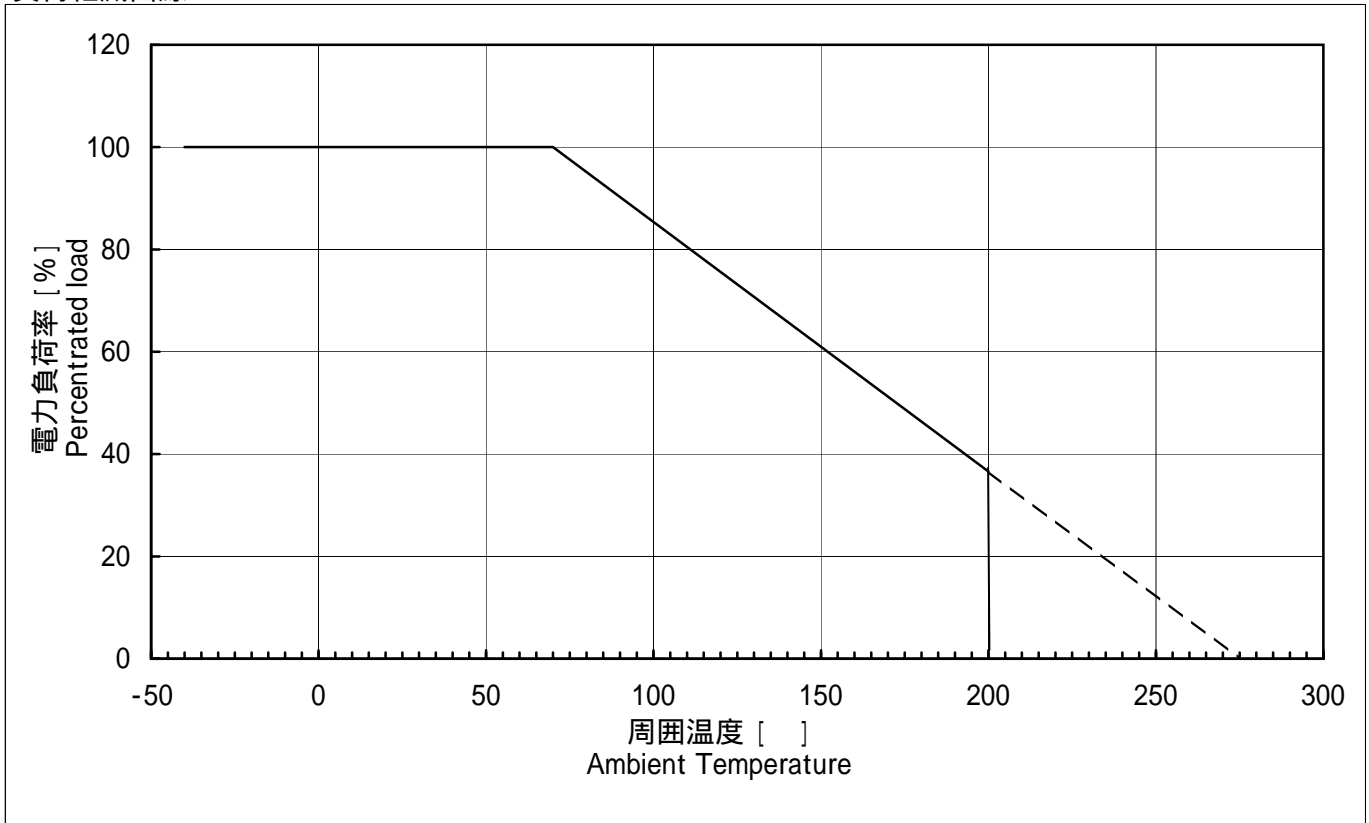
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e-mail [dengu@gd5.so-net.ne.jp](mailto:dengu@gd5.so-net.ne.jp)

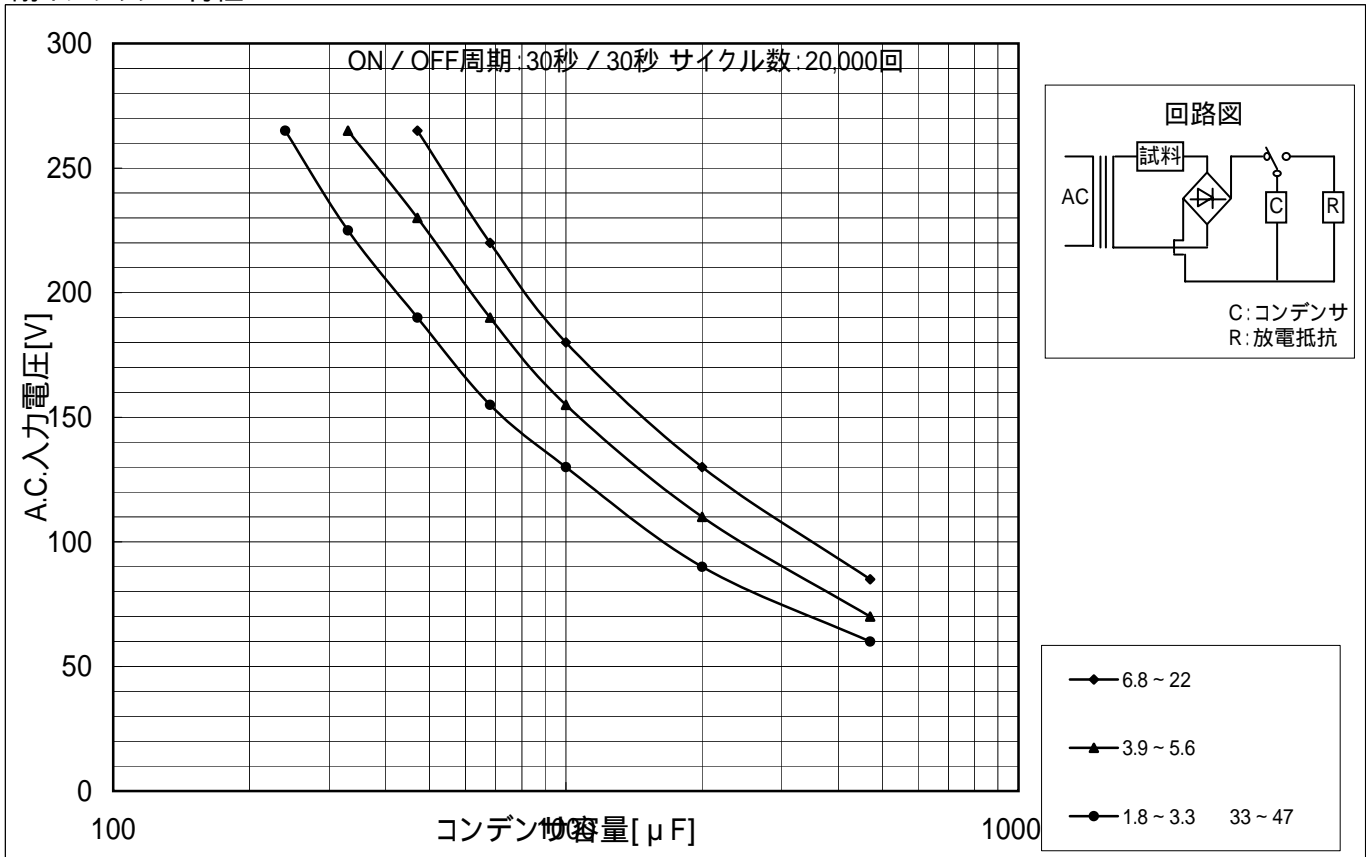


# 5K × × × JA特性

負荷軽減曲線



耐インラッシュ特性



注意事項

設計・仕様について予告なく変更する場合があります。  
 ご使用に際しては、別途納入仕様書をお取りかわし頂きますようお願い申し上げます。