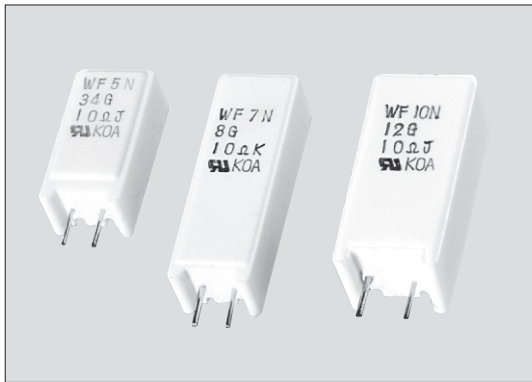


THERMAL FUSE BUILT-IN



WF 温度保险丝水泥电阻器 Thermal Fuse Built-In Resistors



包装: 陶瓷壳 Case: Ceramic
表示: 文字表示 Marking: Alphanumeric

特点 Features

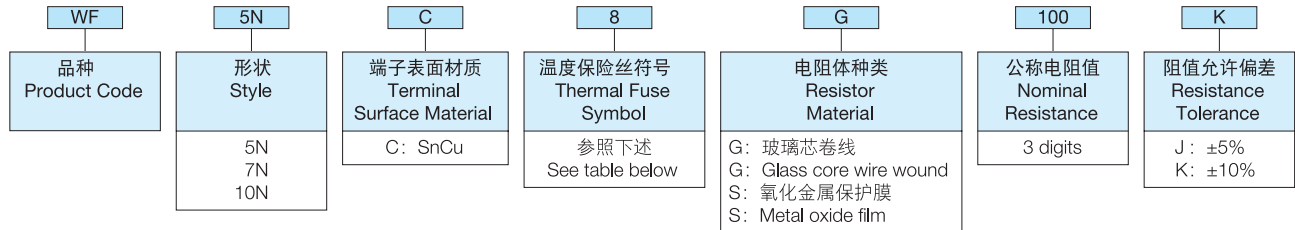
- 对应欧盟RoHS。电极、电阻膜层、玻璃中所含铅玻璃，不包含在欧盟RoHS指令中。
- Products meet EU-RoHS requirement. EU-RoHS regulation is not intended for Pb-glass contained in electrode, resistor element and glass.

取得规格 Approval Awarded

- UL1412认定品 4.7Ω~100Ω, File No.E134679
- UL1412 Recognized 4.7Ω~100Ω, File No.E134679

品名构成 Type Designation

实例 Example



预知关于此产品含有的环境负荷物质详情(除EU-RoHS以外), 请与我们联系。
Contact us when you have control request for environmental hazardous material other than the substance specified by EU-RoHS.

额定值 Ratings

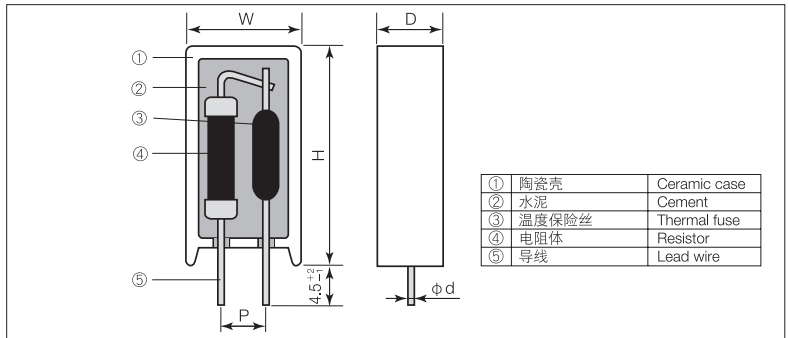
温度保险丝符号 Thermal Fuse Symbol	温度保险丝 Thermal Fuse			额定功率 (W) Power Rating			电阻体不同种类电阻值范围 (Ω) Resistance Range/Material		阻值允许偏差 Resistance Tolerance		最高使用电压 Maximum Working Voltage	最高过载电压 Maximum Overload Voltage
	工作温度 (°C) Thermal Cut-Off Temp.	额定电流 Current Rating	额定电压 Voltage Rating	5N	7N	10N	G※	S※	G※	S※		
8	129 ± 2 (标准) (STD)	10A	250V	1.6	2.0	2.5	1~100 (E24)	110~10k (E24)	J: ±5% K: ±10%	J: ±5%	E = √P · R	E = √P · R · 6.25
10	152 ± 2			1.6	2.0	2.5						
12	188 ⁺³			2.0	2.4	3.5						
14	226 ⁺³			2.0	2.4	3.5						
32	110 ± 2	2A		1.2	1.4	—						
33	126 ± 2			1.4	1.6	—						
34	130 ± 2 (标准) (STD)			1.6	2.0	—						
35	146 ⁺³			1.6	2.0	—						

额定电压是√额定功率×公称电阻值所算出的值。
Rated voltage = √Power Rating × Resistance value.

※电阻体的种类 G: 玻璃芯卷线 Glass core wire wound
S: 氧化金属保护膜 Metal oxide film

由于也有上述以外的温度保险丝·电阻值范围的组合, 务必请商谈。
Other combination of thermal cut-off temperatures and resistance values are available on request.
熔断特性应在使用前确认。
Before use, please make sure of the fusing characteristics.

结构图 Construction



外形尺寸 Dimensions

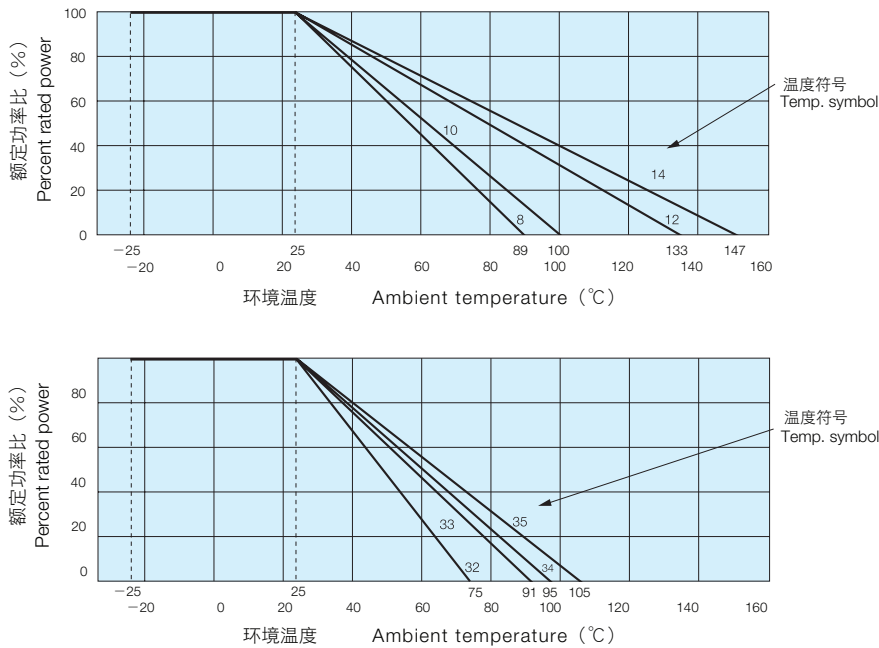
型号 Type	尺寸 Dimensions (mm)						重量 (kg) Weight (kg) (1000pcs)
	W ± 1.0	D ± 1.0	H ± 1.5	P ^{±0.2}	d (R. Lead)	d (Fuse Lead)	
WF5N	13	9	25.5	5	0.8	2A: 0.6	6.6
WF7N			38.5			10A: 1.0	10
WF10N	16	12	35	7.5			14.6

引线长度按照成型和编带的不同而改变。
Lead length changes depending on taping and forming type.

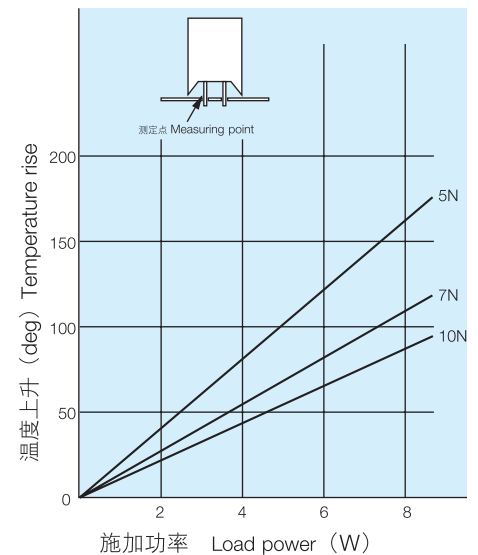
参考标准 Reference Standards

- IEC 60115-1
- JIS C 5201-1

■ 负荷特性曲线 Derating Curve



■ 温度上升 Temperature Rise



在环境温度25℃以上使用时，应按照上图负荷特性曲线，减小额定功率。

For resistors operated at an ambient temperature of 25℃ or above, a power rating shall be derated in accordance with the above derating curve.

■ 性能 Performance

试验项目 Test Items	标准值 Performance Requirements $\Delta R \pm (\% + 0.05 \Omega)$		试验方法 Test Methods
	保证值 Limit	代表值 Typical	
电阻值 Resistance	在规定的允许偏差内 Within specified tolerance	-	25℃
电阻温度系数 T.C.R.	$\pm 250 \times 10^{-6}/K$ (G) $\pm 300 \times 10^{-6}/K$ (S)	-	+25℃/-55℃ and +25℃/+125℃
过载 (短时间) Overload (Short time)	2	1.8	额定功率×6.25倍施加5秒钟 Power Rating×6.25 for 5s
耐焊接热 Resistance to soldering heat	1	0.9	350℃±10℃, 3.5s
耐湿负荷 Moisture resistance	5	4.5	40℃, 90%~95%RH, 500h, 无负荷 No load
耐久性 (额定负荷) Load life	5	4.5	额定负荷, 25℃, 1000小时, 1.5小时ON、0.5小时OFF的周期 Rated voltage, 25℃, 1000h, 1.5h ON/0.5h OFF cycle

- 焊剂等在本产品和安装的印刷电路板上附着离子性杂质时，其耐湿性·耐腐蚀性将受到影响。焊剂内有时含有氯·酸等离子性物质，为除去这些离子性物质应进行清洗。特别是使用无铅焊剂时，由于湿润性提高了，有时会含有大量离子性物质，所以在使用RMA系的焊锡或焊剂时，应充分进行清洗。并且，保管环境和安装条件、环境等，附着了汗·盐等离子性物质时，其耐湿性·耐腐蚀性也将受到影响。对于这种污染，为了除去这些离子性物质，应当进行清洗。
- Ionic impurities such as flux etc. that are attached to these products or those mounted onto a PCB, negatively affect their moisture resistance, corrosion resistance, etc. The flux may contain ionic substances like chlorine, acid, etc. while perspiration and saliva include ionic impurities like sodium (Na^+), chlorine (Cl^-) etc. Therefore these kinds of ionic substances may induce electrical corrosion when they invade into the products. Either thorough washing or using RMA solder and flux are necessary since lead free solder contains ionic substances. Washing process is needed, before putting on moisture proof material in order to prevent electrical corrosion.