

AXIAL LEADED SILICON RECTIFIER DIODES

VOLTAGE RANGE: 50 - 1000V CURRENT: 10.0 A

Features

- Diffused Junction
- Low Forward Voltage Drop
- High Current Capability
- High Reliability
- High Surge Current Capability

Mechanical Data

Case: R-6,

• Terminals: Plated Leads Solderable per

MIL-STD-202, Method 208

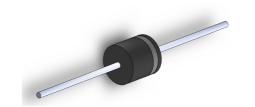
Polarity: Cathode Band

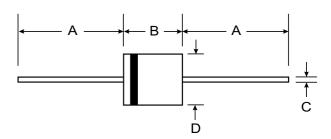
Mounting Position: Any

Marking: Type Number

Weight: 2.1 grams (approx.)







| R-6 | | | | | | |
|----------------------|------|-----|--|--|--|--|
| Dim | Min | Max | | | | |
| Α | 25.4 | _ | | | | |
| В | 8.6 | 9.1 | | | | |
| С | 1.2 | 1.3 | | | | |
| All Dimensions in mm | | | | | | |

Maximum Ratings and Electrical Characteristics T_A = 25°C unless otherwise specified

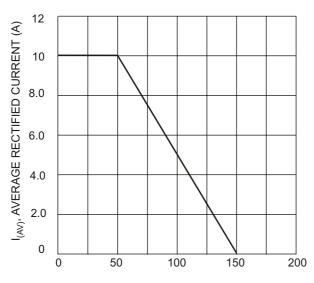
Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

| Characteristic | Symbol | 10A05 | 10A1 | 10A2 | 10A4 | 10A6 | 10A8 | 10A10 | Unit |
|---|------------------------------|-------------|------|------|------|------|------|-------|------|
| Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage | VRRM VRWM VR | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| RMS Reverse Voltage | VR(RMS) | 35 | 70 | 140 | 280 | 420 | 560 | 700 | ٧ |
| Average Rectified Output Current (Note 1) | Ю | 10 | | | | | | Α | |
| Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method) | İFSM | 600 | | | | | | A | |
| Forward Voltage @I _F = 10A | VFM | 1.0 | | | | | | | ٧ |
| | IRM | 10 100 | | | | | | | μΑ |
| Typical Junction Capacitance (Note 2) | Cj | 150 80 | | | | | | pF | |
| Typical Thermal Resistance Junction to Ambient (Note 1) | $R\hspace{.01in}_{	heta}$ JA | 10 | | | | | | °C/W | |
| Operating Temperature Range | Tj | -50 to +150 | | | | | | °C | |
| Storage Temperature Range | Tstg | -50 to +150 | | | | | | °C | |

Note: 1. Leads maintained at ambient temperature at a distance of 9.5mm from the case

2. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.





T_A, AMBIENT TEMPERATURE (°C) Fig. 1 Forward Current Derating Curve

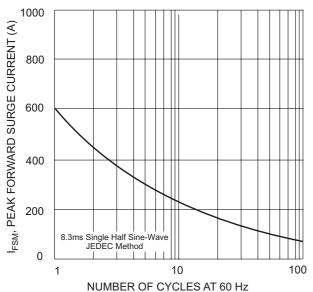
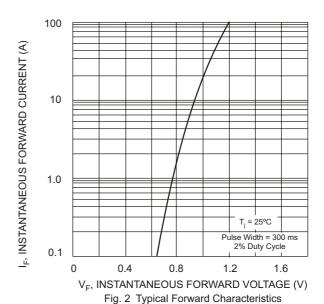


Fig. 3 Maximum Non-Repetitive Peak Forward Surge Current



1000

1000

1000

1000

1000

1000

1000

1000

V_R, REVERSE VOLTAGE (V)

Fig. 4 Typical Junction Capacitance