



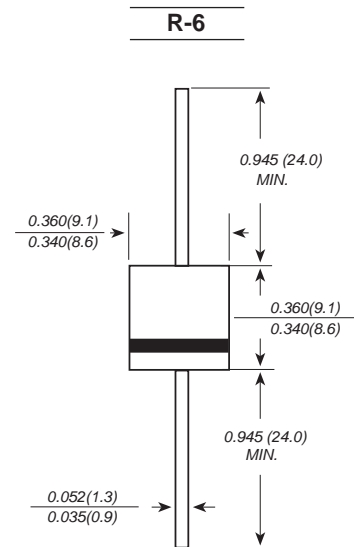
10A05 THRU 10A10 SILICON RECTIFIER

FEATURES

- High surge current capability
- Plastic package has Underwriters Laboratory Flammability Classification 94V-O utilizing Flame Retardant Epoxy Molding Compound.
- Void-free Plastic in a R-6 package.
- High current operation 10.0 ampere at $T_A=55$
- Exceeds environmental standards of MIL-S-19500/228

MECHANICAL DATA

Case: Molded plastic, R-6
 Epoxy: UL 94V-O rate flame retardant
 Lead: Axial leads, solderable per MIL-STD-202, method 208 guaranteed
 Polarity: Color band denotes cathode end
 Mounting position: Any
 Weight: 0.07ounce, 2.1gram



Dimensions in inches and (millimeters)

Maximum Ratings and Electrical Characteristics

Ratings at 25 °C ambient temperature unless otherwise specified.
 Single phase, half wave, 60Hz, resistive or inductive load.
 For capacitive load, derate current by 20%.

| | Symbols | 10A05 | 10A1 | 10A2 | 10A4 | 10A6 | 10A8 | 10A10 | Units |
|---------------------------------------------------------------------------------------------------------|-----------------|--------------|------|------|------|------|------|-------|-------|
| Maximum Recurrent Peak Reverse Voltage | V_{RRM} | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | Volts |
| Maximum RMS Voltage | V_{RMS} | 35 | 70 | 140 | 280 | 420 | 560 | 700 | Volts |
| Maximum DC Blocking Voltage | V_{DC} | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | Volts |
| Maximum Average Forward Rectified Current .375"(9.5mm) Lead Length at $T_A=55$ | $I_{(AV)}$ | 10.0 | | | | | | | Amp |
| Peak Forward Surge Current, 8.3ms single half-sine-wave superimposed on rated load (JEDEC method) | I_{FSM} | 400 | | | | | | | Amp |
| Maximum Forward Voltage at 10.0A DC and 25 | V_F | 1.1 | | | | | | | Volts |
| Maximum Reverse Current at $T_A=25$ at Rated DC Blocking Voltage $T_A=100$ | I_R | 10.0 1000 | | | | | | | uAmp |
| Typical Junction Capacitance (Note 1) | C_J | 150 | | | | | | | pF |
| Typical Thermal Resistance (Note 2) | $R_{\theta JA}$ | 8 | | | | | | | /W |
| Operating Junction Temperature Range | T_J | -55 to +150 | | | | | | | |
| Storage Temperature Range | T_{stg} | -55 to +150 | | | | | | | |

NOTES:

- 1- Measured at 1 MHz and applied reverse voltage of 4.0 VDC.
- 2- Thermal Resistance From Junction to Ambient 0.375"(9.5mm) lead length P.C.B. Mounted with 1.1x1.1" (30x30mm)copper pads.





RATINGS AND CHARACTERISTIC CURVES

FIG.1-TYPICAL FORWARD CHARACTERISTICS

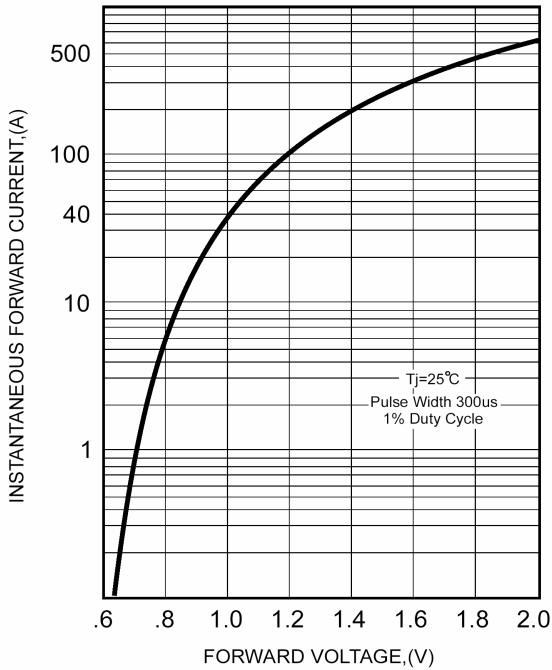


FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE

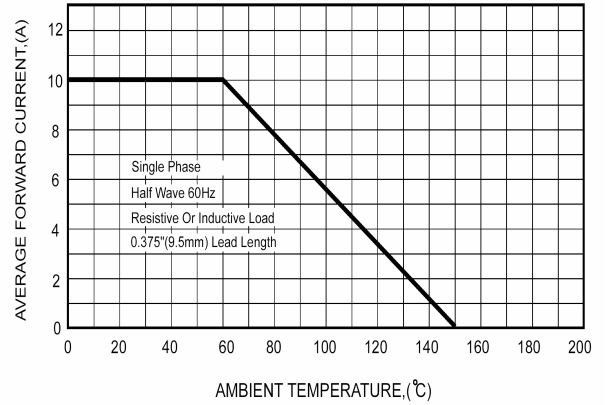


FIG.3 - TYPICAL REVERSE CHARACTERISTICS

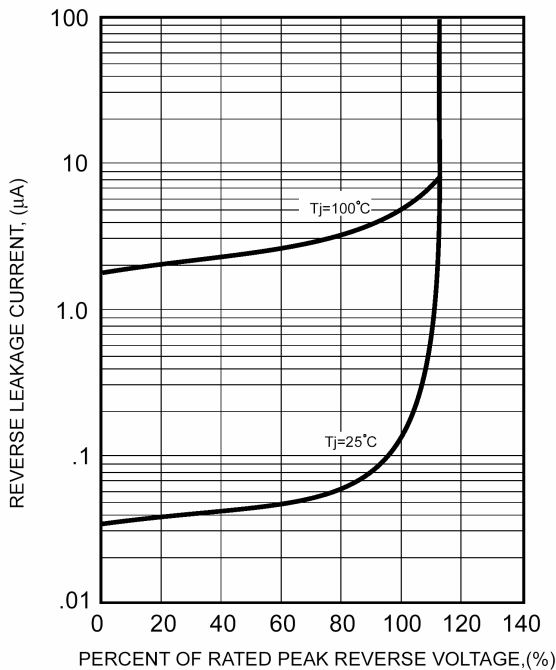


FIG.4-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

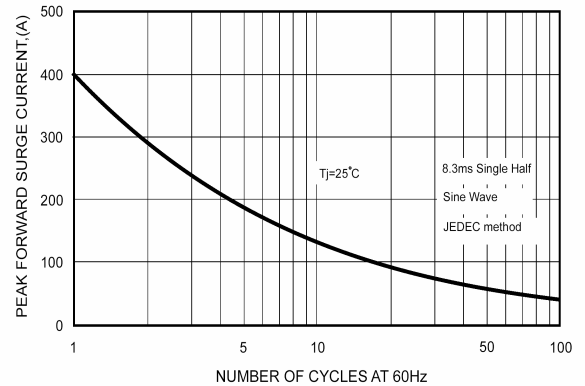


FIG.5 - TYPICAL THERMAL RESISTANCE VS. LEAD LENGTH

