



10A01 THRU 10A07

10.0 AMPS. Silicon Rectifiers

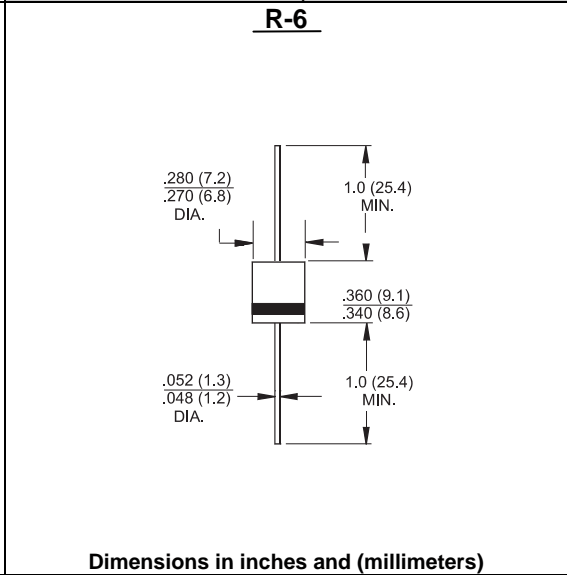
| | |
|--|--|
| | Voltage Range 50 to 1000 Volts Current 10.0 Amperes |
|--|--|

Features

- ✧ Low forward voltage drop
- ✧ High current capability
- ✧ High reliability
- ✧ High surge current capability

Mechanical Data

- ✧ Cases: Molded plastic
- ✧ Epoxy: UL 94V-O rate flame retardant
- ✧ Lead: Axial leads, solderable per MIL-STD-202, Method 208 guaranteed
- ✧ Polarity: Color band denotes cathode end
- ✧ High temperature soldering guaranteed: 260°C/10 seconds/.375", (9.5mm) lead lengths at 5 lbs., (2.3kg) tension
- ✧ Weight: 1.65 grams



Maximum Ratings and Electrical Characteristics

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

| Type Number | Symbol | 10A01 | 10A02 | 10A03 | 10A04 | 10A05 | 10A06 | 10A07 | Units |
|--|-----------------|-------------|-------|-------|-------|-------|-------|-------|--------------------|
| Maximum Recurrent Peak Reverse Voltage | V_{RRM} | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum RMS Voltage | V_{RMS} | 35 | 70 | 140 | 280 | 420 | 560 | 700 | V |
| Maximum DC Blocking Voltage | V_{DC} | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum Average Forward Rectified Current .375 (9.5mm) Lead Length @ $T_A = 50^\circ C$ | $I_{(AV)}$ | 10.0 | | | | | | | A |
| Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method) | I_{FSM} | 600 | | | | | | | A |
| Maximum Instantaneous Forward Voltage @ 10.0A | V_F | 1.0 | | | | | | | V |
| Maximum DC Reverse Current @ $T_A=25^\circ C$ at Rated DC Blocking Voltage @ $T_A=100^\circ C$ | I_R | 10 100 | | | | | | | μA μA |
| Typical Junction Capacitance (Note 1) | C_j | 150 | | | | | | | pF |
| Typical Thermal Resistance (Note 2) | $R_{\theta JA}$ | 10 | | | | | | | $^\circ C/W$ |
| Operating Temperature Range | T_J | -65 to +125 | | | | | | | $^\circ C$ |
| Storage Temperature Range | T_{STG} | -65 to +150 | | | | | | | $^\circ C$ |

Notes: 1. Measured at 1.0 MHz and Applied Reverse Voltage of 4.0 Volts
 2. Mount on Cu-Pad Size 16mm x 16mm on P.C.B.



RATINGS AND CHARACTERISTIC CURVES (10A01 THRU 10A07)

FIG.1- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

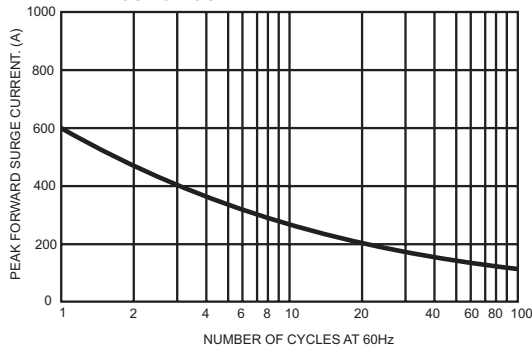


FIG.2- MAXIMUM FORWARD CURRENT DERATING CURVE

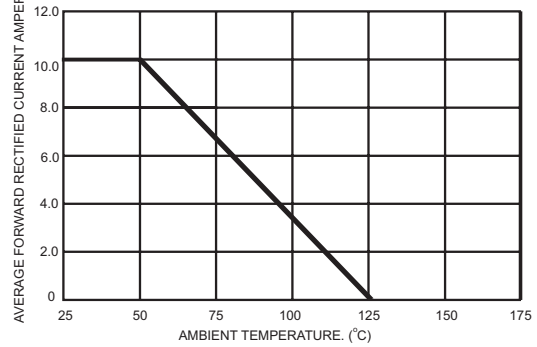


FIG.3- TYPICAL JUNCTION CAPACITANCE

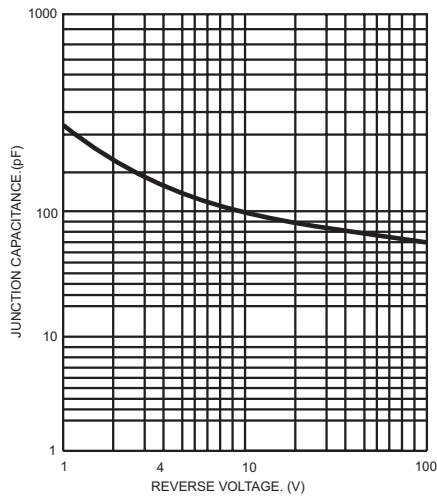
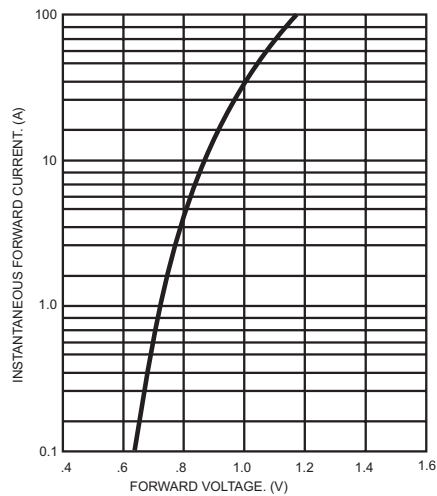


FIG.4- TYPICAL FORWARD CHARACTERISTICS



This datasheet has been download from:

www.datasheetcatalog.com

Datasheets for electronics components.