

SURFACE MOUNT SILICON RECTIFIER

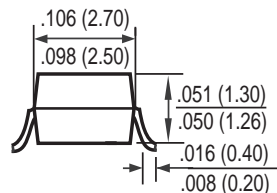
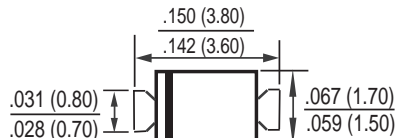
VOLTAGE RANGE 50 to 1000 Volts CURRENT 0.5 Ampere

FEATURES

- * Ideal for surface mounted applications
- * Low leakage current
- * Metallurgically bonded construction
- * Mounting position: Any
- * Weight: 0.016 gram

MECHANICAL DATA

- * Epoxy : Device has UL flammability classification 94V-0



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings 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%.

MAXIMUM RATINGS (At TA = 25°C unless otherwise noted)

| RATINGS | SYMBOL | 05A1 | 05A2 | 05A3 | 05A4 | 05A5 | 05A6 | 05A7 | UNITS |
|---|---------------|--------------|------|------|------|------|------|------|-------|
| Maximum Recurrent Peak Reverse Voltage | VRRM | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | Volts |
| Maximum RMS Voltage | VRMS | 35 | 70 | 140 | 280 | 420 | 560 | 700 | Volts |
| Maximum DC Blocking Voltage | VDC | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | Volts |
| Maximum Average Forward Rectified Current at TA = 55°C | IO | 0.5 | | | | | | | Amps |
| Peak Forward Surge Current IFM(surge): 8.3 ms single half sine-wave superimposed on rated load (JEDEC method) | IFSM | 15 | | | | | | | Amps |
| Maximum Thermal Resistance | (Note 2) RθJL | 70 | | | | | | | °C/W |
| | (Note 3) RθJA | 120 | | | | | | | °C/W |
| Typical Junction Capacitance (Note 1) | CJ | 8 | | | | | | | pF |
| Operating and Storage Temperature Range | TJ, TSTG | -65 to + 150 | | | | | | | °C |

ELECTRICAL CHARACTERISTICS (At TA = 25°C unless otherwise noted)

| CHARACTERISTICS | SYMBOL | 05A1 | 05A2 | 05A3 | 05A4 | 05A5 | 05A6 | 05A7 | UNITS |
|--|--------|------|------|------|------|------|------|------|-------|
| Maximum Forward Voltage at 0.5A DC | VF | 1.1 | | | | | | | Volts |
| Maximum Full Load Reverse Current, Full cycle Average at TA=55°C | IR | 30 | | | | | | | uAmps |
| Maximum DC Average Reverse Current at @TA = 25°C | | 5.0 | | | | | | | uAmps |
| Rated DC Blocking Voltage @TA = 100°C | | 50 | | | | | | | uAmps |

- NOTES : 1. Measured at 1.0 MHz and applied average voltage of 4.0VDC
 2. Thermal resistance junction to terminal 6.0mm² copper pads to each terminal.
 3. Thermal resistance junction to ambient, 6.0mm² copper pads to each terminal.

RATING AND CHARACTERISTIC CURVES (05A1 THRU 05A7)

