Trimming Potentiometers • Bridge Rectifiers • Diodes & Transistors • Surge Arresters • OSC & Quartz Crystals • MLCC & Tantalum Capacitors



GENERAL PURPOSE SILICON RECTIFIER

Reverse Voltage - 50 to 1000 Volts Forward Current - 6.0 Amperes

FEATURES

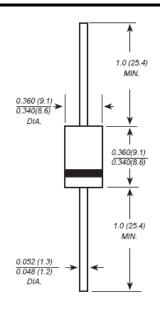
R-6

- ◆The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- Construction utilizes void-free molded plastic technique
- Low reverse leakage
- High forward surge current capability
- ♦ High temperature soldering guaranteed:

250°C/10 seconds,0.375" (9.5mm) lead length,5 lbs. (2.3kg) tension

MECHANICAL DATA

Case: R-6 molded plastic body Terminals: Plated axial leads, solderable per MIL-STD-750,Method 2026 Polarity: Color band denotes cathode end Mounting Position: Any Weight:0.072 ounce, 2.05 grams



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 current derate by 20%.

| | SYMBOLS | 6A05 | 6A1 | 6A2 | 6A4 | 6A6 | 6A8 | 6A10 | UNITS |
|--|---------|------|-----|-----|-------------|-----|-----|------|-------|
| Maximum repetitive 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 0.375"(9.5mm) lead length at T_A=60 $^\circ\!\mathrm{C}$ | I(AV) | | | | 6.0 | | | | Amps |
| Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method) | Ifsm | | | | 400 | | | | Amps |
| Maximum instantaneous forward voltage at 6.0A | VF | | | | 0.95 | | | | Volts |
| Maximum DC reverse current T_A=25 $^\circ\!\mathrm{C}$ at rated DC blocking voltage T_A=100 $^\circ\!\mathrm{C}$ | lr | | | | 10.0 400 | | | | mA |
| Typical junction capacitance (NOTE 1) | Сл | | | | 150 | | | | pF |
| Typical thermal resistance (NOTE 2) | Reja | | | | 10.0 | | | | °C/W |
| Operating junction and storage temperature range | Tj,Tstg | | | -6 | 65 to +17 | 75 | | | °C |

Note:1.Measured at 1MHz and applied reverse voltage of 4.0V D.C.

2. Thermal resistance from junction to ambient at 0.375" (9.5mm)lead length, P.C.B. mounted

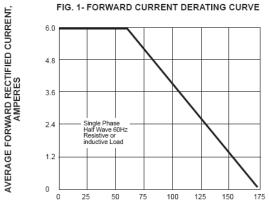
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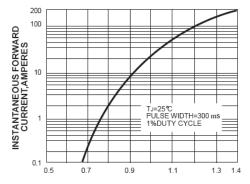


RATINGS AND CHARACTERISTIC CURVES 6A05 THRU 6A10



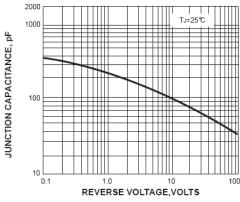
AMBIENT TEMPERATURE, °C





INSTANTANEOUS FORWARD VOLEAGE, VOLTS





Note: Specifications are subject to change without notice.

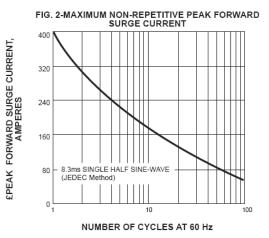


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

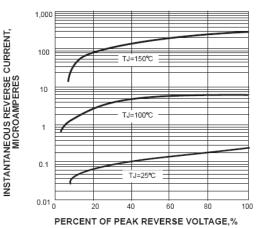
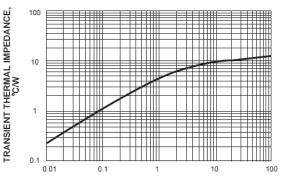


FIG. 6-TYPICAL TRANSIENT THERMAL IMPEDANCE



t,PULSE DURATION,sec.

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