

BA157G THRU BA159G

**GLASS PASSIVATED
FAST RECOVERY RECTIFIER**
VOLTAGE: 400 TO 1000V CURRENT: 1.0A



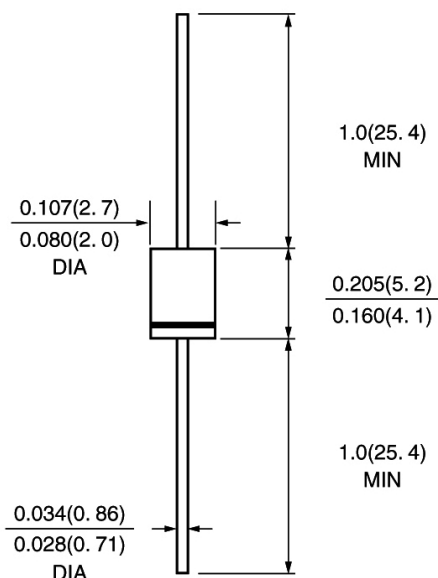
FEATURE

Molded case feature for auto insertion
High current capability
Low leakage current
Fast switching capability
High temperature soldering guaranteed
250°C /10sec/0.375" lead length at 5 lbs tension
Glass Passivated chip

MECHANICAL DATA

Terminal: Plated axial leads solderable per MIL-STD 202E, method 208C
Case: Molded with UL-94 Class V-0 recognized Flame Retardant Epoxy
Polarity: color band denotes cathode
Mounting position: any

DO - 41\DO- 204AL



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(single-phase, half-wave, 60HZ, resistive or inductive load rating at 25°C, unless otherwise stated)

| | SYMBOL | BA157G | BA158G | BA159G | units |
|---|-----------------------------------|--------------|--------|--------|-------|
| Maximum Recurrent Peak Reverse Voltage | V _{rrm} | 400 | 600 | 1000 | V |
| Maximum RMS Voltage | V _{rms} | 280 | 420 | 700 | V |
| Maximum DC blocking Voltage | V _{dc} | 400 | 600 | 1000 | V |
| Maximum Average Forward Rectified Current 3/8" lead length at T _a =55°C | I _{f(av)} | 1.0 | | | A |
| Peak Forward Surge Current 8.3ms single Half sine-wave superimposed on rated load | I _{fsm} | 30.0 | | | A |
| Maximum Instantaneous Forward Voltage at Rated forward current | V _f | 1.25 | | | V |
| Maximum DC Reverse Current T _a =25°C At rated DC blocking voltage T _a =125°C | I _r | 5.0 100.0 | | | μA |
| Typical Junction Capacitance (Note 1) | C _j | 15.0 | | | pF |
| Typical Thermal Resistance (Note 2) | R _{th(ja)} | 55 | | | °C/W |
| Maximum Reverse Recovery Time (Note 3) | T _{rr} | 150 | | 250 | nS |
| Storage and Operating Junction Temperature | T _{stg} , T _j | -55 to +150 | | | °C |

Note:

1. Measured at 1.0 MHz and applied voltage of 4.0Vdc
2. Thermal resistance from junction to ambient at 0.375" (9.5 mm) lead length, P.C.B. mounted
Test Condition I_f =0.5A, I_r =1.0A, I_{rr} =0.25A

RATINGS AND CHARACTERISTIC CURVES BA157G THRU BA159G

FIG. 1 - FORWARD CURRENT DERATING CURVE

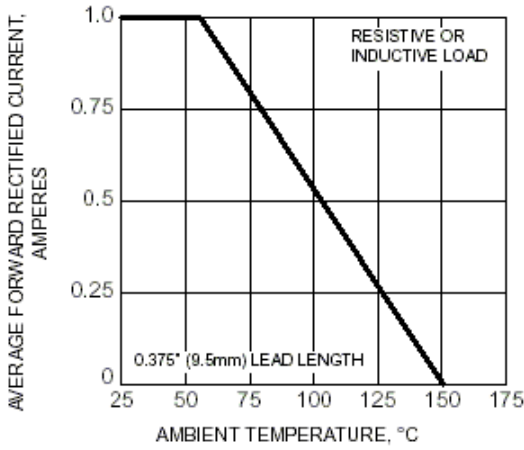


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

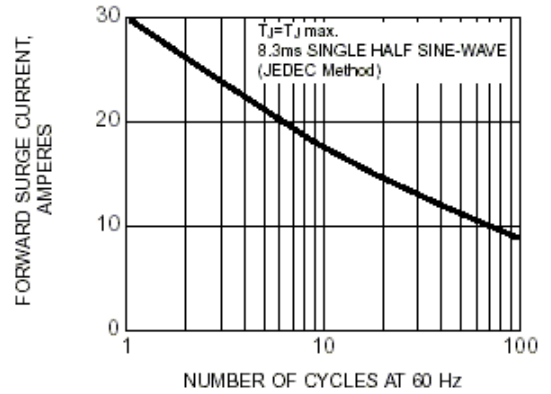


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

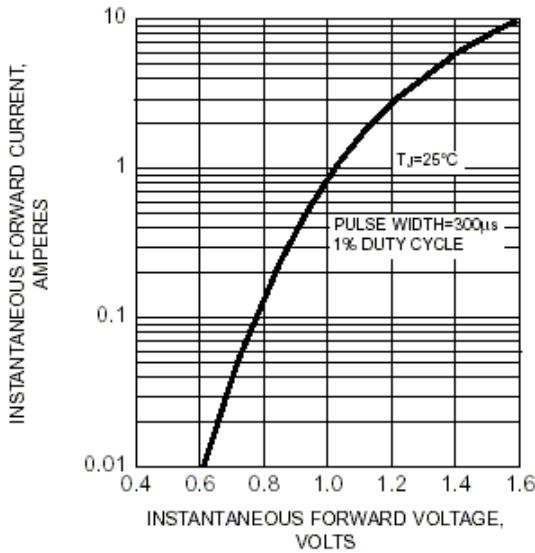


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

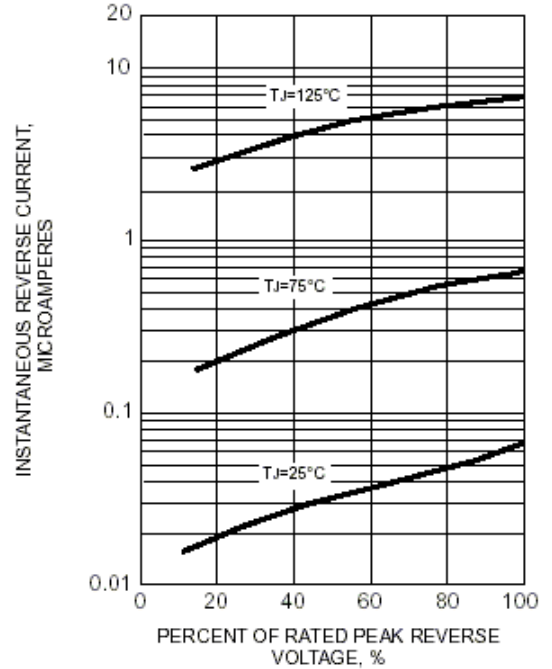


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

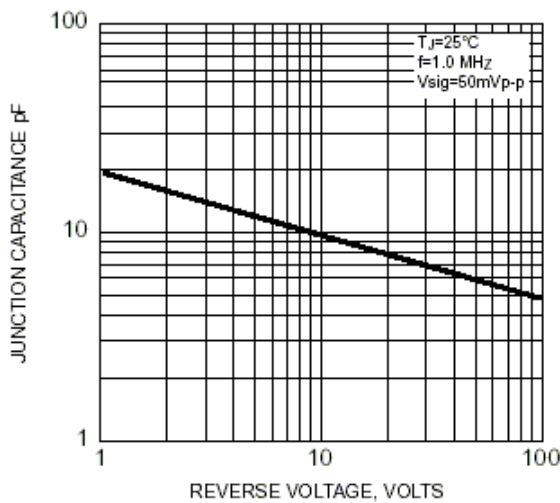


FIG. 6 - TYPICAL TRANSIENT THERMAL IMPEDANCE

