BA157 THRU BA159

FAST SWITCHING PLASTIC RECTIFIER VOLTAGE - 400 to 1000 Volts CURRENT - 1.0 Ampere

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 DO-41 package
- 1.0 ampere operation at T_A=55 ¢J with no thermal runaway
- Fast switching for high efficiency
- Exceeds environmental standards of MIL-S-19500/228

MECHANICAL DATA

Case: Molded plastic, DO-41

Terminals: Axial leads, solderable per MIL-STD-202,

Method 208

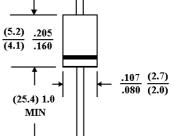
Polarity: Band denotes cathode

Mounting Position: Any

Weight: 0.012 ounce, 0.3 gram

(25.4) 1.0 MIN (5.2) .205 (41) 160

DO-41



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 ¢J ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

	BA157	BA158	BA159	UNITS
Maximum Recurrent Peak Reverse Voltage	400	600	1000	V
Maximum RMS Voltage	280	420	700	V
Maximum DC Blocking Voltage	400	600	1000	V
Maximum Average Forward Rectified Current .375"(9.5mm) lead length at T _A =55 ¢J	1.0			А
Peak Forward Surge Current 8.3ms single half sine wave superimposed on rated load(JECEC method)	30			А
Maximum Forward Voltage at 1.0A	1.3			V
Maximum Reverse Current T _J =25 ¢J	5.0 500			£g A
at Rated DC Blocking Voltage T _J =100 ¢J				
Typical Junction capacitance (Note 1)	12			₽F
Maximum Reverse Recovery Time(Note 2)	150 250		250	ns
Operating and Storage Temperature Range	-55 to +150			¢J

NOTES:

- 1. Measured at 1 MHz and applied reverse voltage of 4.0 VDC
- 2. Reverse Recovery Test Conditions: I_F=.5A, I_R=1A, I_{rr}=.25A



RATING AND CHARACTERISTIC CURVES BA157 THRU BA159

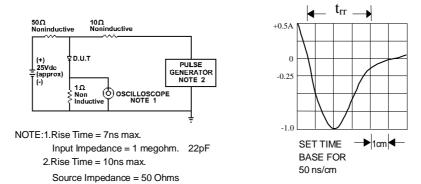


Fig. 1-REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM

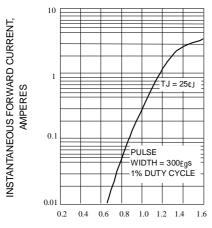




Fig. 2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

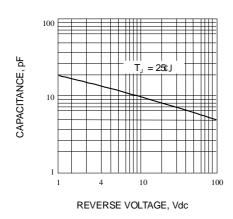


Fig. 4-TYPICAL JUNCTION CAPACITANCE

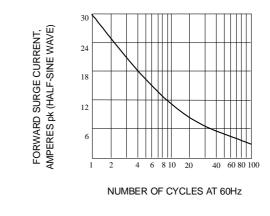


Fig. 5-PEAK FORWARD SURGE CURRENT

Fig. 3-FORWARD CURRENT DERATING CURVE

