

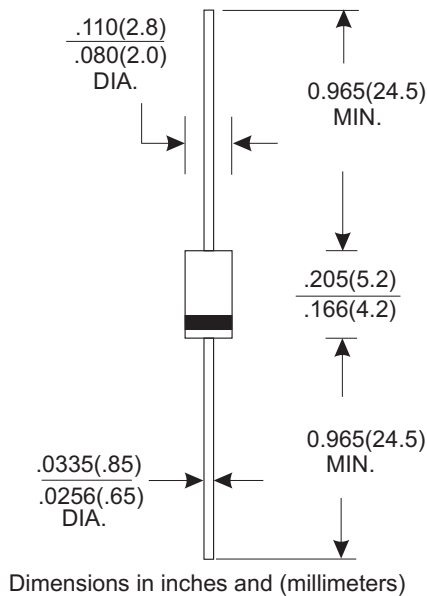


BA157G THRU BA159G

GLASS PASSIVATED FAST RECOVERY RECTIFIERS

Reverse Voltage - 400 to 1000 Volts Forward Current - 1.0 Ampere

DO-41



FEATURES

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

MECHANICAL DATA

- * Case: Molded plastic
- * Epoxy: UL 94V-0 rate flame retardant
- * Lead: Axial leads, solderable per MIL-STD-202, method 208 guaranteed
- * Polarity: Color band denotes cathode end
- * Mounting position: Any
- * Weight: 0.29 grams

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

TYPE NUMBER	BA157G	BA158G	BA159G	UNITS
Maximum Recurrent Peak Reverse Voltage	400	600	1000	V
Maximum RMS Voltage	400	600	1000	V
Maximum DC Blocking Voltage	400	600	1000	V
Maximum Average Forward Rectified Current .375"(9.5mm) Lead Length at Ta=45°C	1.0			A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	30			A
Maximum Instantaneous Forward Voltage at 1.0A	1.3			V
Maximum DC Reverse Current Ta=25°C	5.0			µA
at Rated DC Blocking Voltage Ta=100°C	100			µA
Maximum Reverse Recovery Time (Note 1)	150	150	250	nS
Typical Junction Capacitance (Note 2)	25			pF
Operating and Storage Temperature Range T _J , T _{STG}	-65 — +150			°C

NOTES:

1. Reverse Recovery Time test condition: IF=0.5A, IR=1.0A, IRR=0.25A
2. Measured at 1MHz and applied reverse voltage of 4.0V D.C.

RATING AND CHARACTERISTIC CURVES (BA157G THRU BA159G)

FIG.1-TYPICAL FORWARD CHARACTERISTICS

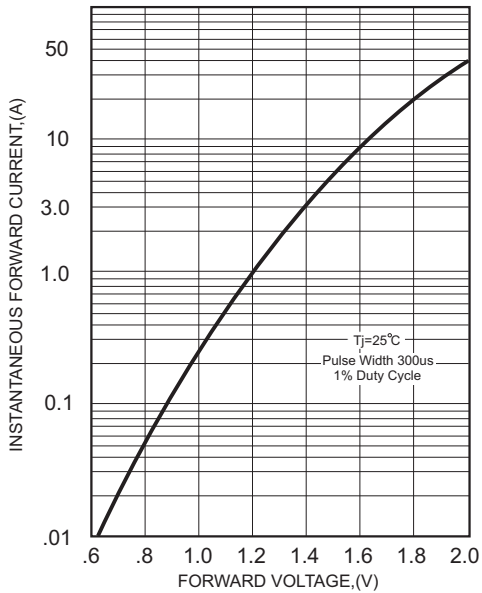


FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE

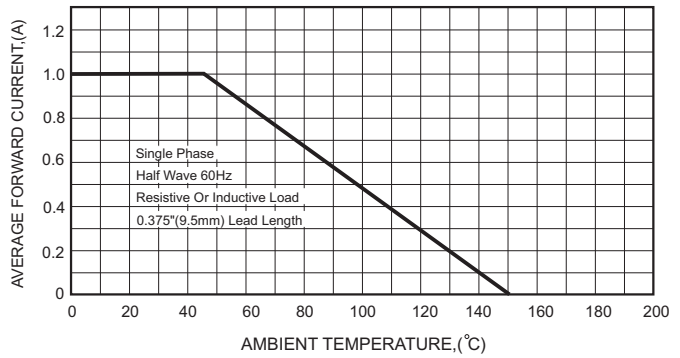


FIG.4-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

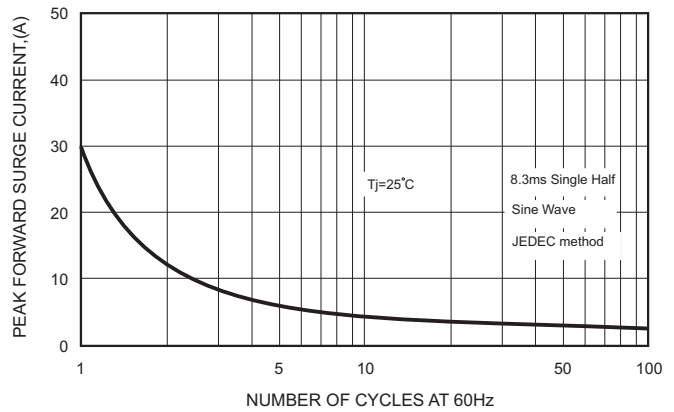
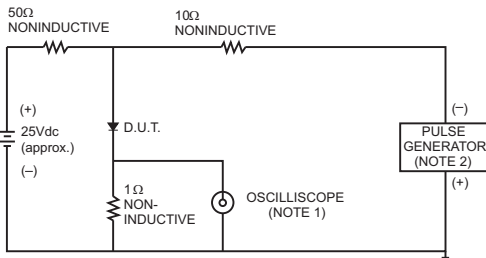


FIG.3- TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTICS



- NOTES: 1. Rise Time= 7ns max., Input Impedance= 1 megohm, 22pF.
2. Rise Time= 10ns max., Source Impedance= 50 ohms.

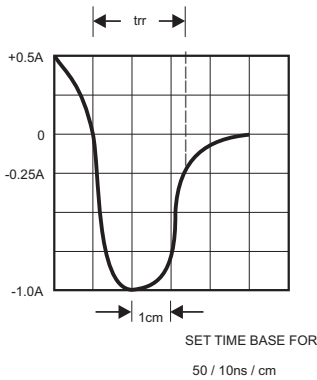


FIG.5-TYPICAL JUNCTION CAPACITANCE

