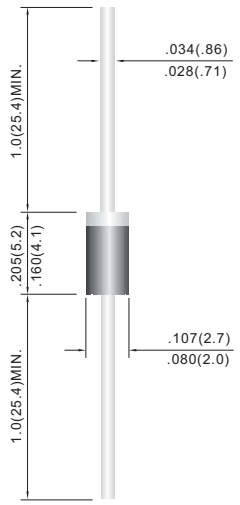
BA157~BA159

FAST RECOVERY PLASTIC RECTIFIER

VOLTAGE 400 to 1000 Volts **CURRENT** 1.0 Amperes

DO-41 Unit: inch(mm)



FEATURES

- High current capability.
- Plastic package has Underwriters Laboratory Flammability Classification 94V-O utilizing Flame Retardant Epoxy Molding Compound.
- Low leakage.
- Exceeds environmental standards of MIL-S-19500/228
- Fast switching for high efficiency.
- In compliance with EU RoHS 2002/95/EC directives

MECHANICALDATA

- Case: Molded plastic, DO-41
- Terminals: Axial leads, solderable to MIL-STD-750,Method 2026
- Polarity: Color Band denotes cathode end
- Mounting Position: Any
- Weight: 0.0118 ounce, 0.336 gram

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified. Resistive or inductive load, 60Hz.

PARAMETER	SYMBOL	BA157	BA158	BA159	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 Current .375"(9.5mm) 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(JEDEC method)	I_{FSM}	30			A
Maximum Forward Voltage at 1.0A	V_F	1.3			V
Maximum DC Reverse Current T_J=25°C at Rated DC Blocking Voltage T_J=100°C	I_R	5.0 500			μA
Maximum Reverse Recovery Time (Note 1)	t_{rr}	150		250	ns
Typical Junction capacitance (Note 2)	C_J	12			pF
Typical Thermal Resistance (Note 3)	$R_{\theta JA}$	41			°C / W
Operating Junction and Storage Temperature Range	T_J,T_{STG}	-55 to +150			°C

NOTES:1. Reverse Recovery Test Conditions: I_F=.5A, I_R=1A, I_{rr}=.25A

2. Measured at 1 MHz and applied reverse voltage of 4.0 VDC

3. Thermal resistance from junction to ambient at 0.375"(9.5mm) lead length with both leads equally heatsink.

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RATING AND CHARACTERISTIC CURVES

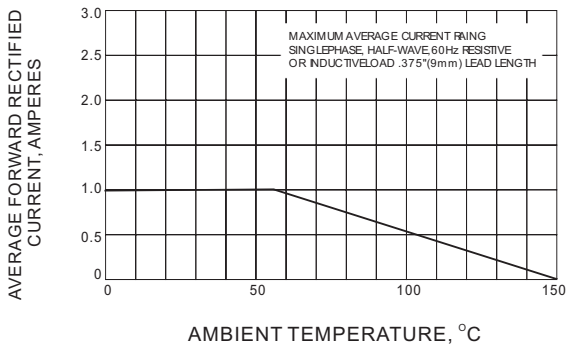


Fig.1 FORWARD CURRENT DERATING CURVE

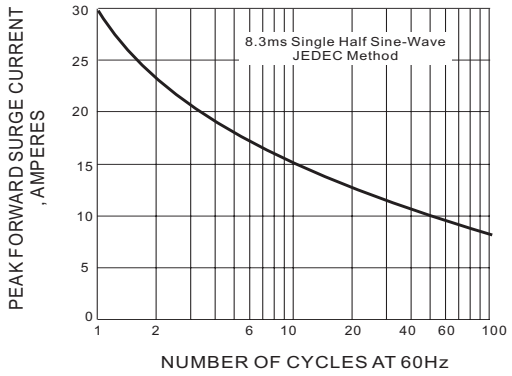


Fig.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

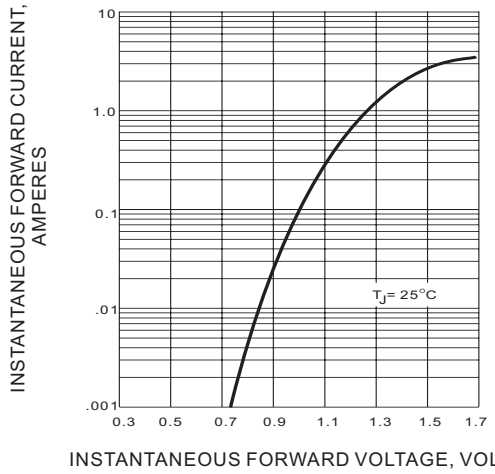


Fig.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

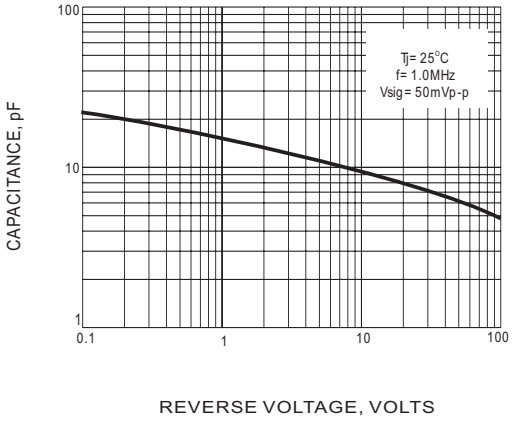


Fig.4 TYPICAL JUNCTION CAPACITANCE

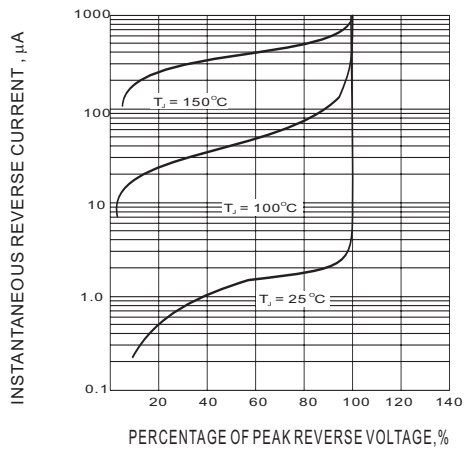


Fig.5- TYPICAL REVERSE CHARACTERISTIC