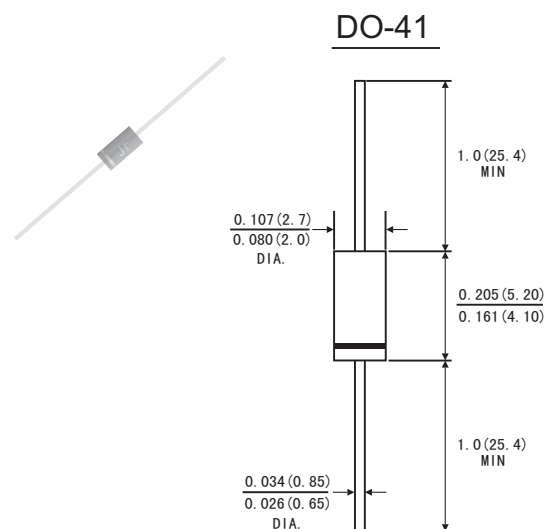


FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Diffused junction
- High current capability
- High temperature soldering guaranteed: 260°C/10 seconds at terminals,
- Component in accordance to RoHS 2011/65/EU

MECHANICAL DATA

- Case: JEDEC DO-41 molded plastic body
- Terminals: Plated axial leads, solderable per MIL-STD-750, method 2026
- Polarity: Color band denotes cathode end
- Mounting Position: Any
- Weight: 0.012 ounce, 0.33 gram



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

	Symbols	BA157	BA158	BA159	Units
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	400	600	1000	Volts
Maximum RMS Voltage	V_{RMS}	280	420	700	Volts
Maximum DC Blocking Voltage	V_{DC}	400	600	1000	Volts
Maximum Average Forward Rectified Current load length at $T_A=50^\circ\text{C}$	$I_{(AV)}$	1.0			Amps
Peak Forward Surge Current 10ms single half sine-wave superimposed on rated load	I_{FSM}	30			Amps
Maximum Instantaneous Forward Voltage at 1.0 A	V_F	1.3			Volts
Maximum DC Reverse Current at rated DC blocking voltage	$T_A=25^\circ\text{C}$	I_R	5.0		μA
	$T_A=100^\circ\text{C}$		100		
Maximum reverse recovery time(Note 1)	t_{rr}	150	250		ns
Max.thermal resistance(Note 2)	$R_{\theta JA}$	65			$^\circ\text{C}/\text{W}$
Typical junction capacitance(Note 3)	C_J	15			pF
Operating junction and storage temperature range	T_J T_{STG}	-55 to +150			$^\circ\text{C}$

Note: 1. Test conditions: $I_F=0.5\text{A}$, $I_R=1.0\text{A}$, $I_{rr}=0.25\text{A}$.

2. Mount on Cu-Pad size 5mmx5mm on P.C.B.

3. Measured at 1MHz and applied reverse voltage of 4.0 Volts D.C.

RATINGS AND CHARACTERISTIC CURVES BA157 THRU BA159

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

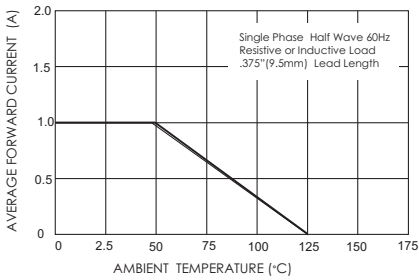


FIG.2-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

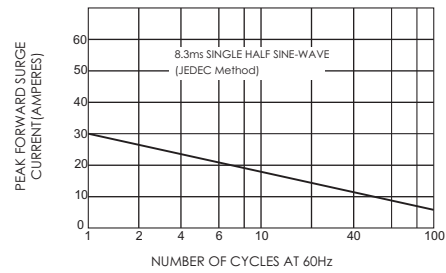


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

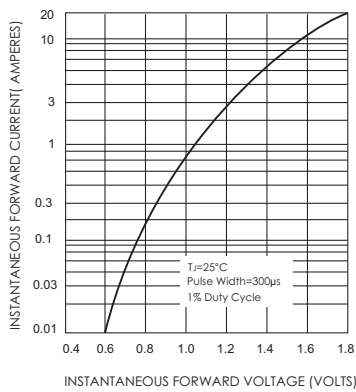


FIG.4-TYPICAL JUNCTION CAPACITANCE

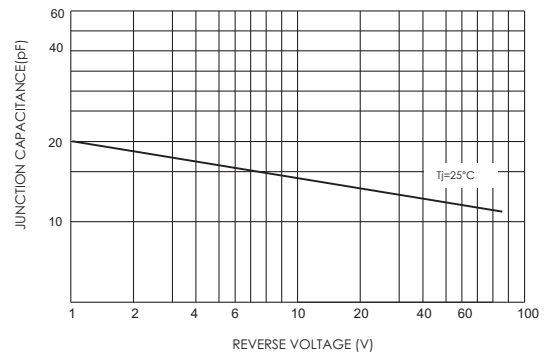
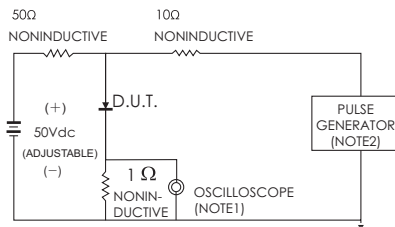


FIG.5-TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTIC



NOTES: 1. Rise Time=7ns max. input Impedance=1 megohm 22pF
 2. Rise Time=10ns max. source Impedance=50 ohms

