

Features

- * Low Forward Voltage Drop
- * High Current Capability
- * High Reliability
- * High Surge Current Capability

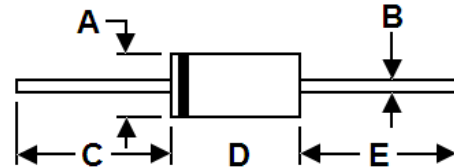


RoHS
COMPLIANT



Package Outline Dimensions

DO-41:



DIM.	Unit (mm)		Unit (inch)	
	Min	Max	Min	Max
A	2.0	2.7	0.078	0.107
B	0.7	0.9	0.027	0.035
C	25.4	-	1.0	-
D	4.2	5.2	0.165	0.205
E	25.4	-	1.0	-

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

Maximum Ratings and Electrical Characteristics

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

Type Number	Symbol	BA157	BA158	BA159	Unit
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	400	600	1000	V
Maximum RMS Voltage	V_{RMS}	280	420	700	V
Maximum D.C Blocking Voltage	V_{DC}	400	600	1000	V
Maximum Average Forward Rectified Current	$I_{F(AV)}$	1.0			A
Peak Forward Surge Current, 8.3ms single half sine-wave superimposed on rated load(JEDEC method)	I_{FSM}	30			A
Maximum Instantaneous Forward Voltage at 1.0A	V_F	1.2			V
Maximum D.C Reverse Current @ $T_J=25^{\circ}C$ at Rated D.C Blocking Voltage @ $T_J=125^{\circ}C$	I_R	5 150			μA
Maximum Reverse Recovery Time(Note1)	T_{rr}	150		250	nS
Typical Junction Capacitance(Note2)	C_J	10			pF
Typical Thermal Resistance	$R_{\theta JA}$	65			$^{\circ}C/W$
Operating and Storage Temperature Range	T_J/T_{STG}	-55 to +150			$^{\circ}C$

Note:1、 Reverse Recovery Test Conditions: $I_F=0.5A$, $I_R=1.0A$, $I_{RR}=0.25A$. 2、 Measured at 1MHz and Applied Reverse Voltage of 4.0V D.C.

Ratings and Characteristic Curves

FIG. 1- MAXIMUM FORWARD CURRENT DERATING CURVE

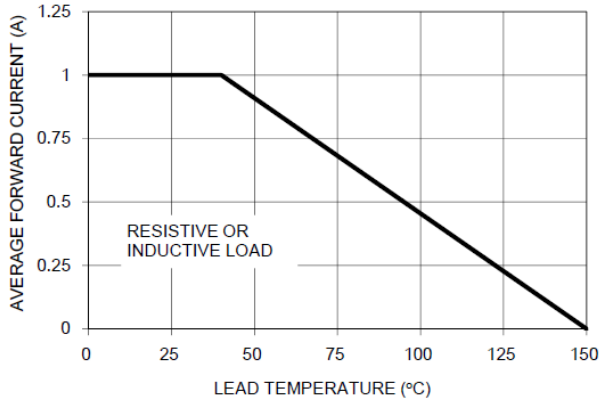


FIG. 2- TYPICAL REVERSE CHARACTERISTICS

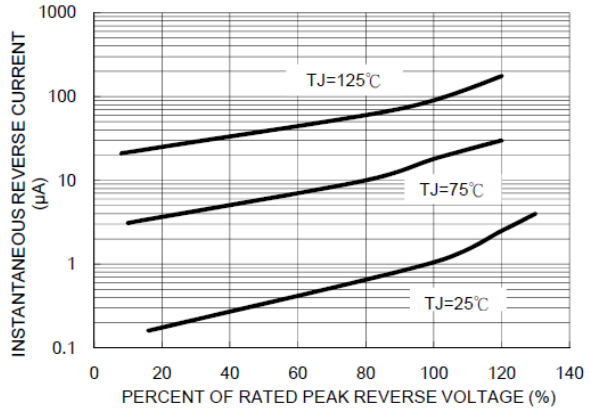


FIG. 3- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

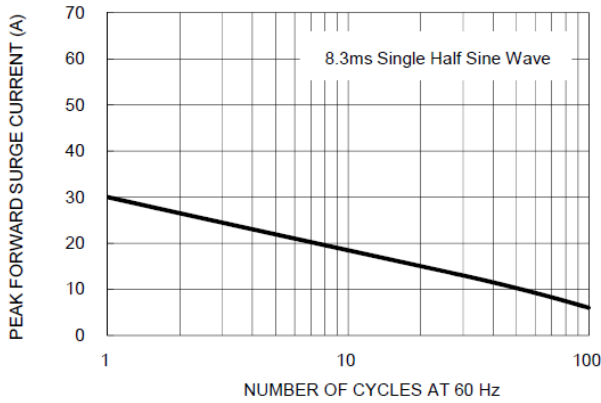


FIG. 4- TYPICAL FORWARD CHARACTERISTICS

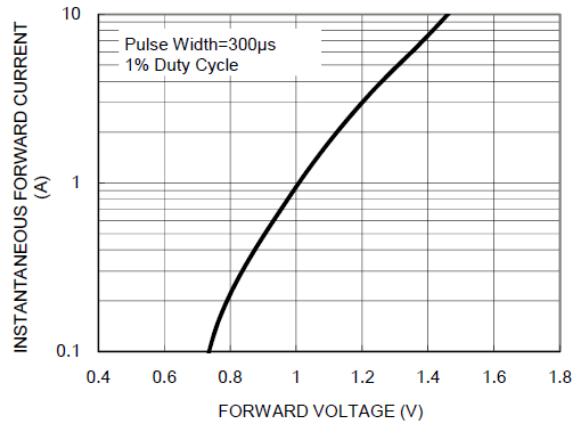


FIG. 5- TYPICAL JUNCTION CAPACITANCE

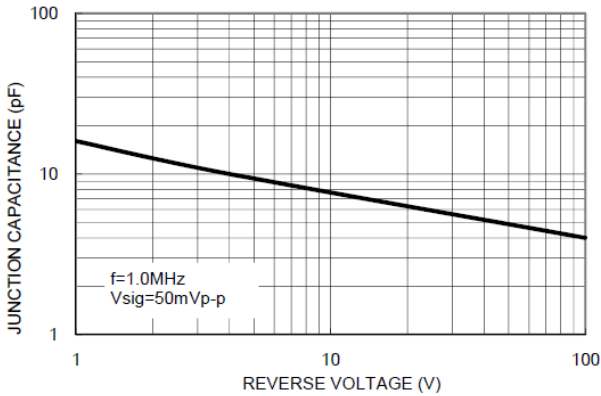
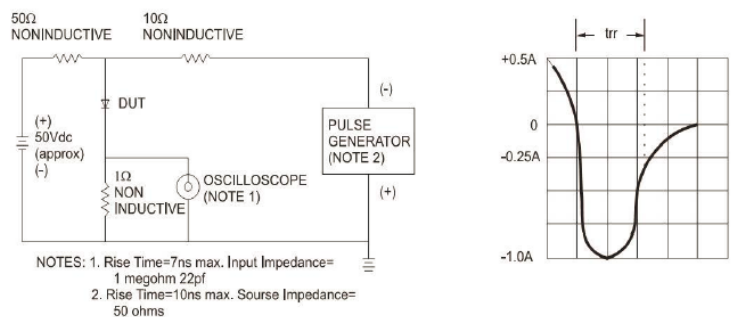


FIG. 6- REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM





BA157 THRU BA159
1.0 Amp. Fast Recovery Rectifiers

Ordering Information

Part No.	Package	Packing
BA157~BA159	DO-41	3K/AMMO box
BA157~BA159	DO-41	5K/AMMO box
BA157~BA159	DO-41	5K/13" Paper reel
BA157~BA159	DO-41	1K/Bulk packing