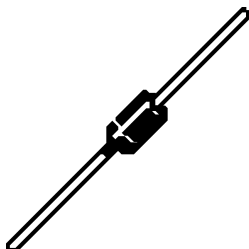


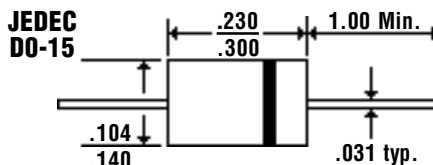
1.0 Amp FAST RECOVERY PLASTIC RECTIFIERS

BA157 ... 159 Series

Description



Mechanical Dimensions

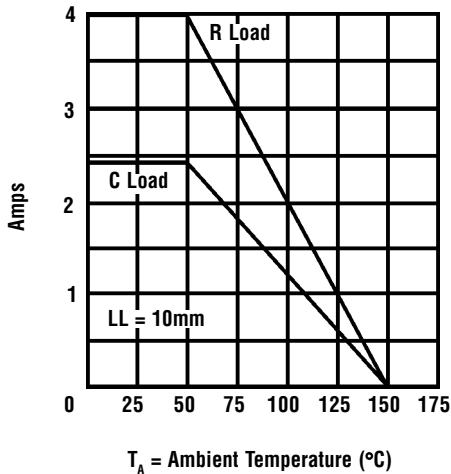


Features

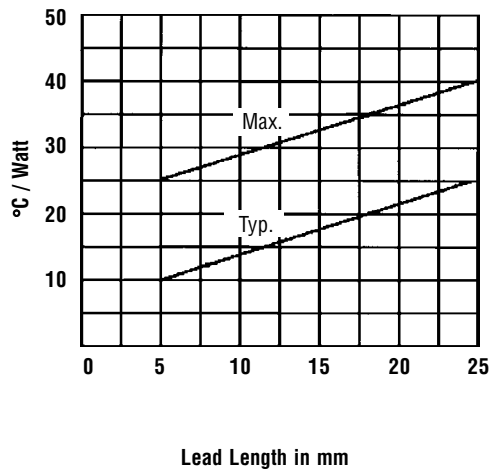
- FAST SWITCHING FOR HIGH EFFICIENCY
- HIGH SURGE CAPABILITY
- 1.0 AMP OPERATION @ $T_A = 55^\circ\text{C}$, WITH NO THERMAL RUNAWAY
- MEETS UL SPECIFICATION 94V-0

Electrical Characteristics @ 25°C.	BA157 ... 159 Series			Units
Maximum Ratings	BA157	BA158	BA159	
Peak Repetitive Reverse Voltage... V_{RRM}	400	600	1000	Volts
RMS Reverse Voltage... $V_{R(rms)}$	280	420	700	Volts
DC Blocking Voltage... V_{DC}	400	600	1000	Volts
Average Forward Rectified Current... $I_{F(av)}$ $T_A = 55^\circ\text{C}$ (Note 3)	.....	1.0	.....	Amps
Non-Repetitive Peak Forward Surge Current... I_{FSM} @ Rated Current & Temp	.....	5.0	.....	Amps
	.....	35	.....	Amps
Forward Voltage @ 1.0A... V_F	.....	1.3	.....	Volts
DC Reverse Current... I_R @ 25°C	.....	5.0	.....	μAmps
@ Rated DC Blocking Voltage @ 100°C	.....	100	.....	μAmps
Typical Junction Capacitance... C_J (Note 1)	22	20	18	pF
Typical Thermal Resistance... $R_{\theta JC}$ (Note 2)	.....	60	.....	°C / W
Typical Reverse Recovery Time... t_{RR}	300	300	500	nS
Operating & Storage Temperature Range... T_J, T_{STRG}	.....	-50 to 150	.....	°C

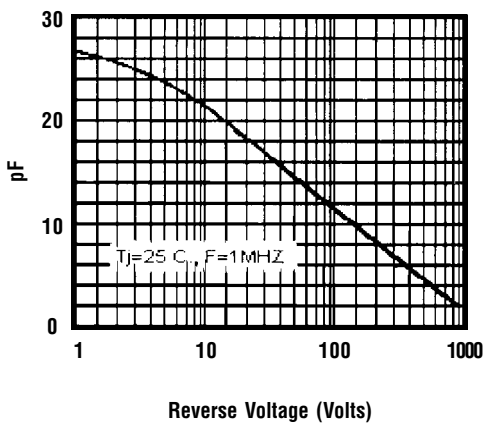
Forward Current Derating Curve



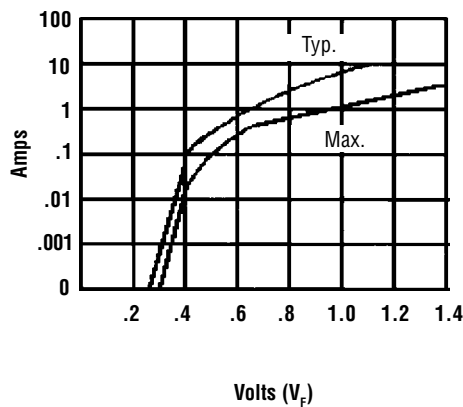
Thermal Resistance Junction to Ambient



Typical Junction Capacitance



Instantaneous Forward Current



Ratings at
25 Deg. C ambient
temperature
unless otherwise
specified.

Single Phase Half
Wave, 60 HZ
Resistive or
Inductive Load.

For Capacitive
Load, Derate
Current by 20%.

- NOTES:**
1. Measured @ 1 MHz and applied reverse voltage of 4.0V.
 2. Thermal Resistance Junction to Ambient, Jedec Method.
 3. When Mounted to heat sink, from body.