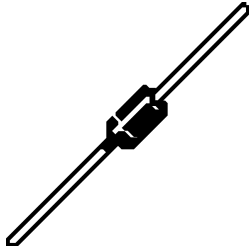


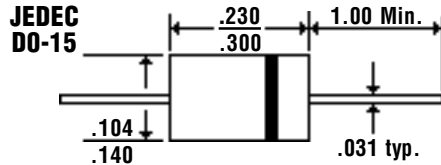
# 1.0 Amp FAST RECOVERY PLASTIC RECTIFIERS

**BA157 ... 159 Series**

## Description



## Mechanical Dimensions

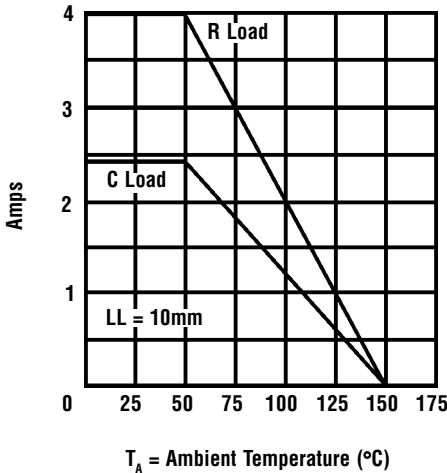


### Features

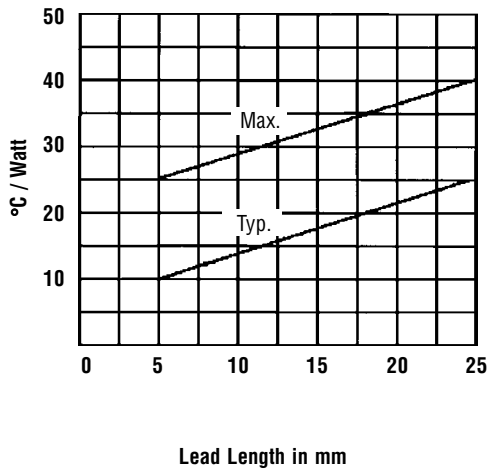
- FAST SWITCHING FOR HIGH EFFICIENCY
- HIGH SURGE CAPABILITY
- 1.0 AMP OPERATION @  $T_A = 55^\circ\text{C}$ , WITH NO THERMAL RUNAWAY
- MEETS UL SPECIFICATION 94V-0

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

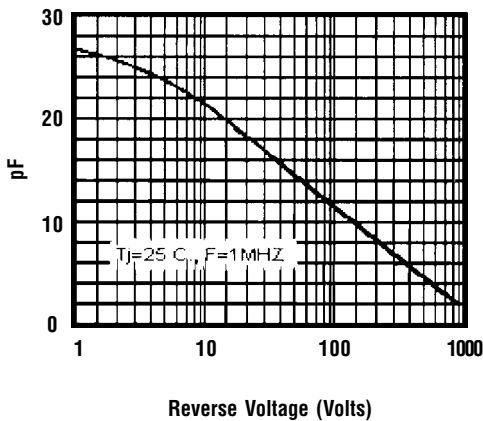
**Forward Current Derating Curve**



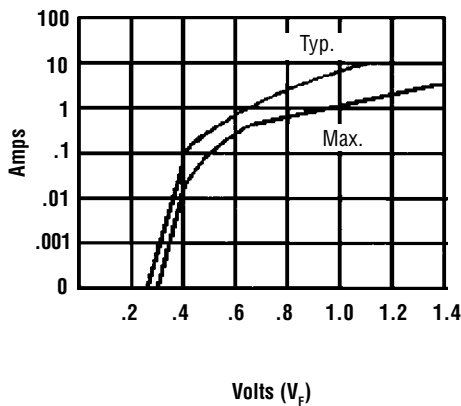
**Thermal Resistance Junction to Ambient**



**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.