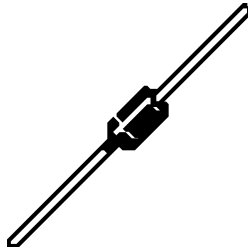


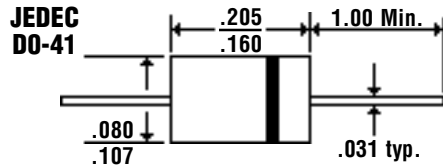
# 1.0 Amp FAST RECOVERY PLASTIC RECTIFIERS

**BA157 . . . 159 Series**

## Description



## Mechanical Dimensions

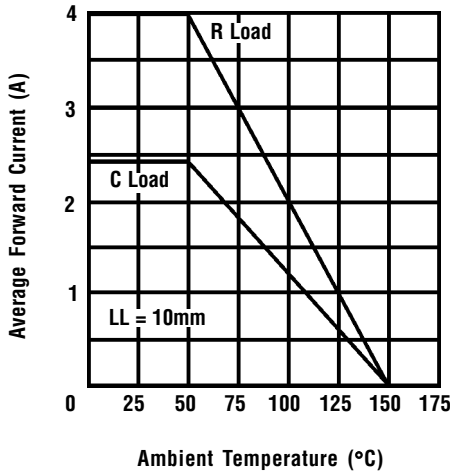


### Features

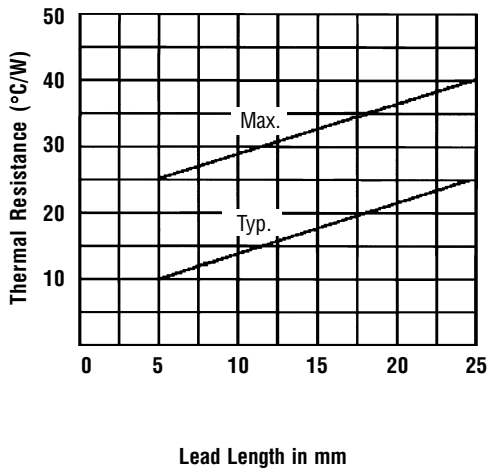
- FAST SWITCHING FOR HIGH EFFICIENCY
- HIGH SURGE CAPABILITY
- 1.0 AMP OPERATION @  $T_A = 55^\circ\text{C}$ , WITH NO THERMAL RUNAWAY
- MEETS UL SPECIFICATION 94V-0

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

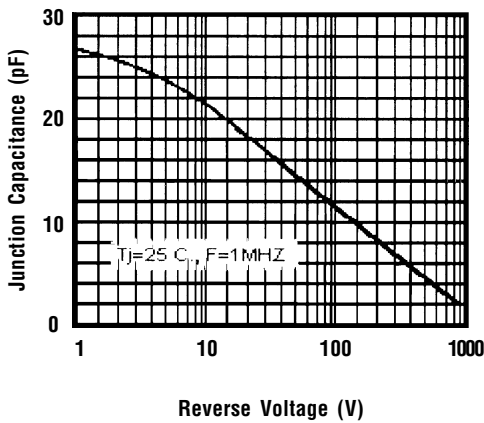
**Forward Current Derating Curve**



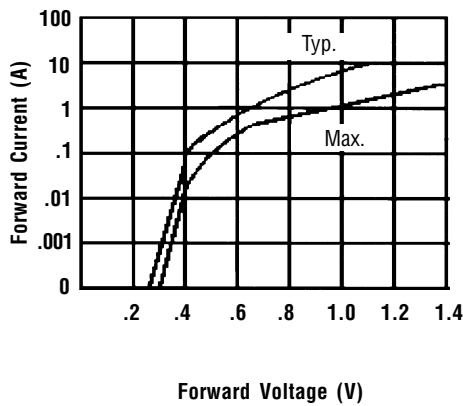
**Thermal Resistance Junction to Ambient**



**Typical Junction Capacitance**



**Instantaneous Forward Characteristics**



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.