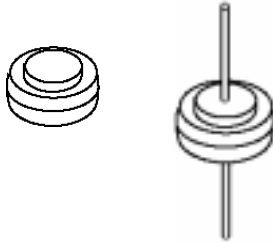
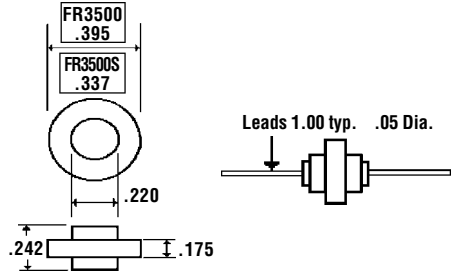


## Description



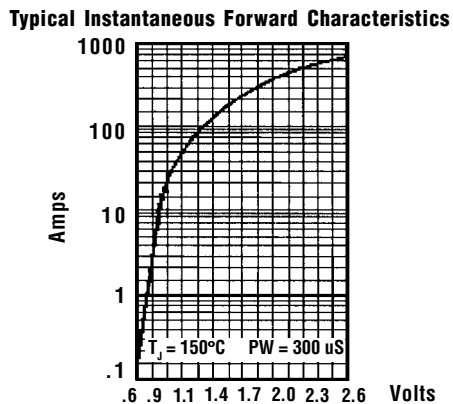
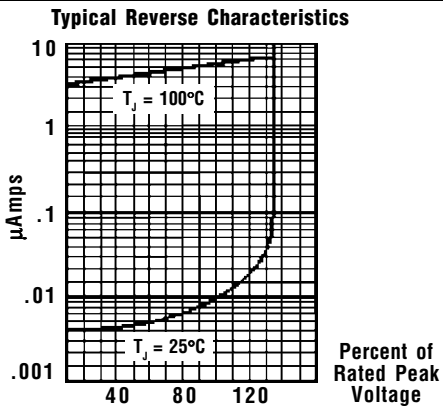
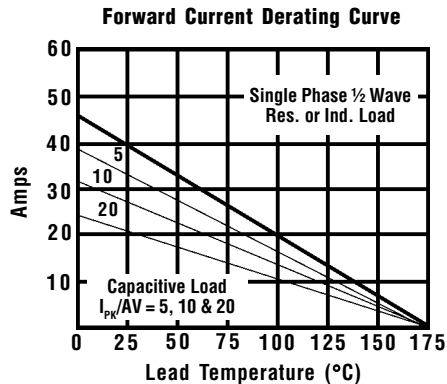
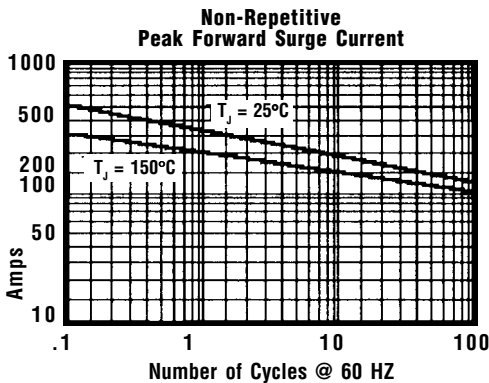
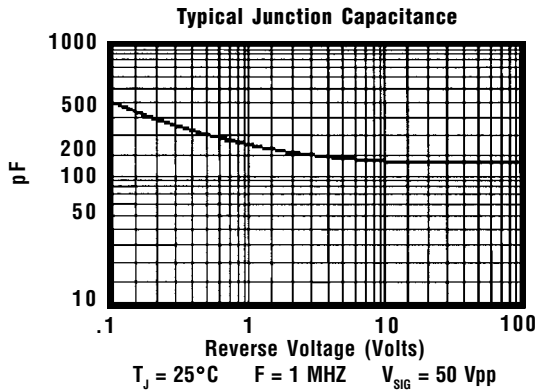
## Mechanical Dimensions



## Features

- **LOW COST**
- **HIGH SURGE CAPABILITY**
- **DIFFUSED JUNCTION**
- **LOW LEAKAGE CURRENT**
- **HIGH TEMPERATURE CAPABILITY**
- **MEETS UL SPECIFICATION 94V-0**

Electrical Characteristics @ 25°C.	<i>FR3501 ... 3510 Series</i>							Units	
Maximum Ratings	FR3501	FR3502	FR3503	FR3504	FR3506	FR3508	FR3510		
Peak Repetitive Reverse Voltage... $V_{RRM}$	100	200	300	400	600	800	1000	Volts	
RMS Reverse Voltage... $V_{R(rms)}$	70	140	210	280	420	560	700	Volts	
DC Blocking Voltage... $V_{DC}$	100	200	300	400	600	800	1000	Volts	
Average Forward Rectified Current... $I_{F(av)}$ $T_A = 55^\circ\text{C}$ (Note 3)				35				Amps	
Non-Repetitive Peak Forward Surge Current... $I_{FSM}$ @ Rated Current & Temp				400				Amps	
Forward Voltage @ 80A... $V_F$	< .....		1.08	> < .....		1.18	>		Volts
DC Reverse Current... $I_R$ @ Rated DC Blocking Voltage, 150°C				2.0				$\mu\text{Amps}$	
				350				$\mu\text{Amps}$	
Typical Junction Capacitance... $C_J$ (Note 1)				400				pF	
Typical Thermal Resistance... $R_{\theta JC}$ (Note 2)				1.0				°C/W	
Typical Reverse Recovery Time... $t_{RR}$				3.0				$\mu\text{S}$	
Operating & Storage Temperature Range... $T_J, T_{STRG}$				-50 to 175				°C	



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.