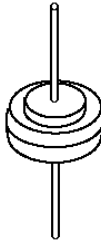
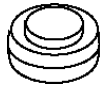


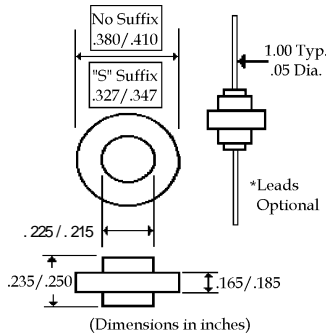
35 Amp PLASTIC SILICON AUTOMOTIVE RECTIFIERS

FR3501 . . . 3510 Series

Description



Mechanical Dimensions

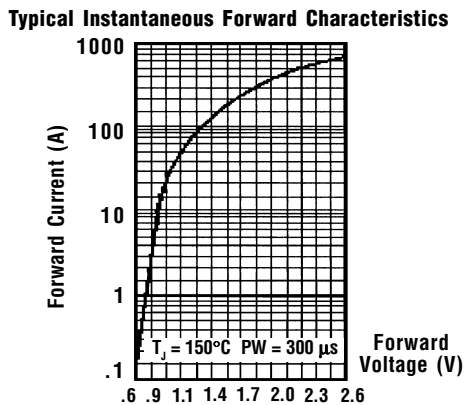
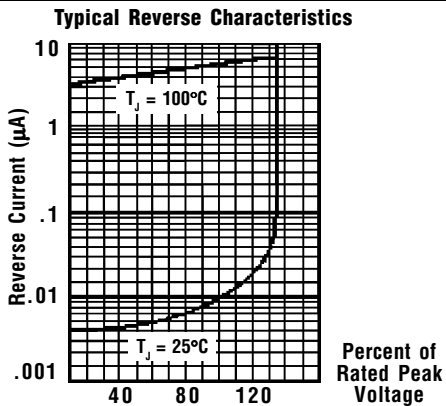
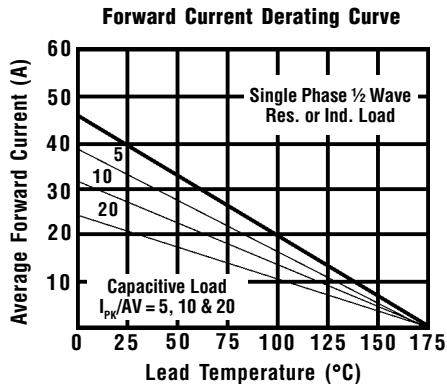
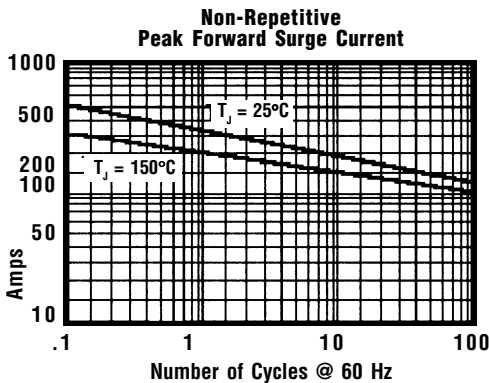
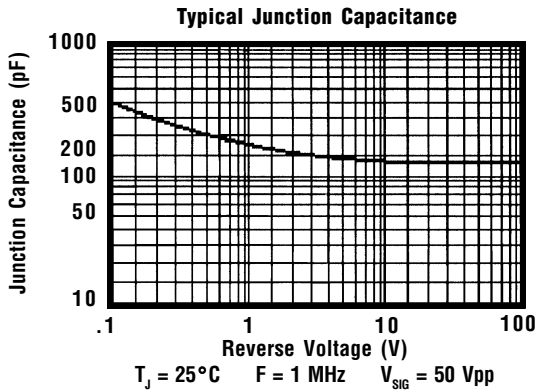


Options - Add Suffix to Part #:
FR3500L = 2 Leads
For 1 Lead Small Pkg:
FR3500SC = Lead On Cathode
FR3500SA = Lead On Anode

Features

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

FR3501 . . . 3510 Series								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	
Operating & Storage Temperature Range... T_J, T_{STRG}	-50 to 175							$^\circ\text{C}$	
Electrical Characteristics									
Maximum Forward Voltage @ 80A... V_F	<		1.08	>		<		1.18	Volts
Maximum DC Reverse Current... I_R @ Rated DC Blocking Voltage,	25 $^\circ\text{C}$				2.0				μAmps
	150 $^\circ\text{C}$				350				μAmps
Typical Junction Capacitance... C_J (Note 1)				400				pF	
Typical Thermal Resistance... $R_{\theta JA}$ (Note 2)				1.0				$^\circ\text{C}/\text{W}$	
Typical Reverse Recovery Time... t_{RR}				3.0				μs	



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.