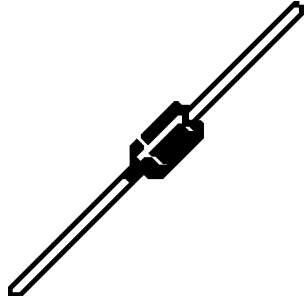


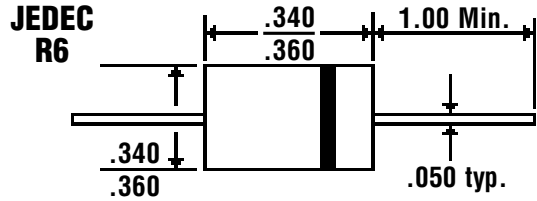
# 6.0 Amp FAST RECOVERY PLASTIC RECTIFIERS

**FR60 . . . 610 Series**

## Description



## Mechanical Dimensions



## Features

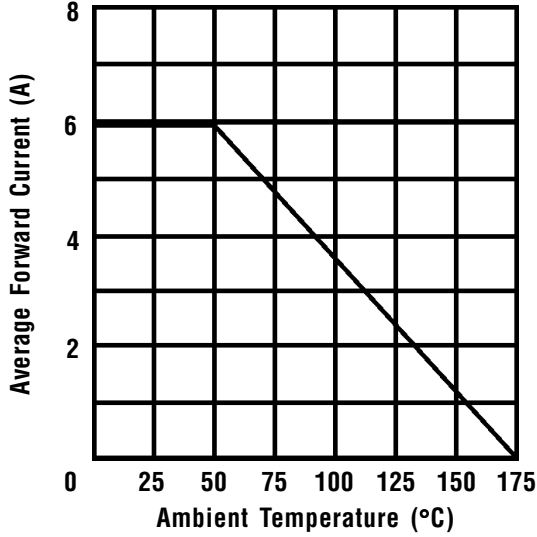
- FAST SWITCHING FOR HIGH EFFICIENCY
- HIGH SURGE CAPABILITY
- 6.0 AMP OPERATION @  $T_A = 55^\circ\text{C}$ , WITH NO THERMAL RUNAWAY
- MEETS UL SPECIFICATION 94V-0

<b>FR60 . . . 610 Series</b>								<b>Units</b>
<b>Maximum Ratings</b>	<b>FR60</b>	<b>FR61</b>	<b>FR62</b>	<b>FR64</b>	<b>FR66</b>	<b>FR68</b>	<b>FR610</b>	
Peak Repetitive Reverse Voltage... $V_{RRM}$	50	100	200	400	600	800	1000	Volts
RMS Reverse Voltage... $V_{R(rms)}$	35	70	140	280	420	560	700	Volts
DC Blocking Voltage... $V_{DC}$	50	100	200	400	600	800	1000	Volts
Average Forward Rectified Current... $I_{F(av)}$ $T_A = 55^\circ\text{C}$				6.0				Amps
Non-Repetitive Peak Forward Surge Current... $I_{FSM}$ @ Rated Current & Temp				300				Amps
Operating & Storage Temperature Range... $T_J, T_{STRG}$				-65 to 175				°C
<b>Electrical Characteristics</b>								
Maximum Forward Voltage @ 6.0A... $V_F$				1.3				Volts
Maximum DC Reverse Current... $I_R$ @ Rated DC Blocking Voltage				10				μAmps
				150				μAmps
Typical Junction Capacitance... $C_j$ (Note 1)				100				pF
Maximum Reverse Recovery Time... $t_{RR}$	150	150	150	150	250	500	500	ns

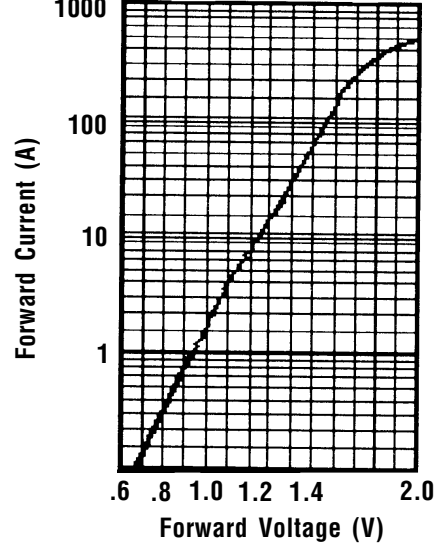
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**FR60 . . . 610 Series**

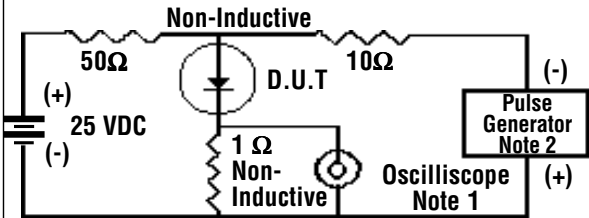
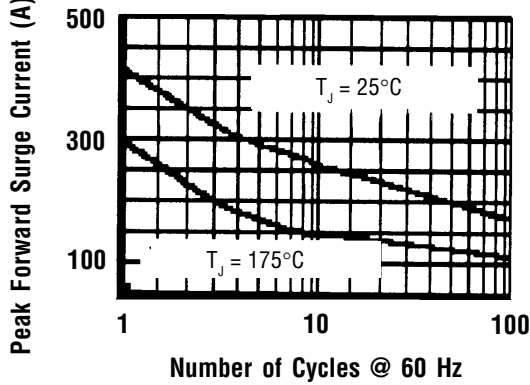
**Forward Current Derating Curve**



**Typical Instantaneous Forward Characteristics**

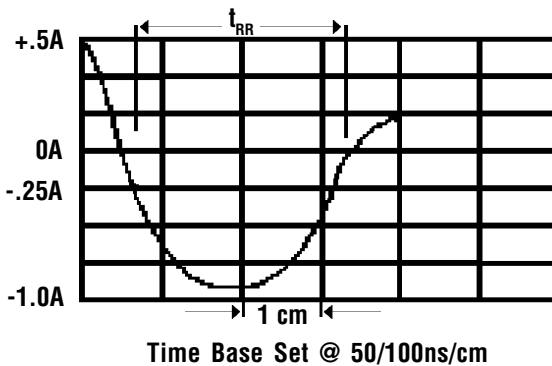


**Non-Repetitive Peak Forward Surge Current**



- Notes:**
1. Rise Time = 7 ns Max.  
Impedance = 1 megohm, 22 pF
  2. Rise Time = 10 ns Max.  
Source Impedance = 50 Ohms

**Reverse Recovery 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.