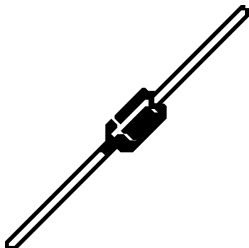


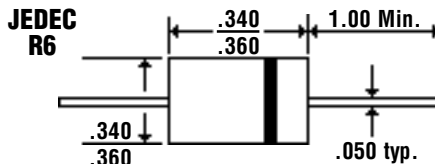
6.0 Amp FAST RECOVERY PLASTIC RECTIFIERS

FR60 . . . 610 Series

Description



Mechanical Dimensions

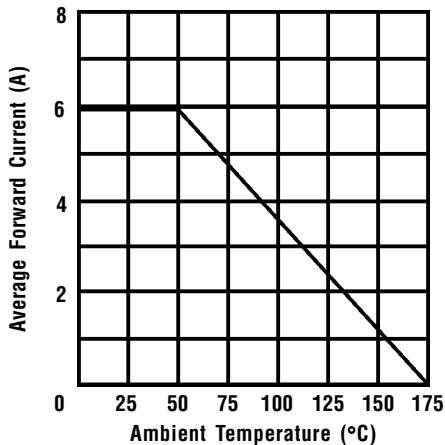


Features

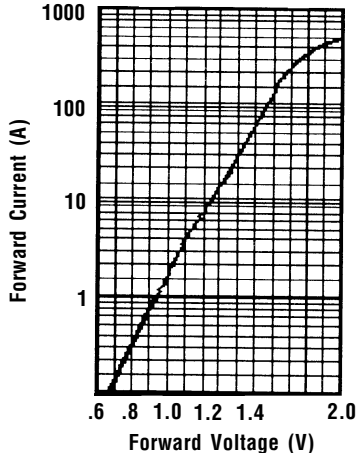
- FAST SWITCHING FOR HIGH EFFICIENCY
- HIGH SURGE CAPABILITY
- 6.0 AMP OPERATION @ $T_A = 55^\circ\text{C}$, WITH NO THERMAL RUNAWAY
- MEETS UL SPECIFICATION 94V-0

FR60 . . . 610 Series								Units
Maximum Ratings	FR60	FR61	FR62	FR64	FR66	FR68	FR610	
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°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
Electrical Characteristics								
Maximum Forward Voltage @ 6.0A...V _F	1.3							Volts
Maximum DC Reverse Current...I _R @ 25°C	10							μAmps
@ Rated DC Blocking Voltage @ 100°C	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

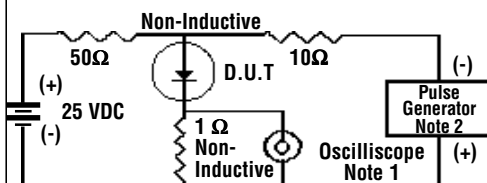
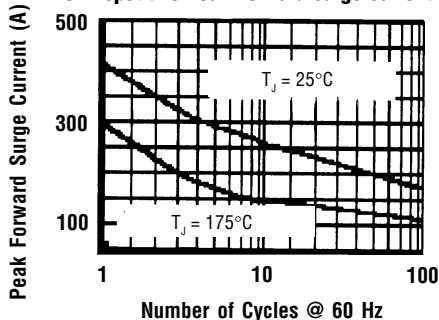
Forward Current Derating Curve



Typical Instantaneous Forward Characteristics

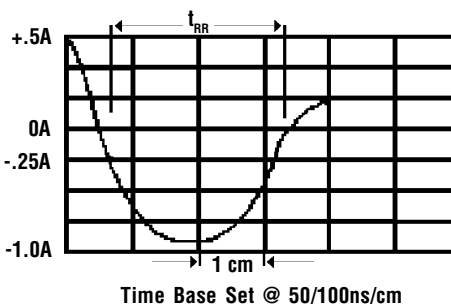


Non-Repetitive Peak Forward Surge Current



- 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.