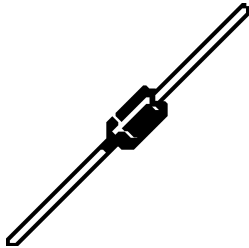


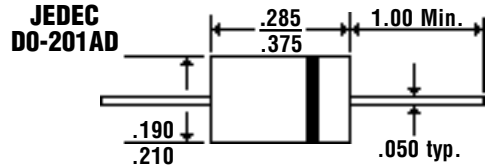
3.0 Amp FAST RECOVERY PLASTIC RECTIFIERS

FR30 . . . 310 Series

Description



Mechanical Dimensions



Features

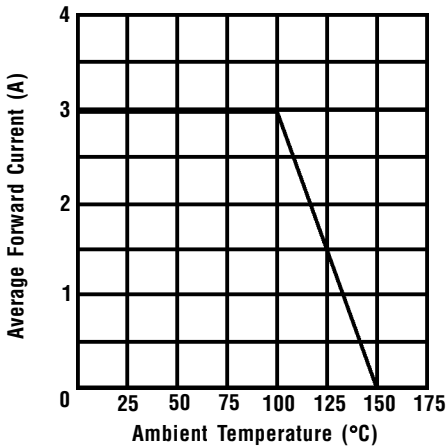
- FAST SWITCHING FOR HIGH EFFICIENCY
- HIGH SURGE CAPABILITY
- 3.0 AMP OPERATION @ $T_A = 105^\circ\text{C}$, WITH NO THERMAL RUNAWAY
- MEETS UL SPECIFICATION 94V-0

<i>FR30 . . . 310 Series</i>								Units
Maximum Ratings	FR30	FR31	FR32	FR34	FR36	FR38	FR310	
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... $I_{F(av)}$ $T_A = 55^\circ\text{C}$				3.0				Amps
Non-Repetitive Peak Forward Surge Current... I_{FSM} @ Rated Current & Temp				200				Amps
Operating & Storage Temperature Range... T_J, T_{STRG}				-65 to 150				$^\circ\text{C}$
Electrical Characteristics								
Maximum Forward Voltage @ 3.0A... V_F				1.3				Volts
Maximum DC Reverse Current... I_R @ Rated DC Blocking Voltage				50				μAmps
				100				μAmps
Typical Junction Capacitance... C_j (Note 1)				60				pF
Maximum Reverse Recovery Time... t_{RR}	150	150	150	150	250	500	500	ns

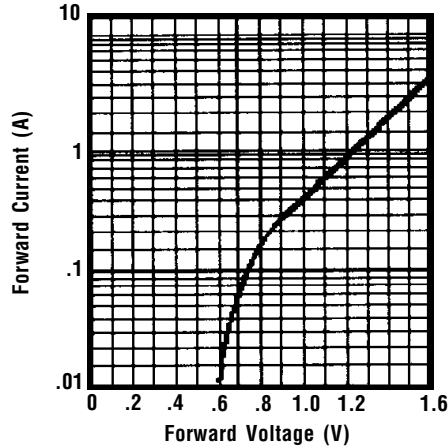
3.0 Amp FAST RECOVERY PLASTIC RECTIFIERS

FR30 . . . 310 Series

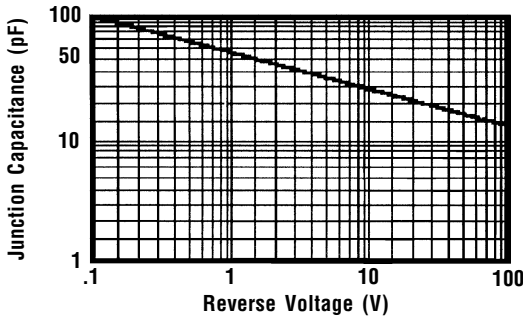
Forward Current Derating Curve



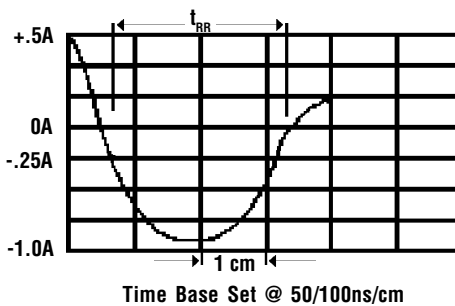
Typical Instantaneous Forward Characteristics



Typical Junction Capacitance



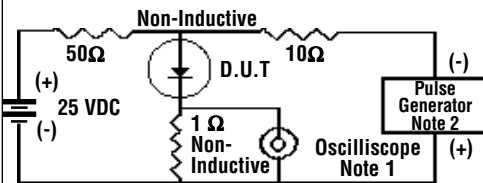
Reverse Recovery Characteristics



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

- NOTES: 1. Measured @ 1 MHz and applied reverse voltage of 4.0V.
2. Thermal Resistance Junction to Case, Jedec Method.