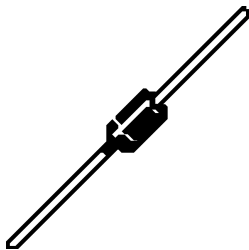


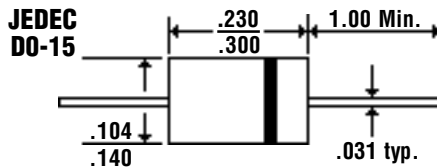
# 2.0 Amp FAST RECOVERY PLASTIC RECTIFIERS

**FR20 . . . 210 Series**

## Description



## Mechanical Dimensions

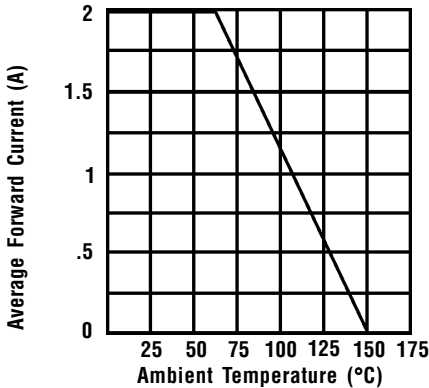


## Features

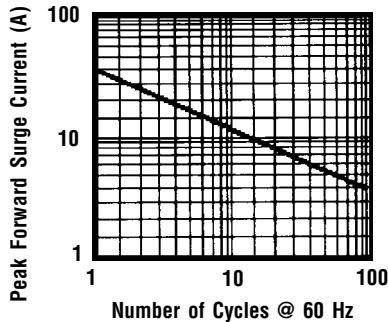
- FAST SWITCHING FOR HIGH EFFICIENCY
- HIGH SURGE CAPABILITY
- 2.0 AMP OPERATION @  $T_A = 55^\circ\text{C}$ , WITH NO THERMAL RUNAWAY
- MEETS UL SPECIFICATION 94V-0

<b>FR20 . . . 210 Series</b>								<b>Units</b>
<b>Maximum Ratings</b>	<b>FR20</b>	<b>FR21</b>	<b>FR22</b>	<b>FR24</b>	<b>FR26</b>	<b>FR28</b>	<b>FR210</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... $I_{F(av)}$ $T_A = 55^\circ\text{C}$	2.0							Amps
Non-Repetitive Peak Forward Surge Current... $I_{FSM}$ @ Rated Current & Temp	60							Amps
Operating & Storage Temperature Range... $T_J, T_{STRG}$	-65 to 150							°C
<b>Electrical Characteristics</b>								
Maximum Forward Voltage @ 2.0A... $V_F$	1.3							Volts
Maximum DC Reverse Current... $I_R$ @ Rated DC Blocking Voltage	5.0							μAmps
	10							μAmps
Typical Junction Capacitance... $C_j$ (Note 1)	25							pF
Maximum Reverse Recovery Time... $t_{RR}$	150	150	150	150	250	500	500	ns

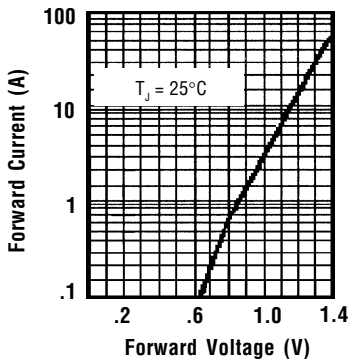
**Forward Current Derating Curve**



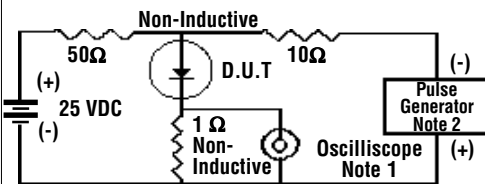
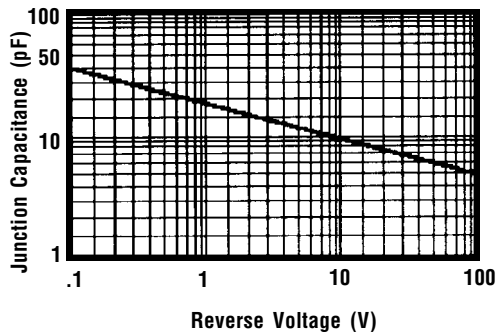
**Non-Repetitive  
Peak Forward Surge Current**



**Typical Instantaneous Forward Characteristics**

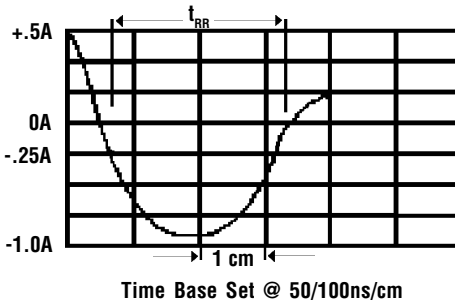


**Typical Junction Capacitance**



- 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.