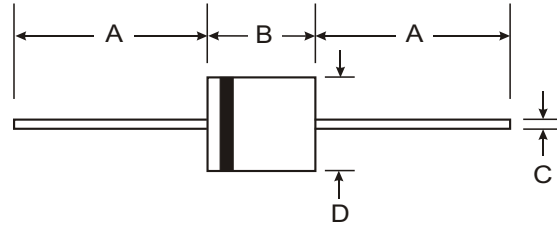


NOT RECOMMENDED FOR NEW DESIGNS,  
PLEASE USE PR6001 - PR6005

### Features

- Low Reverse Recovery Time
- Low Reverse Current
- Low Forward Voltage Drop
- High Current Capability
- Plastic Material: UL Flammability Classification Rating 94V-0



### Mechanical Data

- Case: R-6, Molded Plastic
- Terminals: Axial Leads, Solderable per MIL-STD-202 Method 208
- Polarity: Color Band Denotes Cathode
- Weight: 1.7 grams (approx.)
- Mounting Position: Any

R-6		
Dim	Min	Max
A	25.4	—
B	8.6	9.1
C	1.2	1.3
D	8.6	9.1
All Dimensions in mm		

### Maximum Ratings and Electrical Characteristics @ T<sub>A</sub> = 25°C unless otherwise specified.

Characteristic	Symbol	FR 601	FR 602	FR 603	FR 604	FR 605	FR 606	FR 607	Unit
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V <sub>RMS</sub>	35	70	140	280	420	560	700	V
Maximum DC Blocking voltage	V <sub>DC</sub>	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current 9.5mm Lead Length @ T <sub>A</sub> =75°C	I <sub>(AV)</sub>	6.0							A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I <sub>FSM</sub>	300							A
Maximum Instantaneous Forward Voltage @ 6.0A DC	V <sub>F</sub>	1.3							V
Maximum DC Reverse Current at Rated Blocking Voltage @ T <sub>A</sub> = 25°C	I <sub>R</sub>	10							μA
Maximum Full Load Reverse Current Full Cycle Average 9.5mm lead length @ T <sub>L</sub> = 55°C	I <sub>R</sub>	150							μA
Maximum Reverse Recovery Time (Note 1)	T <sub>rr</sub>	150			250		500		ns
Typical Junction Capacitance (Note 2)	C <sub>J</sub>	200							pF
Operating and Storage Temperature Range	T <sub>J</sub> , T <sub>STG</sub>	-65 to +175							°C

- Notes: 1. Reverse Recovery Test Conditions: I<sub>F</sub> = 0.5A, I<sub>R</sub> = 1.0A, I<sub>RR</sub> = 0.25A  
2. Measured at 1.0MHz and applied reverse voltage of 4.0V.

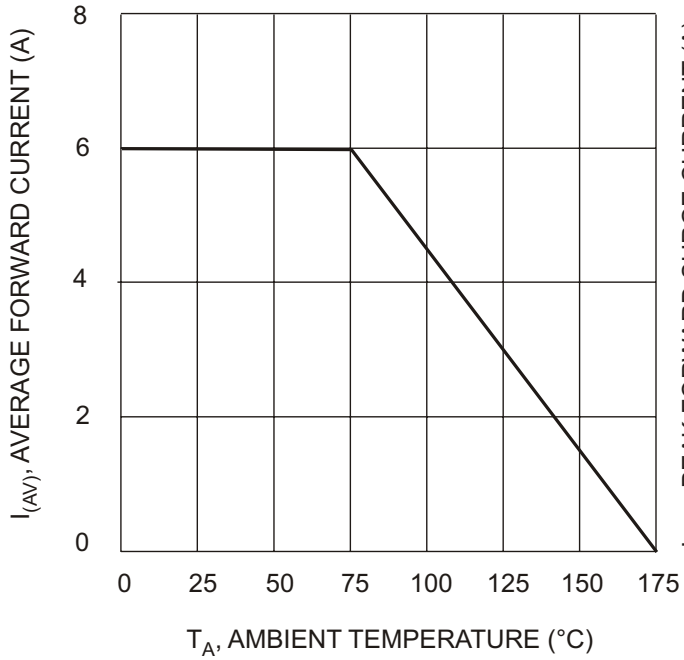


Fig. 1, Typical Forward Current Derating Curve

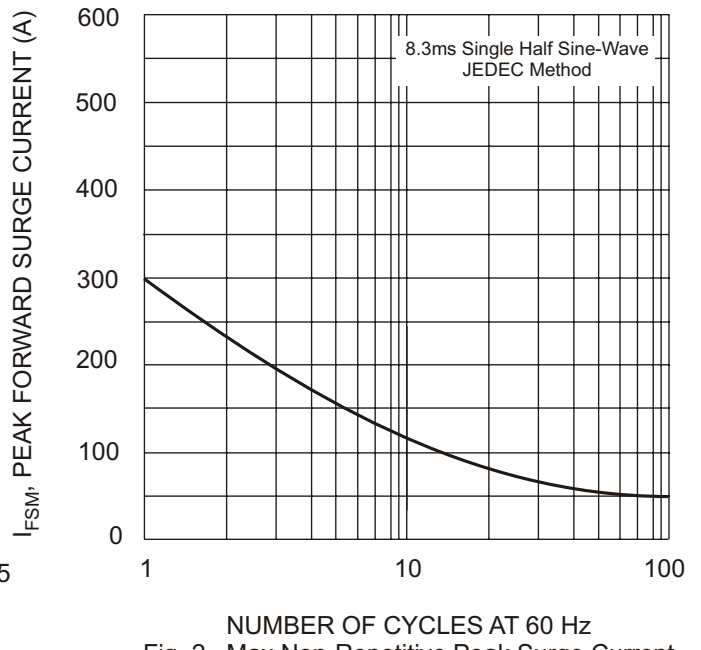


Fig. 2, Max Non-Repetitive Peak Surge Current

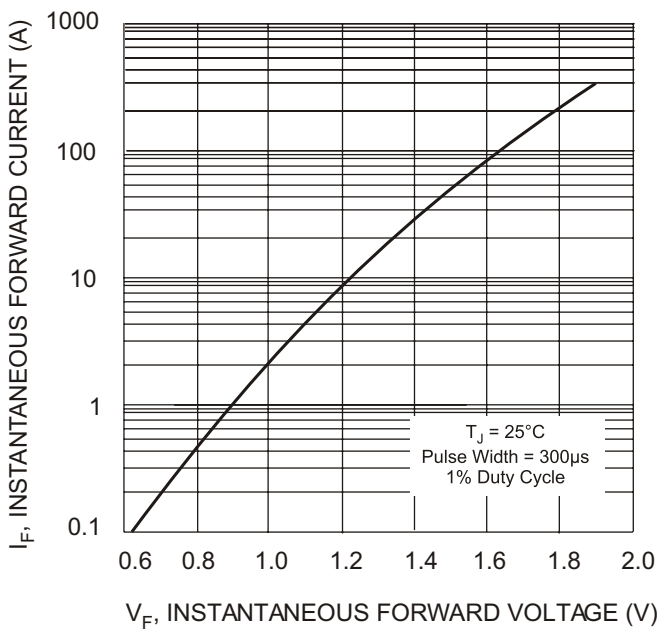


Fig. 3, Typical Instantaneous Forward Characteristics

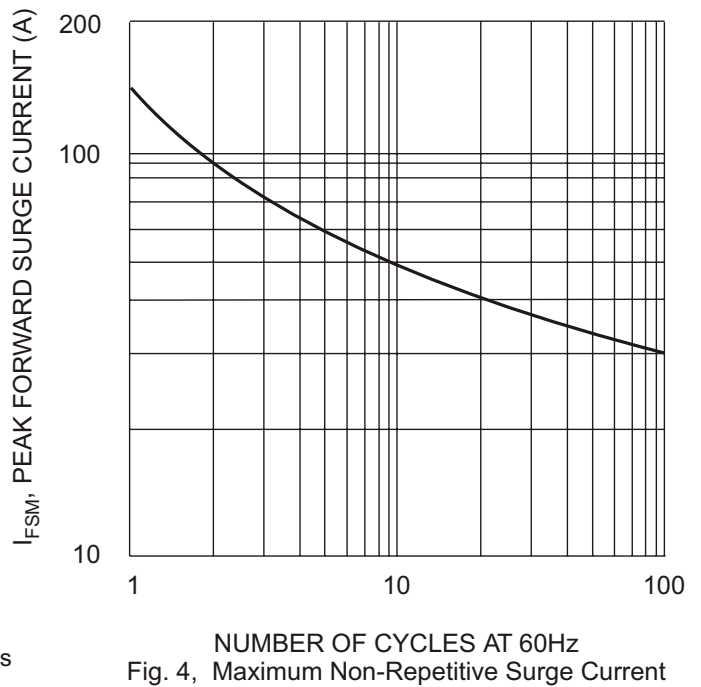


Fig. 4, Maximum Non-Repetitive Surge Current