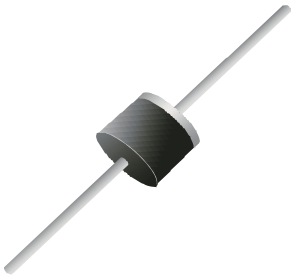




## 6.0 Amp. Glass Passivated Junction Rectifier

 <p style="font-size: 24px; font-weight: bold; margin-top: 20px;">P-6</p>	<p><b>Voltage</b> 50V to 1000 V</p>	<p><b>Current</b> 6.0 A</p>	
			
	<p><b>FEATURES</b></p> <ul style="list-style-type: none"> <li>Glass passivated chip junction</li> <li>Hyperectifier structure for high reliability</li> <li>Cavity-free glass-passivated junction</li> <li>Low forward voltage drop</li> <li>Low leakage current, typical <math>I_R</math> less than 0.1 <math>\mu</math>A</li> <li>High forward surge capability</li> <li>Solder dip 260°C, 10s</li> <li>AEC-Q101 qualified</li> <li>Component in accordance to RoHS 2011/65/EU and WEEE 2002/96/EC</li> </ul>		 <p style="font-weight: bold; font-size: 10px;">RoHS COMPLIANT</p>
	<p><b>MECHANICAL DATA</b></p> <ul style="list-style-type: none"> <li><b>Case:</b> P-6. Epoxy meets UL 94V-0 flammability rating.</li> <li><b>Polarity:</b> Color band denotes cathode end</li> <li><b>Terminals:</b> Matte tin plated leads, solderable per MIL-STD-750 Method 2026, J-STD-002 and JESD22-B102. Consumer grade, meets JESD 201 class 1A whisker test.</li> </ul>		
<p><b>TYPICAL APPLICATIONS</b></p> <p>Used in general purpose rectification of power supplies, inverters, converters and freewheeling diodes application</p>			

### Maximun Ratings and Electrical Characteristics at 25°C

		P600A	P600B	P600D	P600G	P600J	P600K	P600M
$V_{RRM}$	Peak Recurrent Reverse Voltage (V)	50	100	200	400	600	800	1000
$I_{F(AV)}$	Forward Current at $T_{amb} = 60^\circ\text{C}$	6.0 A						
$I_{FRM}$	Recurrent Peak Forward Current	70 A						
$I_{FSM}$	8.3 ms. Peak Forward Surge Current (Jedec Method)	400 A						
$T_j$	Operating Temperature Range	-65 to +150°C						
$T_{stg}$	Storage Temperature Range	-65 to +175°C						

### Electrical Characteristics at $T_{amb} = 25^\circ\text{C}$

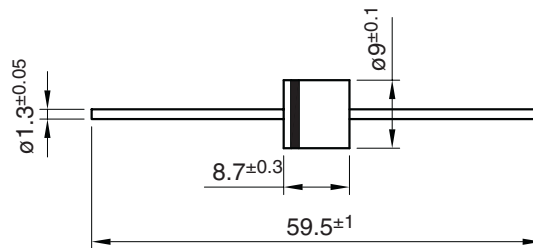
$V_F$	Maximum Forward Voltage Drop at $I_F = 6.0\text{ A}$	1.1 V
$I_R$	Maximum Reverse Current at $V_{RRM}$ at 25 °C at 125 °C	5 $\mu$ A 100 $\mu$ A
$R_{th(j-a)}$	Thermal Resistance ( $l = 10\text{mm.}$ )	10 °C/W

**6.0 Amp. Glass Passivated Junction Rectifier**

**Ordering information**

PREFERRED P/N	PACKAGE CODE	DELIVERY MODE	BASE QUANTITY	UNIT WEIGHT (g)
P600D AMP	AMP	AMMO BOX	400	1.968
P600D TR	TR	14" diameter tape and reel	800	1.968

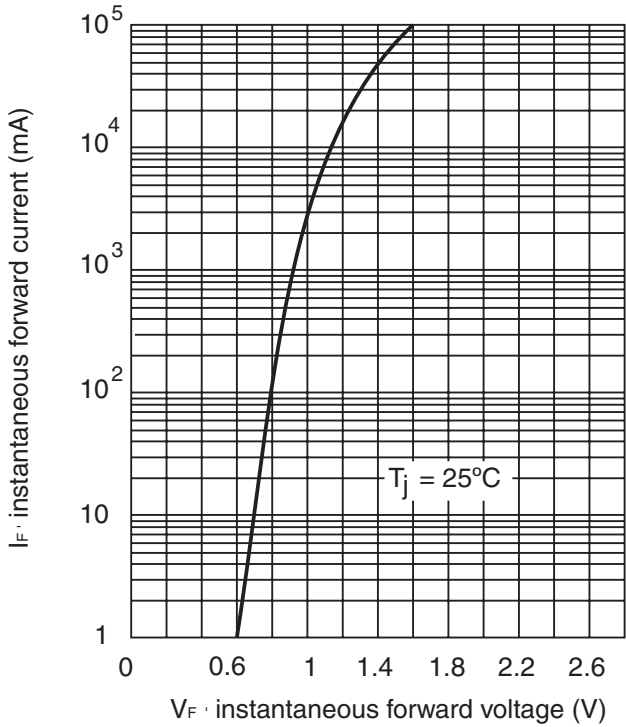
**Package Outline Dimensions: (mm) P-6**



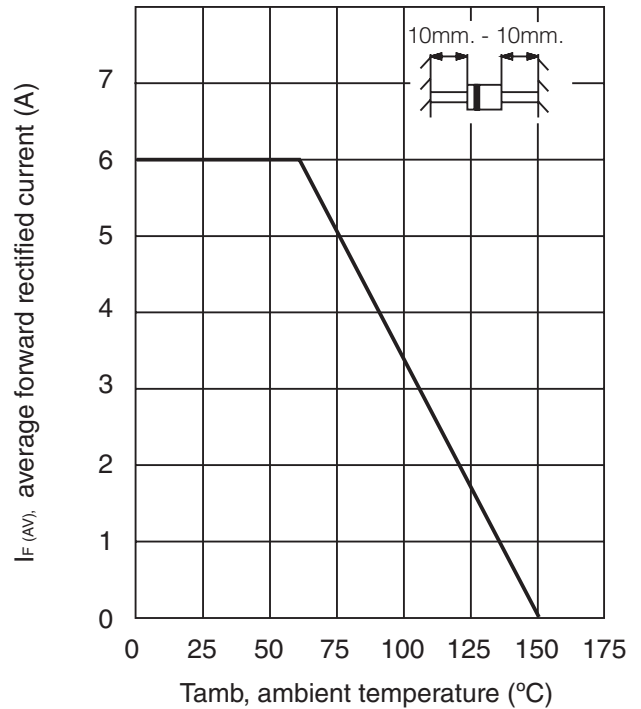
**6.0 Amp. Glass Passivated Junction Rectifier**

**Ratings and Characteristics (Ta 25 °C unless otherwise noted)**

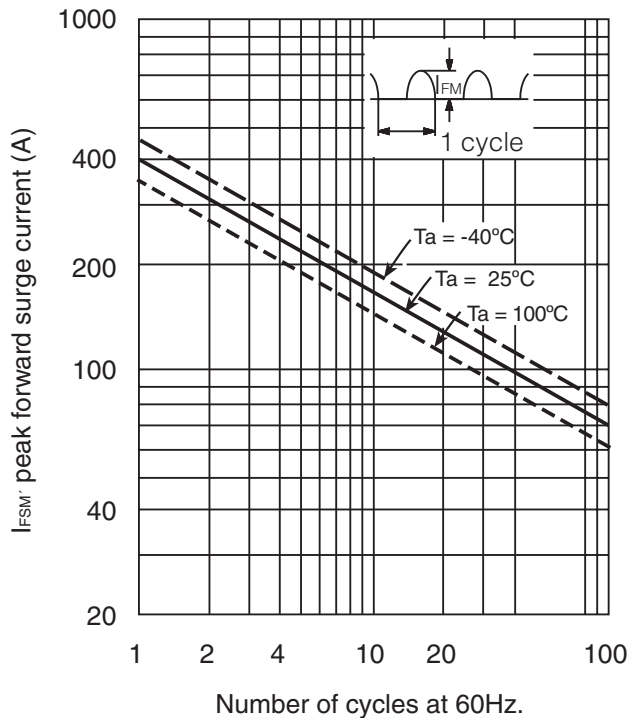
TYPICAL FORWARD CHARACTERISTIC



FORWARD CURRENT DERATING CURVE



MAXIMUM NON REPETITIVE PEAK FORWARD SURGE CURRENT



## 6.0 Amp. Glass Passivated Junction Rectifier

### Revision History

Date	Revision	Description of Changes
15-Jul-2012	0	Original Data Sheet
10-Jun-2014	1	Changed Tj: from -65 to + 175°C to -65 to + 150°C / Eliminated: ERSM
15-May-2017	2	New ambient temperature curves added to IFSM Versus No. cycles plot.

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