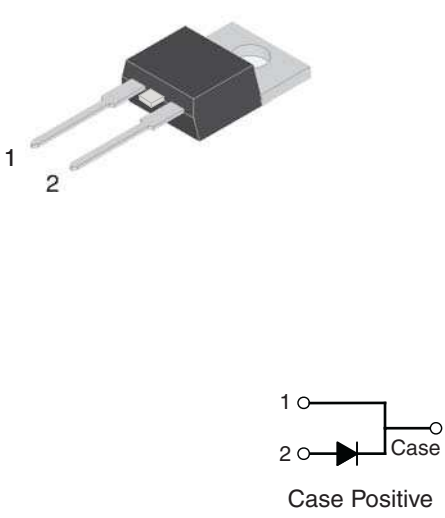
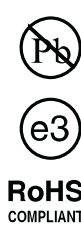


**8.0 Amp. Glass Passivated Fast Recovery Rectifier**

<p><b>TO-220AC</b></p> 	<p><b>Voltage</b> 400 to 1000 V</p>	<p><b>Current</b> 8.0 A</p>	
	<p><b>FEATURES</b></p> <ul style="list-style-type: none"> <li>• Fast Switching for high efficiency</li> <li>• Low power losses</li> <li>• Low forward voltage drop</li> <li>• High forward surge current capability</li> <li>• Solder dip 260°C, 10s / 16" (4.06 mm) from case</li> <li>• Component in accordance to RoHS 2002/95/EC and WEEE 2002/96/EC</li> <li>• Meets MSL level 1, per J-STD-020, LF maximum peak of 260° C</li> </ul>		
	<p><b>MECHANICAL DATA</b></p> <ul style="list-style-type: none"> <li>• <b>Case:</b> TO-220AC. Epoxy meets UL 94V-0 flammability rating.</li> <li>• <b>Polarity:</b> As marked on the body.</li> <li>• <b>Mounting Torque:</b> 5 in-lbs maximum.</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>For use in fast switching rectification of power supply, inverters, converters, and freewheeling diodes for consumer, and telecommunication.</p>		

**Maximum Ratings and Electrical Characteristics at 25°C**

		<b>FRA804G</b>	<b>FRA805G</b>	<b>FRA807G</b>
$V_{RRM}$	Peak recurrent reverse voltage (V)	400	600	1000
$V_{RMS}$	Maximum RMS voltage (V)	280	420	700
$V_{DC}$	Maximum DC blocking voltage (V)	400	600	1000
$I_{F(AV)}$	Maximum average Forward current at $T_C = 55^\circ C$	8 A		
$I_{FSM}$	8.3 ms. peak forward surge current (Jedec Method)	150 A		
$T_{RR}$	Max. reverse recovery time from $I_F = 0.5 A$ ; $I_R = 1 A$ ; $I_{RR} = 0.25 A$	150 ns	250 ns	500 ns
$C_j$	Typical Junction Capacitance at 1 MHz and reverse voltage of $4V_{DC}$	50 pF		
$T_j$	Operating temperature range	- 65 to + 150 °C		
$T_{stg}$	Storage temperature range	- 65 to + 150 °C		

**Electrical Characteristics at Tamb = 25 °C**

$V_F$	Max. forward voltage drop at $I_F = 8 A$ (Note 2) $T_j = 25^\circ C$	1.3 V
$I_R$	Max. Instantaneous reverse current at $V_R = V_{RRMax}$ $T_C = 25^\circ C$ / $T_C = 125^\circ C$	5.0 $\mu A$ / 100 $\mu A$
$R_{thj-C}$	Typical Thermal Resistance (Note 1)	3.0 °C/W

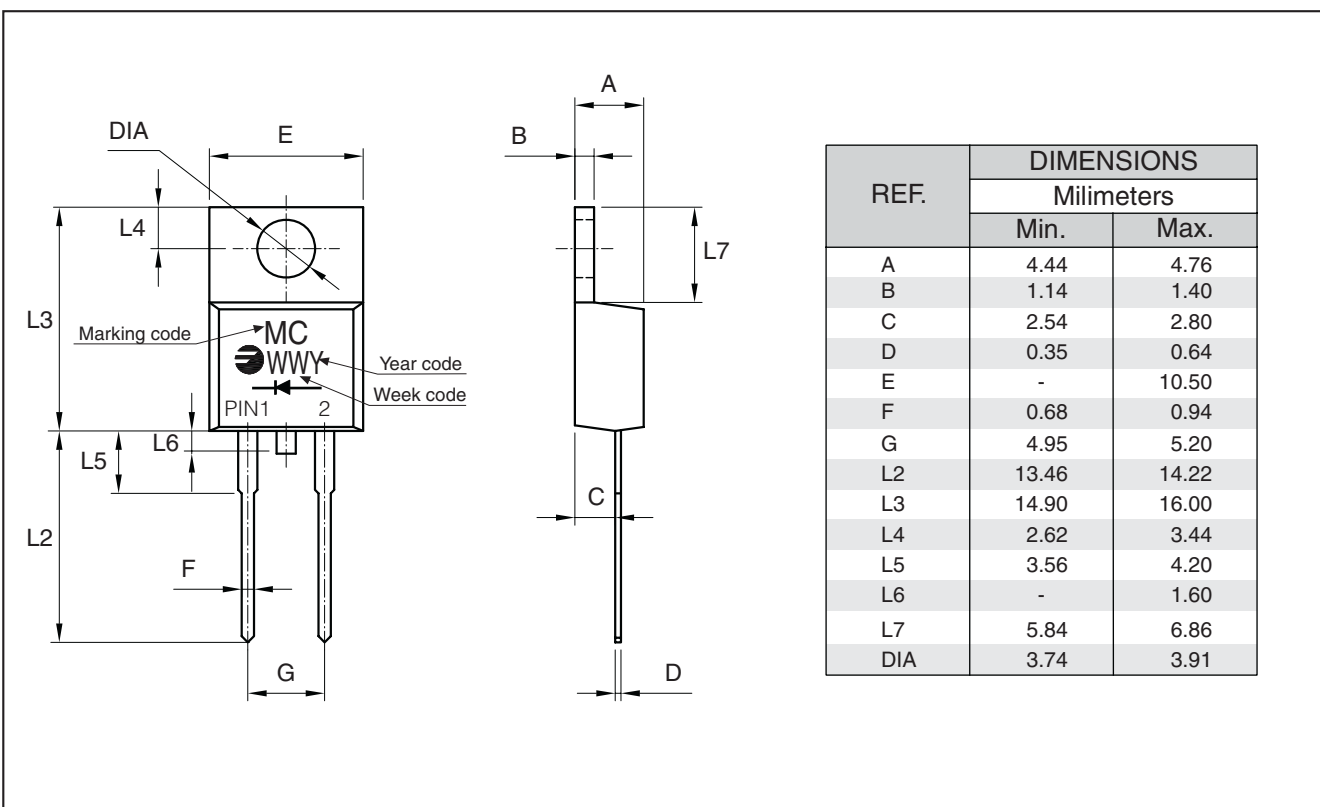
Note: 1. Mounted on Heatsink Size of 50.8 mm x 76.2 mm x 6.35 mm Al-Plate.  
 2. Pulse test: 300 $\mu s$  pulse width, 1% duty cycle.

**8.0 Amp. Glass Passivated Fast Recovery Rectifier**

**Ordering information**

PREFERRED P/N	PACKAGE CODE	DELIVERY MODE	BASE QUANTITY	UNIT WEIGHT (g)
FRA804 00TUC	TU	TUBE	2,000	1.80

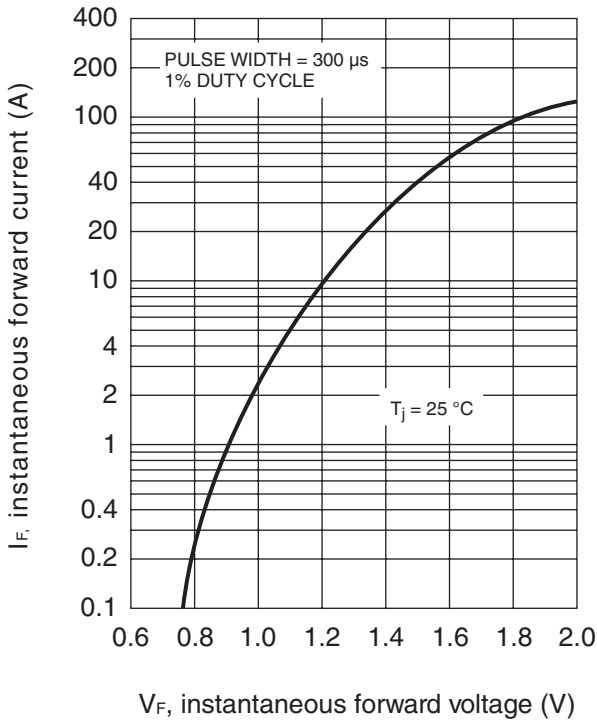
**Package Outline Dimensions: (mm) TO-220AC**



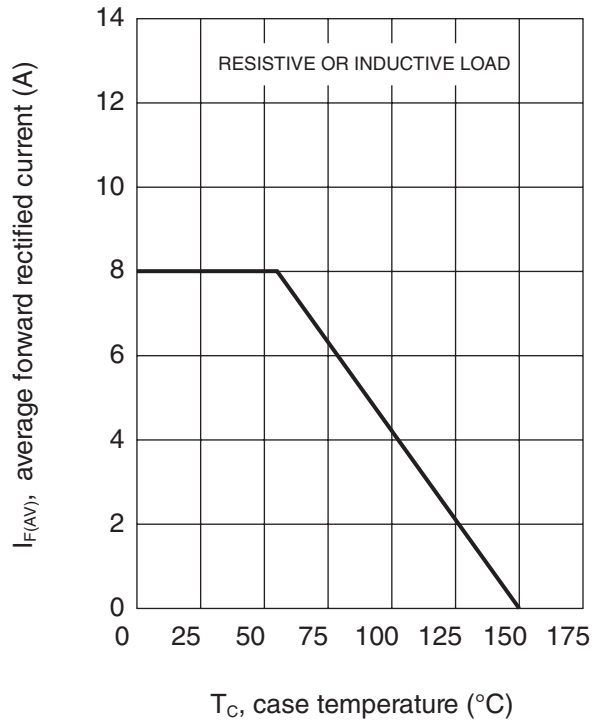
**8.0 Amp. Glass Passivated Fast Recovery Rectifier**

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

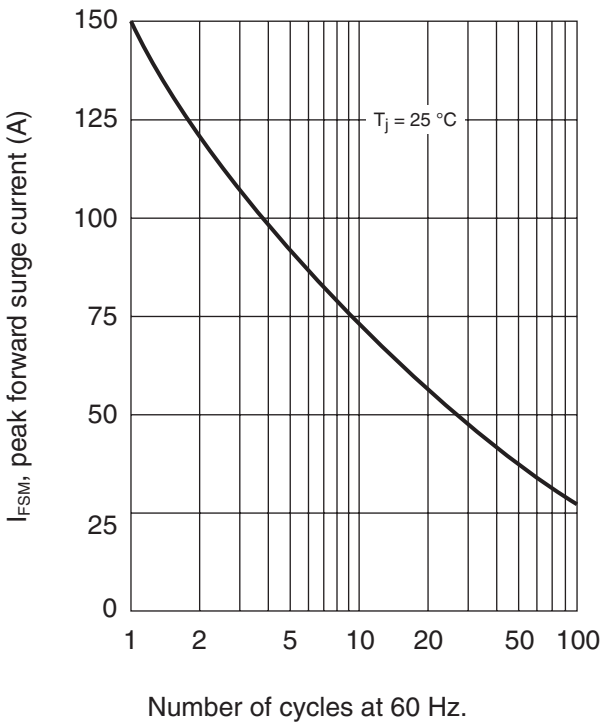
TYPICAL FORWARD CHARACTERISTIC



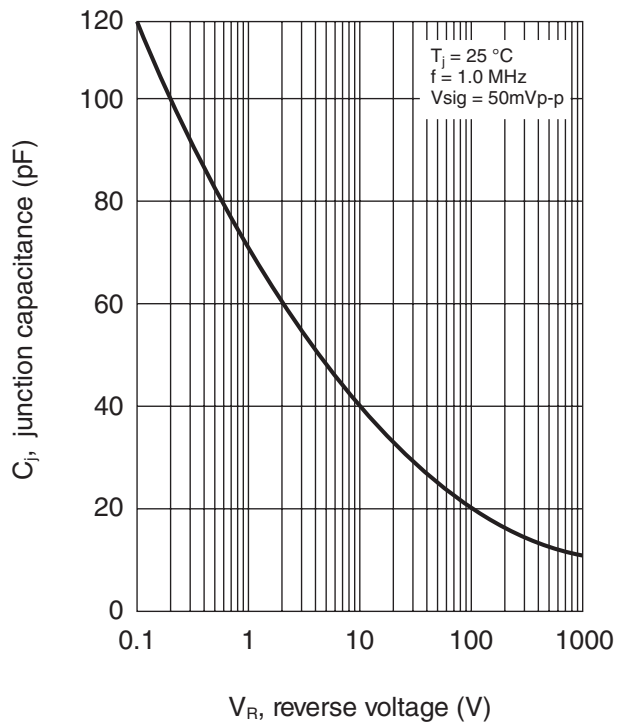
FORWARD CURRENT DERATING CURVE



MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT



TYPICAL JUNCTION CAPACITANCE



## 8.0 Amp. Glass Passivated Fast Recovery Rectifier

### Disclaimer

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