

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

<p><b>TO-220AC</b></p>	<p><b>Voltage</b> 200 to 600 V</p>	<p><b>Current</b> 8.0 A</p>	
	<p><b>FEATURES</b></p> <ul style="list-style-type: none"> <li>• Ultrafast recovery time 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 2011/65/EU 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>Used in high frequency rectifier of switching mode power supplies, inverters, freewheeling diodes, dc-to-dc converters, and other power switching application.</p>		

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

		<b>FUR820</b>	<b>FUR840</b>	<b>FUR860</b>
$V_{RRM}$	Peak Recurrent Peak Reverse Voltage (V)	200	400	600
$V_{RMS}$	Maximum RMS Voltage (V)	140	280	420
$V_{DC}$	Maximum DC Blocking Voltage (V)	200	400	600
$I_{F(AV)}$	Maximum Average Forward Rectified Current 9.5mm Lead Lenght (See Fig. 1)	8.0 A		
$I_{FSM}$	Peak Forward Surge Current 8.3 ms. single Half Sine-wave Superimposed on Rated Load (JEDEC Method)	100 A		
$T_{rr}$	Maximum Reverse Recovery Time From $I_F = 0.5 A$ ; $I_R = 1 A$ ; $I_{RR} = 0.25 A$	35 nS	50 nS	
$T_j$	Operating temperature range	- 55 to + 150 °C		
$T_{stg}$	Storage temperature range	- 55 to + 150 °C		

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

$V_F$	Max. Instantaneous Forward Voltage @ 8.0 A (Note 2)	0.975 V	1.3 V	1.7 V
$I_R$	Max. DC Reverse Current at @ $T_c = 25 °C$ Rated DC Blocking Voltage @ $T_c = 150 °C$	5.0 $\mu A$ 250 $\mu A$		
$R_{thj-C}$	Typical Thermal Resistance (Note 1)	3.0 °C/W	2.0 °C/W	

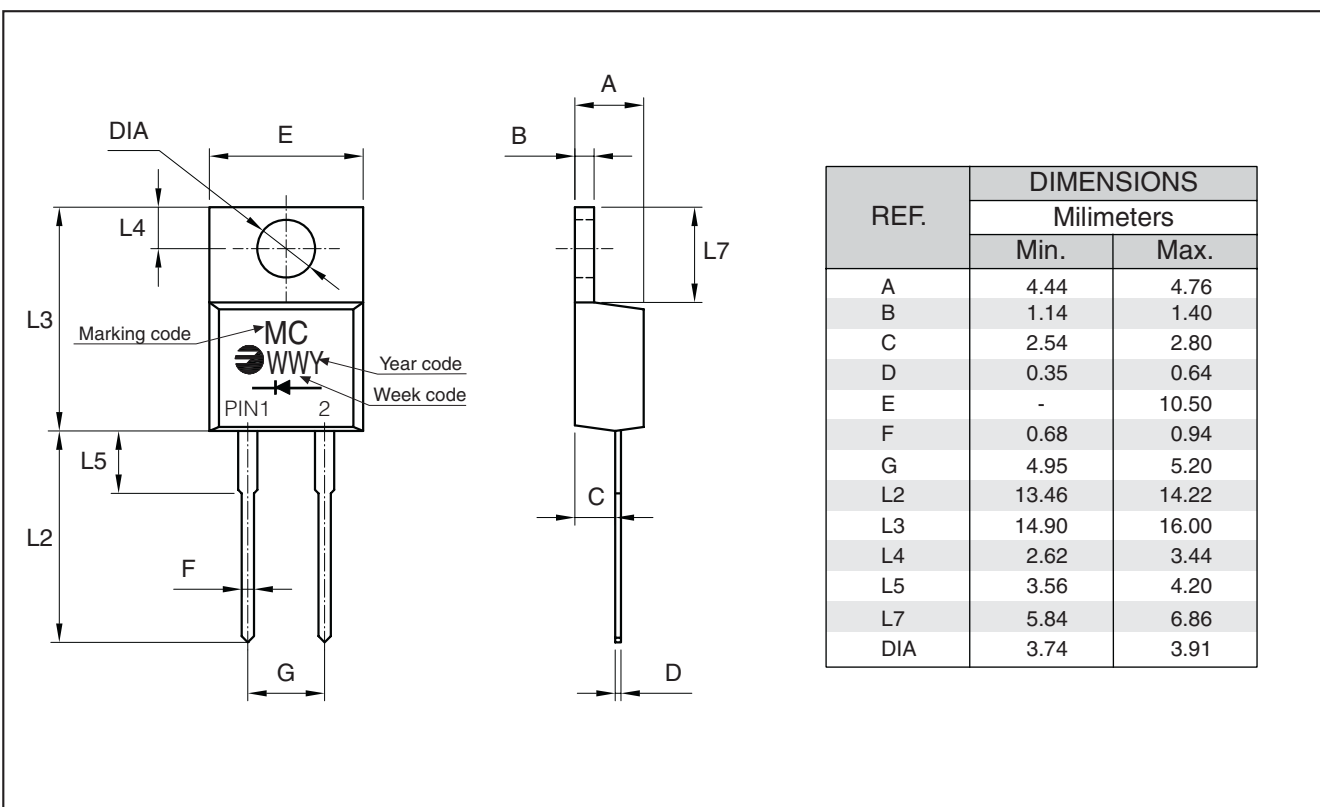
Note: 1. Mounted on Heatsink Size of 50.8 mm x 76.2 mm x 6.35 mm Al-Plate.  
2. Pulse test: 300 $\mu s$  pulse width, 1% duty cycle.

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**Ordering information**

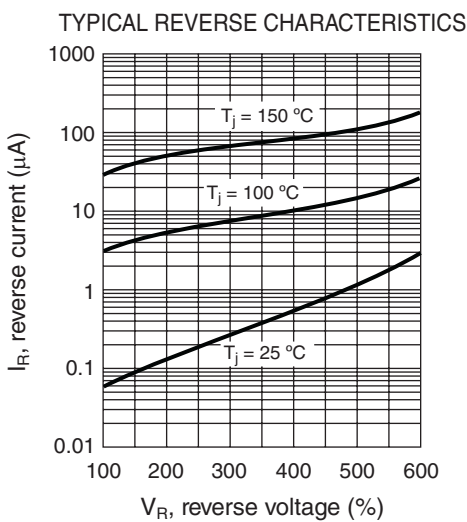
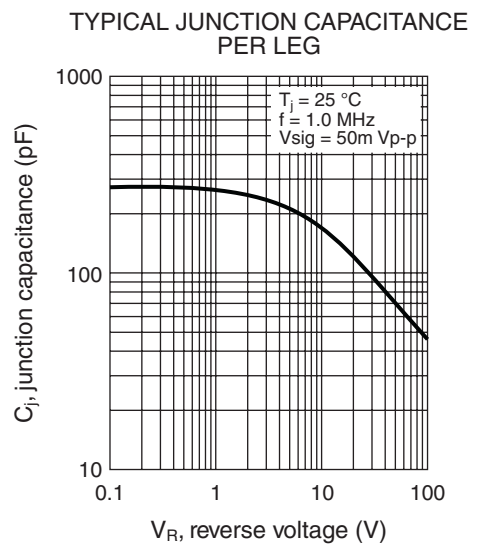
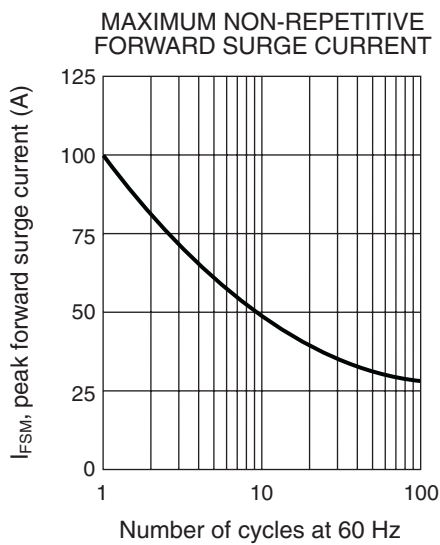
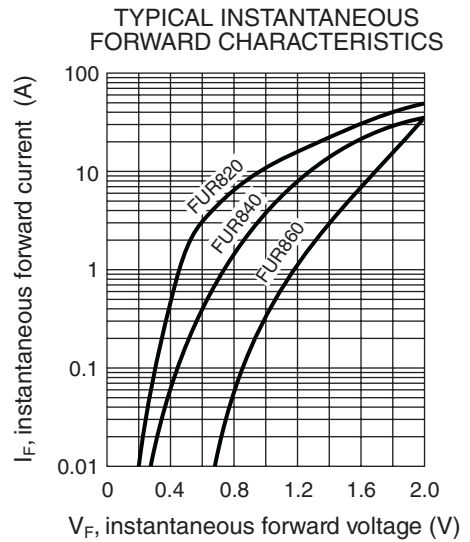
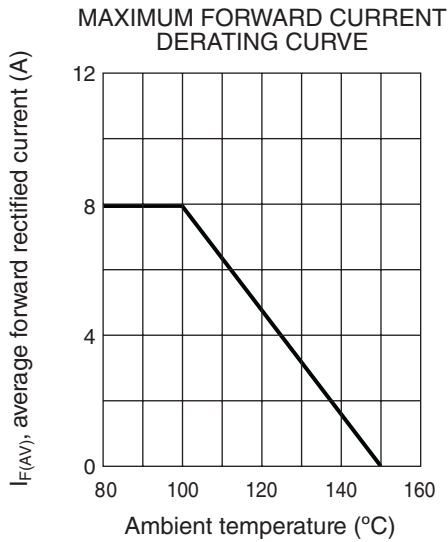
PREFERRED P/N	PACKAGE CODE	DELIVERY MODE	BASE QUANTITY	UNIT WEIGHT (g)
FUR820 00TUC	TU	TUBE	1,000	1.90

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



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



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