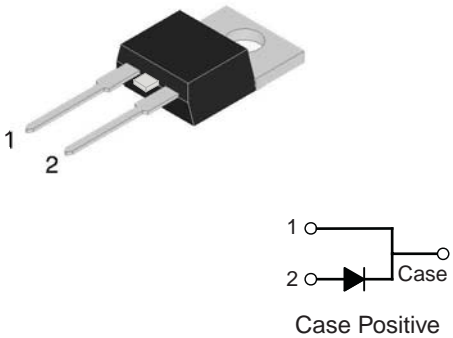


## 8.0 Amp. Glass Passivated Ultrafast Rectifiers

<b>TO-220AC</b>  	<b>Voltage</b> 200 to 600 V	<b>Current</b> 8.0 A
	<ul style="list-style-type: none"> <li>• Low forward Voltage drop</li> <li>• High current capability</li> <li>• High reliability</li> <li>• High surge current capability</li> </ul>	
	<b>Mechanical Data</b> <ul style="list-style-type: none"> <li>• Cases: TO-220A molded plastic</li> <li>• Epoxy: UL 94V-O rate flame retardant</li> <li>• Terminals: Leads solderable per MIL-STD-202, Method 208 guaranteed</li> <li>• Polarity: As marked</li> <li>• High temperature soldering guaranteed: 260 °C/10 seconds 4.06mm., from case.</li> <li>• Weight: 2.24 grams</li> </ul>	

### Absolute Maximum Ratings, according to IEC publication No. 134

		FUR820	FUR840	FUR860
$V_{RRM}$	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 Length (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	25 nS	50 nS	
$T_j$	Operating temperature range	- 65 to + 175 °C		
$T_{stg}$	Storage temperature range	- 65 to + 175 °C		

### Electrical Characteristics

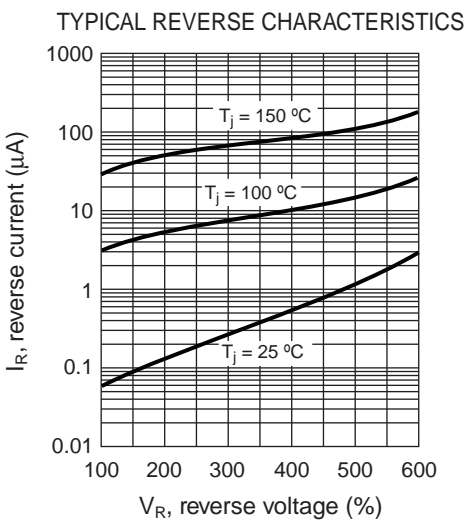
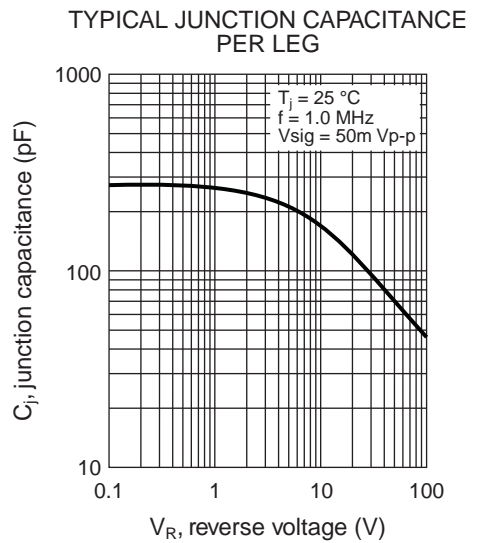
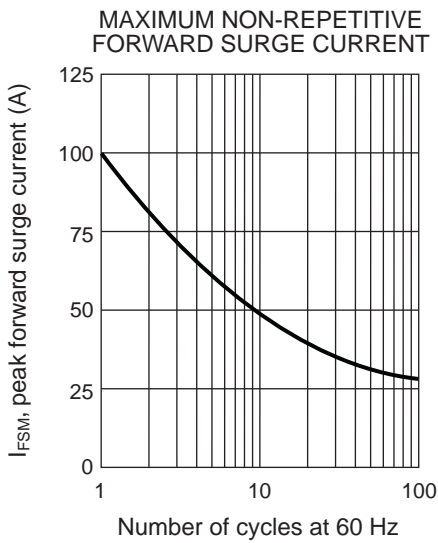
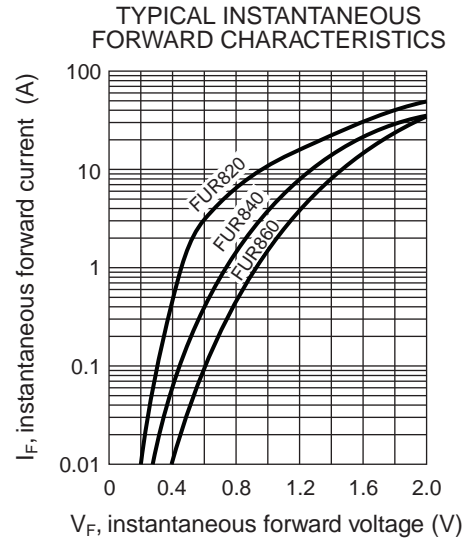
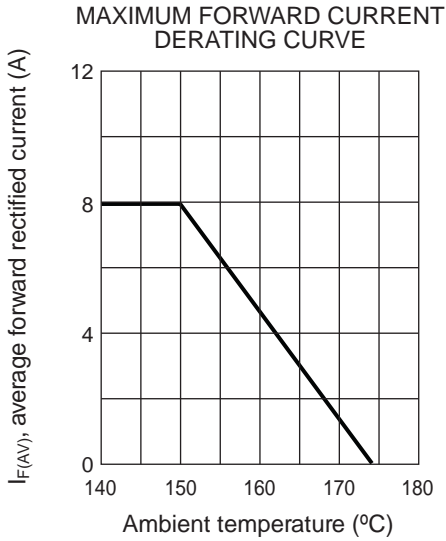
		FUR820	FUR840	FUR860
$V_F$	Max. Instantaneous Forward Voltage @ 8.0 A	0.975 V	1.3 V	1.7 V
$I_R$	Max. DC Reverse Current at @ $T_C = 25$ °C Rated DC Blocking Voltage @ $T_C = 150$ °C (Note 3)	5.0 $\mu$ A 250 $\mu$ A		
$R_{thj-C}$	Typical Thermal Resistance (Note 2)	3.0 °C/W	2.0 °C/W	

Notes: 1. Measured at 1 MHz and Applied Reverse Voltage of 4.0 Volts D.C.

2. Thermal Resistance from Junction to Case, Mounted on Heatsink Size of 50.8 mm x 76.2 mm x 6.35 mm Al-Plate.

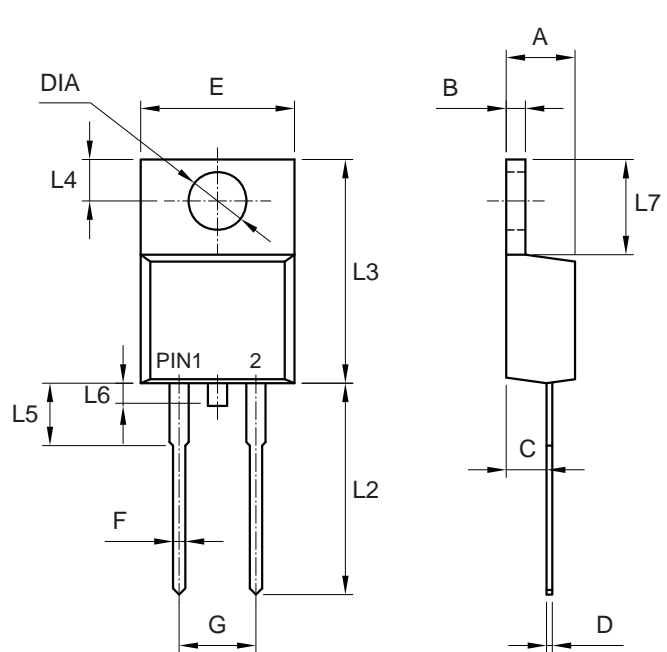
3. Pulse test:  $t_p = 300$   $\mu$ S,  $D4ty$  Cyc3e < 2

**Rating And Characteristic Curves**



**8.0 Amp. Glass Passivated Ultrafast Rectifiers**

**PACKAGE MECHANICAL DATA TO-220AC**



The image contains two mechanical drawings of a TO-220AC package. The left drawing is a top view showing a rectangular body with two leads extending downwards. Dimensions labeled include: DIA (lead diameter), E (body width), L4 (lead diameter), L3 (body height), L5 (lead length), L6 (lead diameter), L2 (total height), F (lead diameter), and G (lead length). The leads are labeled PIN1 and 2. The right drawing is a side view showing the profile of the package. Dimensions labeled include: A (body width), B (lead diameter), L7 (lead length), C (lead diameter), and D (lead length).

REF.	DIMENSIONS	
	Milimeters	
	Min.	Max.
A	4.44	4.70
B	1.14	1.40
C	2.54	2.79
D	0.35	0.64
E	-	10.50
F	0.68	0.94
G	4.95	5.20
L2	13.46	14.22
L3	14.9	15.10
L4	2.62	2.87
L5	3.56	4.06
L6	-	1.60
L7	5.84	6.86
DIA	3.74	3.91