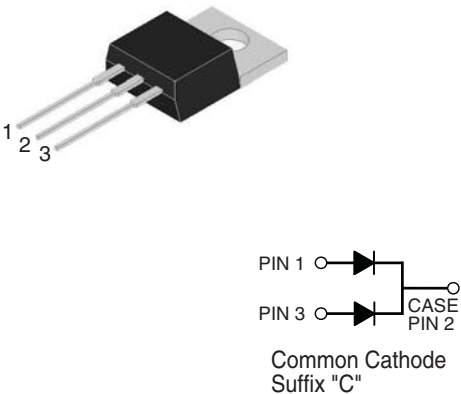


## 20.0 Amp. Glass Passivated Ultrafast Rectifiers

<p><b>TO-220AB</b></p>  <p style="text-align: center;">Common Cathode Suffix "C"</p>	<p><b>Voltage</b> 150 V to 600 V</p> <p><b>Current</b> 20.0 A</p> <ul style="list-style-type: none"> <li>High efficiency, low VF</li> <li>High current capability</li> <li>High reliability</li> <li>High surge current capability</li> <li>Low power loss.</li> <li>For use in low voltage, high frequency inverter, free wheeling, and polarity protection application.</li> </ul> <p><b>MECHANICAL DATA</b></p> <ul style="list-style-type: none"> <li>Cases: TO-220AB Molded plastic</li> <li>Epoxy: UL 94V0 rate flame retardant</li> <li>Terminals: Pure tin plated, lead free, 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

		SF 2003G	SF 2004G	SF 2006G	SF 2008G
$V_{RRM}$	Maximum Recurrent Peak Reverse Voltage (V)	150	200	400	600
$V_{RMS}$	Maximum RMS Voltage (V)	105	140	280	420
$V_{DC}$	Maximum DC Blocking Voltage (V)	150	200	400	600
$I_{F(AV)}$	Maximum Average Forward Rectified Current @ $T_c = 100\text{ °C}$	20 A			
$I_{FSM}$	Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC Method)	150 A			
$T_{rr}$	Maximum Reverse Recovery Time from $I_F = 0.5A$ ; $I_R = 1A$ ; $I_{RR} = 0.25A$	35 nS			
$C_j$	Typical Junction Capacitance at 1 MHz and reverse voltage of $4V_{DC}$	80 pF			
$T_j$	Operating Temperature Range	-65 to +150 °C			
$T_{stg}$	Storage Temperature Range	-65 to +150 °C			

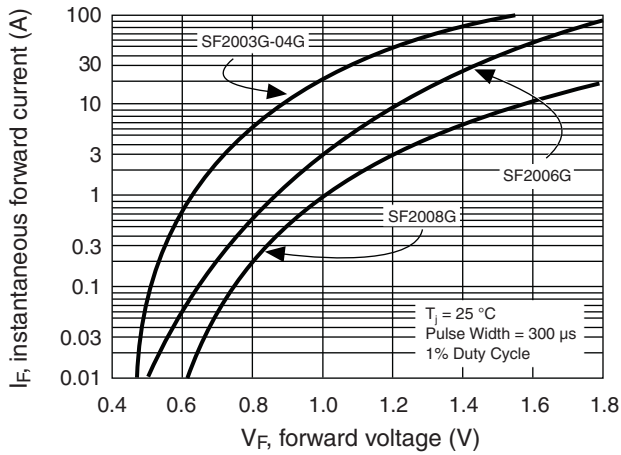
### Electrical Characteristics

$V_F$	Maximum Instantaneous Forward Voltage @ 10 A	0.975 V	1.3 V	1.7 V
$I_R$	Maximum DC Reverse Current @ $T_A = 25\text{ °C}$ at Rated DC Blocking Voltage @ $T_A = 100\text{ °C}$	5 $\mu$ A 400 $\mu$ A		
$R_{th(j-c)}$	Typical Thermal Resistance (See note)	2.5 °C/W		

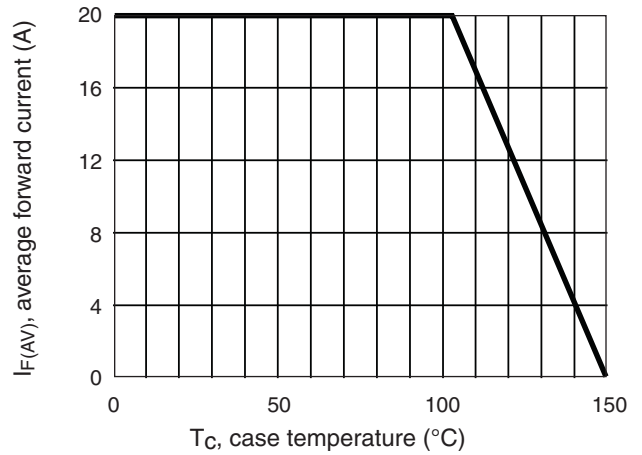
NOTE: Thermal Resistance from Junction to Case Mounted on Heatsink size of 76.2 x 127 x 6.35 Al-Plate.

### Rating And Characteristic Curves

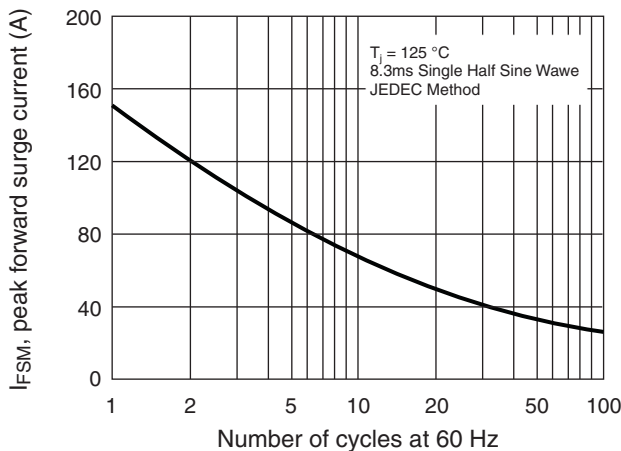
TYPICAL FORWARD CHARACTERISTICS PER LEG



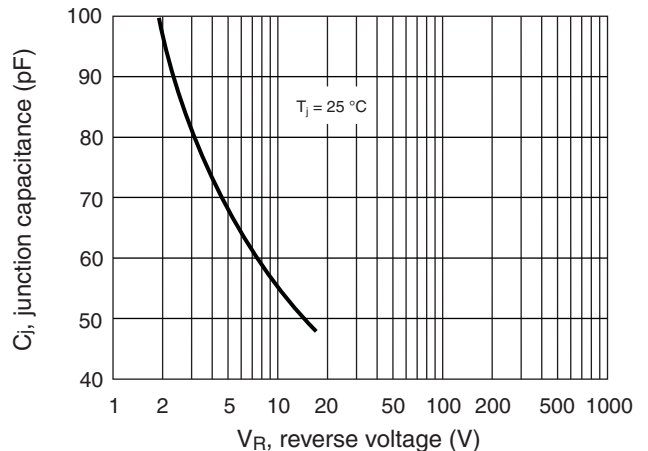
MAXIMUM AVERAGE FORWARD CURRENT DERATING CURVE



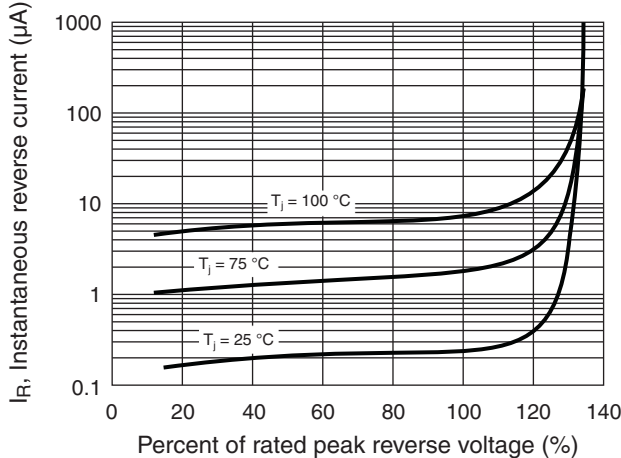
MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER LEG



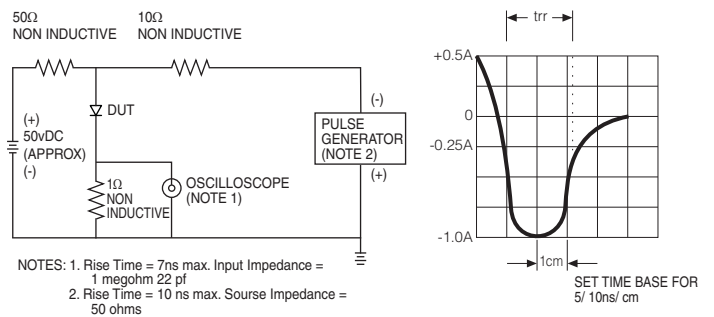
TYPICAL JUNCTION CAPACITANCE PER LEG



TYPICAL REVERSE CHARACTERISTICS



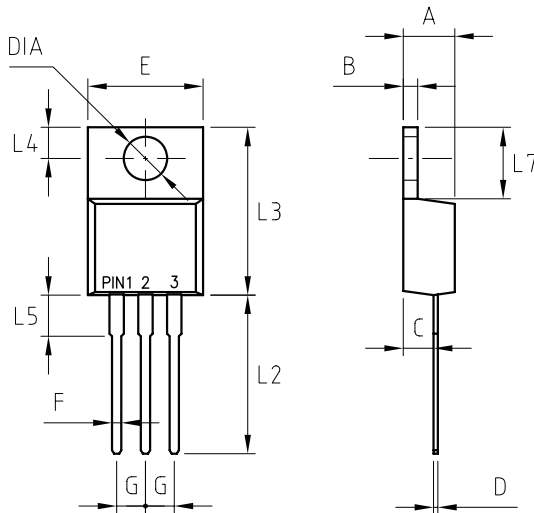
REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM



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

**PACKAGE MECHANICAL DATA**

**TO-220AB**



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	--	10.5
F	0.68	0.94
G	2.41	2.67
L2	13.46	14.22
L3	14.90	15.10
L4	2.62	2.87
L5	3.56	4.06
L7	5.84	6.86
DIA	3.74	3.91