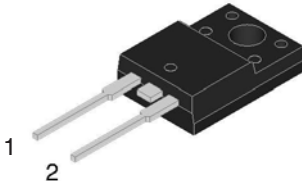
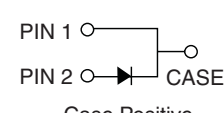


## 5 Amp. Glass Passivated Ultrafast Rectifiers

<h3 style="margin: 0;">ITO-220AC</h3>  <div style="text-align: center; margin-top: 20px;">  <p style="margin: 0;">Case Positive</p> </div>	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center; border-bottom: 1px solid black;"><b>Voltage</b> 200 to 600 V</td> <td style="text-align: center; border-bottom: 1px solid black;"><b>Current</b> 5 A</td> </tr> <tr> <td colspan="2" style="padding: 5px;"> <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> </td> </tr> <tr> <td colspan="2" style="padding: 5px;"> <p><b>MECHANICAL DATA</b></p> <ul style="list-style-type: none"> <li>Case: ITO-220AC Molded plastic</li> <li>Epoxy: UL 94V-0 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> </td> </tr> </table>	<b>Voltage</b> 200 to 600 V	<b>Current</b> 5 A	<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>Case: ITO-220AC Molded plastic</li> <li>Epoxy: UL 94V-0 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>	
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### Absolute Maximum Ratings, according to IEC publication No. 134

		SFAF 504G	SFAF 506G	SFAF 508G
V <sub>RRM</sub>	Maximum Recurrent Peak Reverse Voltage (V)	200	400	600
V <sub>RMS</sub>	Maximum RMS Voltage (V)	140	280	420
V <sub>DC</sub>	Maximum DC Blocking Voltage (V)	200	400	600
I <sub>F(AV)</sub>	Maximum Average Forward Rectified Current 9.5mm Lead Length @ T <sub>c</sub> = 100 °C	5.0 A		
I <sub>FSM</sub>	Peak Forward Surge Current 8.3 ms. single Half Sine-wave Superimposed on Rated Load (JEDEC Method)	125 A		
T <sub>rr</sub>	Maximum Reverse Recovery Time From I <sub>F</sub> = 0.5 A; I <sub>R</sub> = 1 A; I <sub>RR</sub> = 0.25 A	35 nS		
C <sub>j</sub>	Typical Junction Capacitance at 1MHz and reverse voltage of 4V <sub>DC</sub>	70 pF		
T <sub>j</sub> , T <sub>stg</sub>	Operating and Storage Temperature Range	- 65 to + 150 °C		

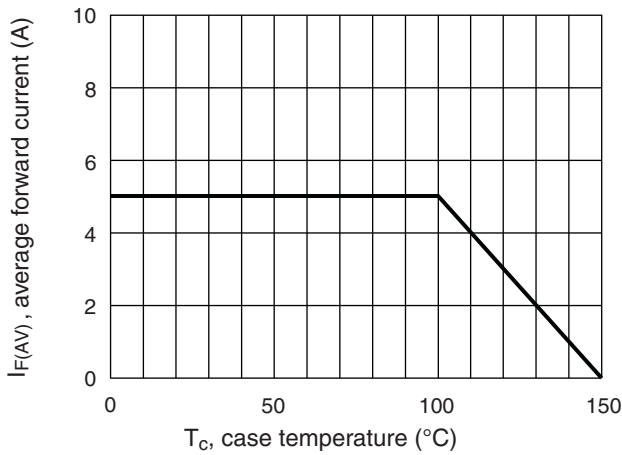
### Electrical Characteristics

		SFAF 504G	SFAF 506G	SFAF 508G
V <sub>F</sub>	Maximum Instantaneous Forward Voltage @ 5.0 A	0.975 V	1.3 V	1.7 V
I <sub>R</sub>	Maximum DC Reverse Current @ T <sub>A</sub> = 25 °C at Rated DC Blocking Voltage @ T <sub>A</sub> = 100 °C	10 µA 400 µA		
R <sub>thj-c</sub>	Typical Thermal Resistance (See Note)	5.0 °C/W		

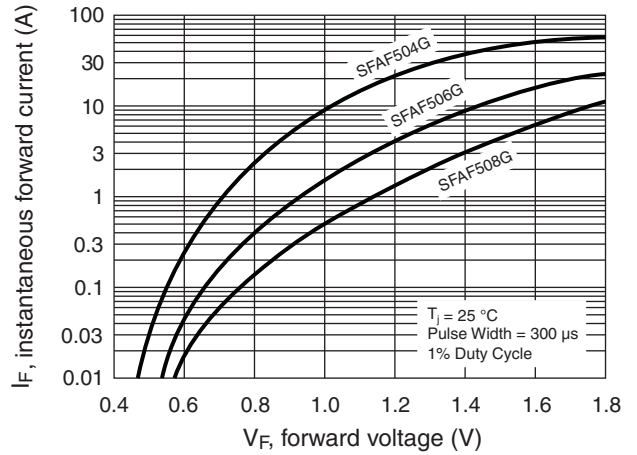
Note: Thermal Resistance from Junction to Case Mounted on Heatsink Size of 50.8mm x 76.2mm x 6.35mm Al-Plate.

## Rating And Characteristic Curves

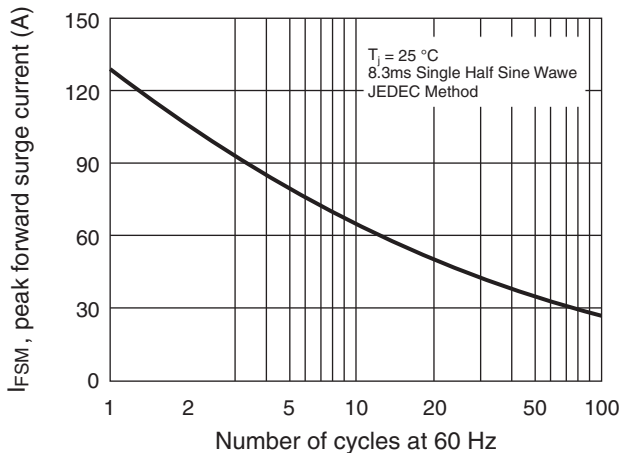
MAXIMUM FORWARD CURRENT DERATING CURVE



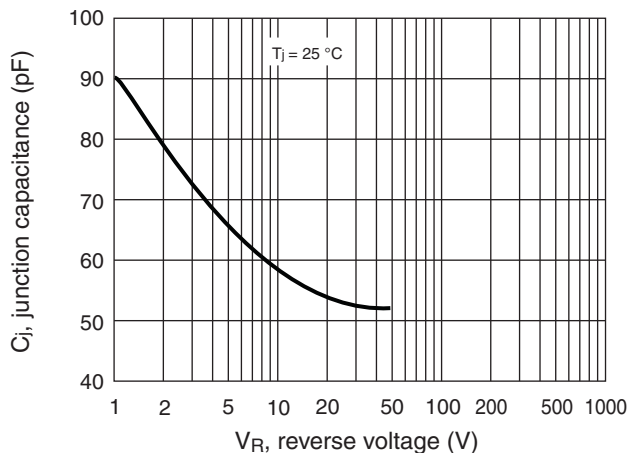
TYPICAL FORWARD CHARACTERISTICS



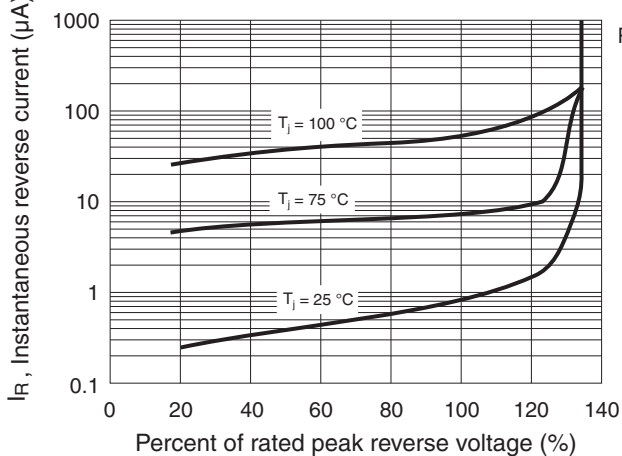
MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT



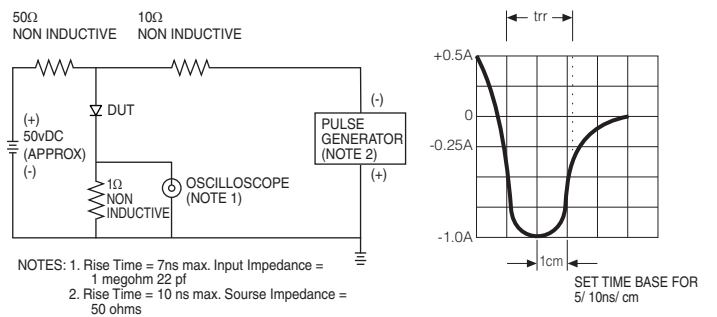
TYPICAL JUNCTION CAPACITANCE



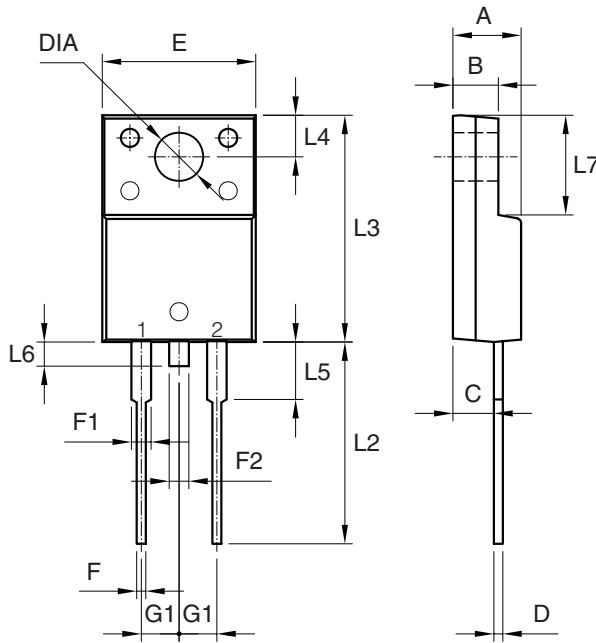
TYPICAL REVERSE CHARACTERISTICS



REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM



**PACKAGE MECHANICAL DATA ITO-220AC**



REF.	DIMENSIONS		
	Milimeters		
	Min.	Nominal	Max.
A	4.40	-	4.70
B	3.00	-	3.16
C	2.50	-	2.80
D	0.50	-	0.76
E	9.90	-	10.30
F	0.50	-	0.90
F1	1.10	-	1.40
F2	-	-	1.80
G1	2.40	2.55	2.70
L2	13.20	-	13.80
L3	14.80	-	15.50
L4	2.55	-	2.85
L5	3.70	-	4.10
L6	-	-	1.60
L7	6.30	-	6.90
DIA	3.00	-	3.40