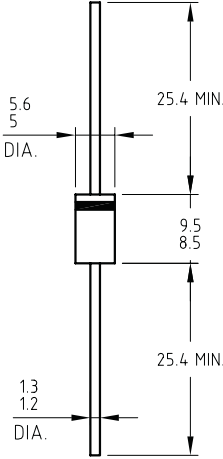


4.0 Amp. Glass Passivated Ultrafast Rectifiers

 RoHS COMPLIANCE DO-201AD  Dimensions in mm.	<table> <tr> <th>Voltage</th><th>Current</th></tr> <tr> <td>200 V to 600 V</td><td>4.0 A</td></tr> </table> • High efficiency, low VF • High current capability • High reliability • High surge current capability • Low power loss. • For use in low voltage, high frequency inverter, free wheeling, and polarity protection application. MECHANICAL DATA • Case: Molded plastic • Epoxy: UL 94V0 rate flame retardant • Lead: Pure tin plated, lead free, solderable per MIL-STD-202, Method 208 guaranteed • Polarity: Color band denotes cathode • High temperature soldering guaranteed: 260 °C/10 seconds/9.5mm lead lengths at 2.3kg tension • Mounting position: Any • Weight: 1.2 grams	Voltage	Current	200 V to 600 V	4.0 A
Voltage	Current				
200 V to 600 V	4.0 A				

Maximum Ratings and Electrical Characteristics at 25 °C

		FSF 44G	FSF 46G	FSF 48G
V _{RRM}	Maximum 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 @ T _A = 55 °C	4.0 A		
I _{FSM}	Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC Method)	125 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}	100 pF	80 pF	
T _j	Operating Temperature Range	-65 to +150 °C		
T _{stg}	Storage Temperature Range	-65 to +150 °C		

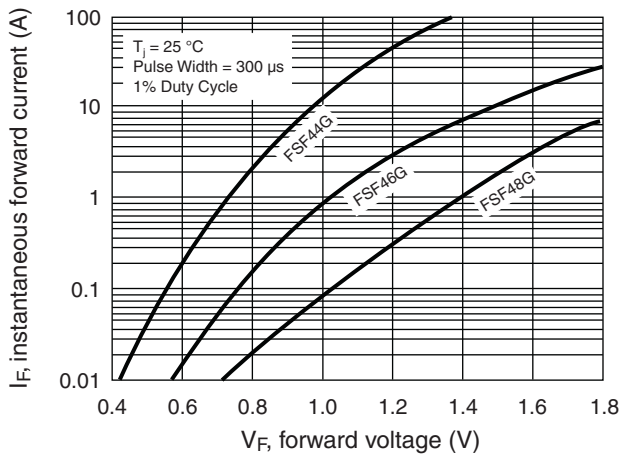
Electrical Characteristics at Tamb = 25 °C

V_F	Maximum Instantaneous Forward Voltage @ = 4.0 A	1.0 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 μA 500 μA		
$R_{th(j-a)}$	Thermal Resistance	25 °C/W		

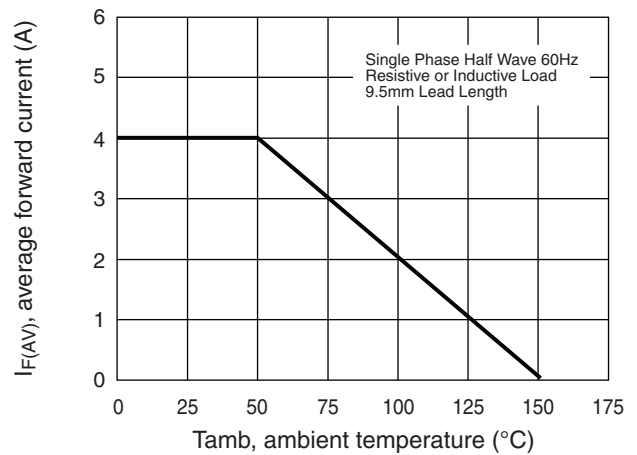
NOTE: Mount on Cu-Pad size 16mm x 16mm on P. C. B.

Rating And Characteristic Curves

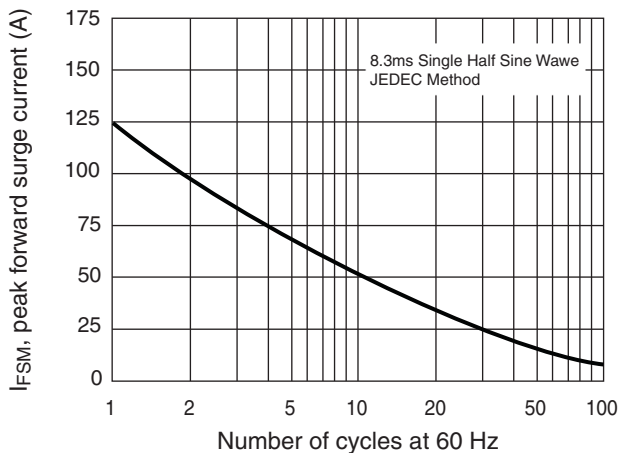
TYPICAL FORWARD CHARACTERISTICS



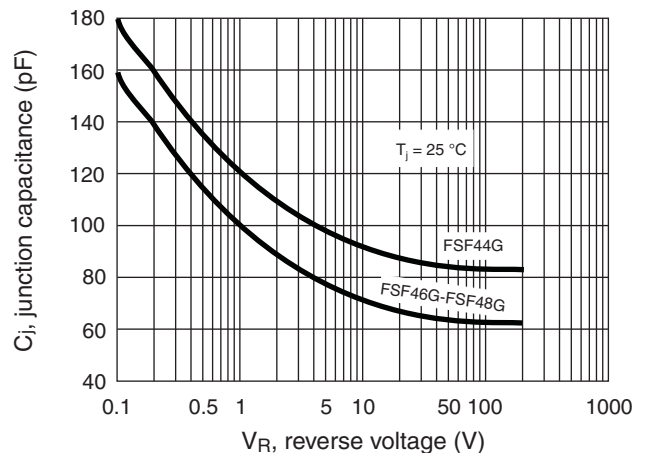
MAXIMUM AVERAGE FORWARD CURRENT DERATING



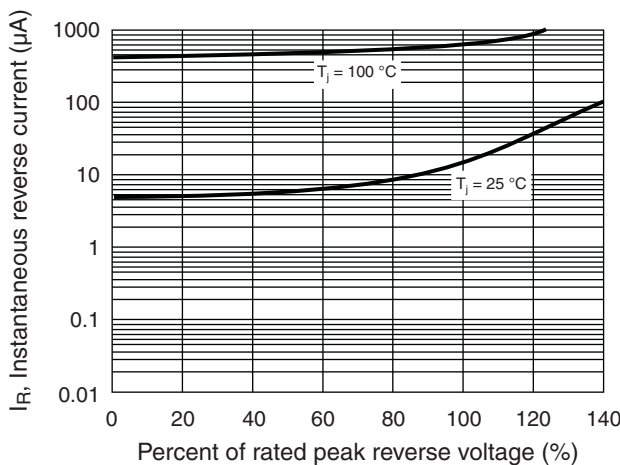
MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT



TYPICAL JUNCTION CAPACITANCE



TYPICAL REVERSE CHARACTERISTICS



REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM

