



Super Fast Glass Passivated Rectifier

Features

- Low power loss, high efficiency
- Low leakage
- High Surge Capacity
- Glass passivated chip junction
- Super fast switching speed
- High temperature soldering guaranteed:
250°C/10 seconds, 0.16" (4.06mm) lead length
- Also available with common Anode, add an "A" suffix, i.e. SF3001CA,
And as a doubler, add a "D" suffix, i.e. SF3001CD
- RoHS and REACH Compliance



Mechanical Data

Case:	Transfer molded plastic
Polarity:	Color band denots cathode end
Epoxy:	UL94V-0 rate flame retardant
Lead:	Plated axial lead, solderable per MIL-STD-202E Method 208C
Mounting Position:	Any
Weight:	0.22 ounce, 6.3 gram

Maximum Ratings ($T_{Ambient}=25^{\circ}C$ unless noted otherwise)

Symbol	Description	SF 3001C	SF 3002C	SF 3003C	SF 3004C	SF 3005C	SF 3006C	SF 3007C	SF 3008C	Unit	Conditions
VRRM	Max Recurrent Peak Reverse Voltage	50	100	150	200	300	400	500	600	V	
VRMS	Max RMS Voltage	35	70	105	140	210	280	350	420	V	
VDC	Max DC Blocking Voltage	50	100	150	200	300	400	500	600	V	
I(AV)	Max Average Forward Rectified Current	30								A	$T_c=120^{\circ}C$
IFSM	Peak Forward Surge Current	250								A	JEDEC method
TJ,TSTG	Operating and Storage Temperature Range	-55 to +150, -55 to +150								°C	

Electrical Characteristics ($T_{Ambient}=25^{\circ}C$ unless noted otherwise)

Symbol	Description	SF 3001C	SF 3002C	SF 3003C	SF 3004C	SF 3005C	SF 3006C	SF 3007C	SF 3008C	Unit	Conditions
VF	Max Instantaneous Forward Voltage	1.0		1.30			1.70			V	15.0A
IR	Max DC Reverse Current at Rated DC Blocking Voltage	10.0								μA	$T_A=25^{\circ}C$
		500									$T_A=125^{\circ}C$
TRR	Maximum reverse recovery time	35								nS	Note 1
Rθ-JA	Typical Thermal Resistance	1.0								°C/W	Note 2
CJ	Typical Junction capacitance	30				50				pF	Measured at 1.0MHz / 4.0V

Note:

1. Reverse recovery test conditions: $I_F=0.5A$, $I_R=1.0A$, $I_{RR}=0.25A$
2. Unit mounted on heatsink

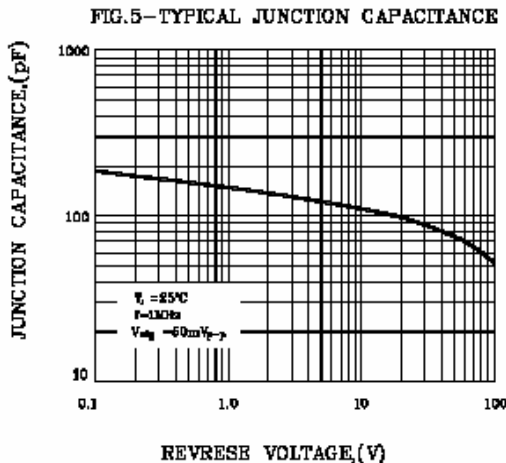
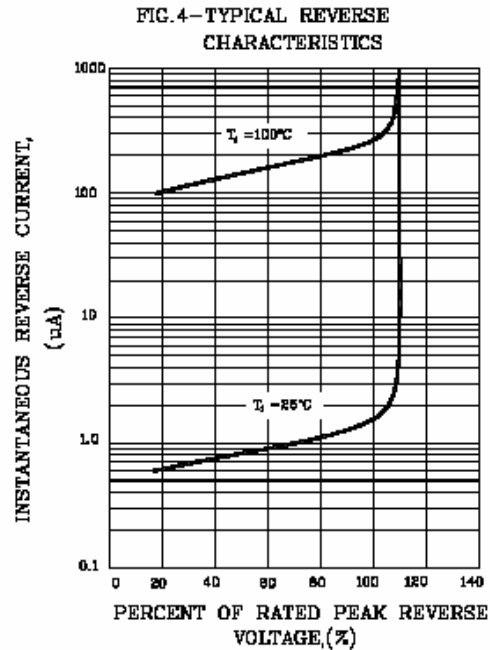
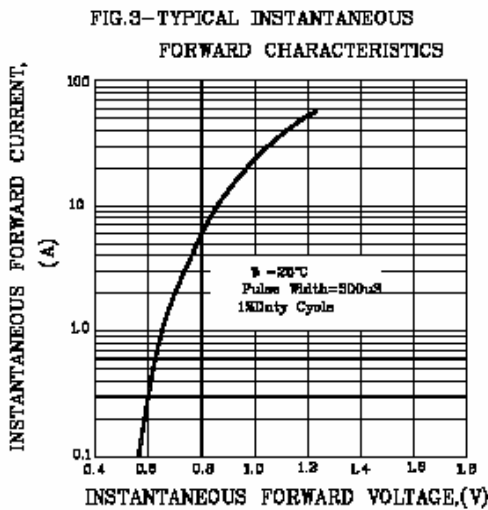
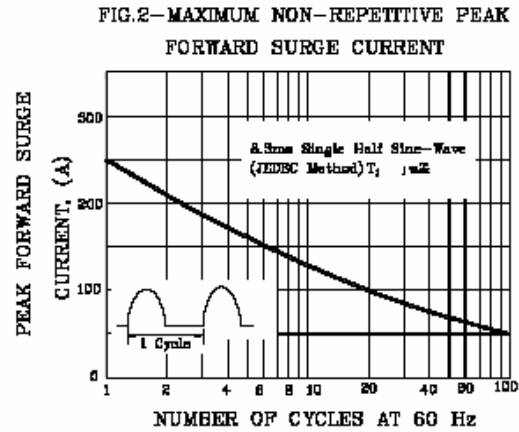
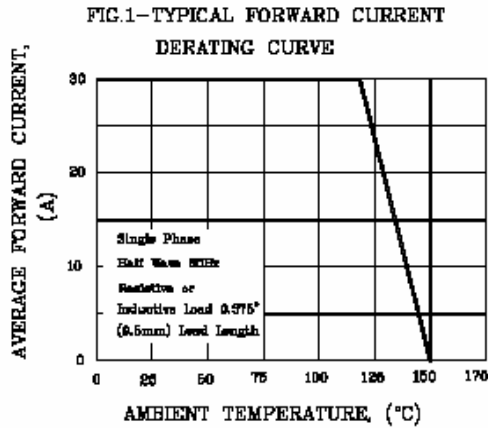
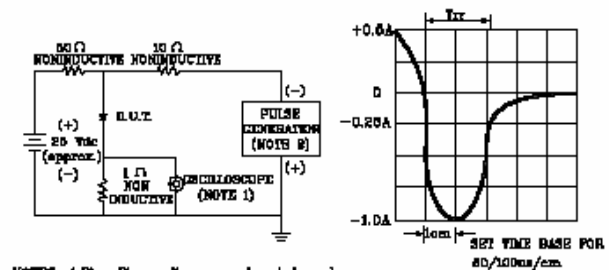
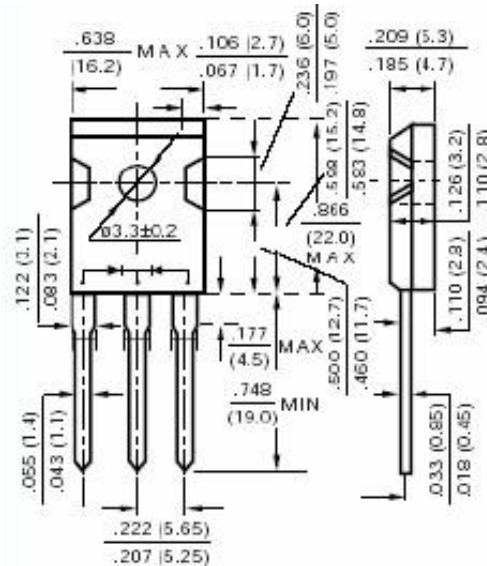
SF3001C ~ SF3008C
RATINGS AND CHARACTERISTIC CURVES SF3001C THRU SF3008C


FIG.6-TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTIC



Dimensions in inches (mm)

TO-3P
Contact us:
US HEADQUARTERS
MEI SEMI INC.
2902 Corvin Drive, Santa Clara, CA95051, USA

Tel: 1-408-733-0808 Fax: 1-408-733-2828