



# SURFACE MOUNT GLASS PASSIVATED RECTIFIER S1T ~ S1Y

## Surface Mount Glass Passivated Rectifier

### Features

- Plastic package has Underwriters Laboratory flammability Classification 94V-0
- Built-in strain relief, ideal for automated placement
- Glass passivated rectifier chip inside
- High temperature soldering guaranteed 260°C/ 10 seconds
- RoHS and REACH compliance



DO-214AC (SMA)



RoHS  
COMPLIANT

### Mechanical Data

<b>Case:</b>	DO-214AC, transfer molded plastic
<b>Epoxy:</b>	Meets UL 94V-0 flammability rating
<b>Terminals:</b>	Solder plated, solderable per MIL-STD 750, Method 2026
<b>Polarity:</b>	Cathode indicated by color band
<b>Mounting position:</b>	Any
<b>Weight:</b>	0.002 Ounce, 0.064 gram

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

Symbol	Description	S1T	S1W	S1X	S1Y	Unit	Conditions
<b>V<sub>RRM</sub></b>	Max Recurrent Peak Reverse Voltage	1300	1600	1800	2000	V	
<b>V<sub>RMS</sub></b>	Max RMS Voltage	910	1120	1260	1400	V	
<b>V<sub>DC</sub></b>	Max DC Blocking Voltage	1300	1600	1800	2000	V	
<b>I<sub>(AV)</sub></b>	Max Average Forward Rectified Current	1.0				A	TA=100°C
<b>I<sub>FSM</sub></b>	Peak Forward Surge Current	30				A	8.3ms single half sine-wave (JEDEC)
<b>V<sub>F</sub></b>	Max Instantaneous Forward Voltage	1.25				V	IF= 1.0A TA=25°C
<b>I<sub>R</sub></b>	Max DC Reverse Current at Rated DC Blocking Voltage	5				μA	TA=25°C
		50					TA=125°C
<b>C<sub>J</sub></b>	Typical Junction Capacitance	15				pF	At 1MHz, reversed voltage of 4V
<b>R<sub>θ-JA</sub></b>	Typical Thermal Resistance	70				°C/W	
<b>R<sub>θ-JL</sub></b>		30					
<b>T<sub>J</sub>, T<sub>STG</sub></b>	Operating and Storage Temperature Range	-55 to +150				°C	

Rev. 0 2011-10-20

**Typical Characteristics Curves**

FIG.1 - FORWARD CURRENT DERATING CURVE

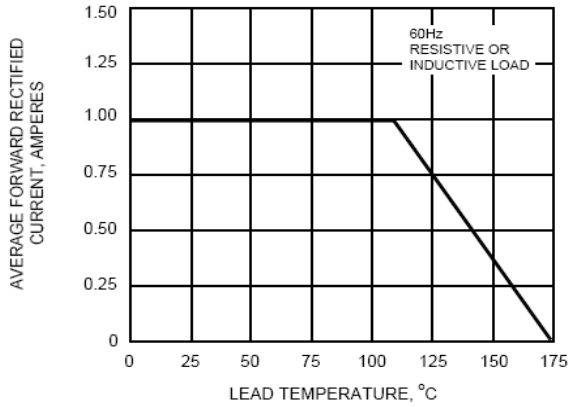


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

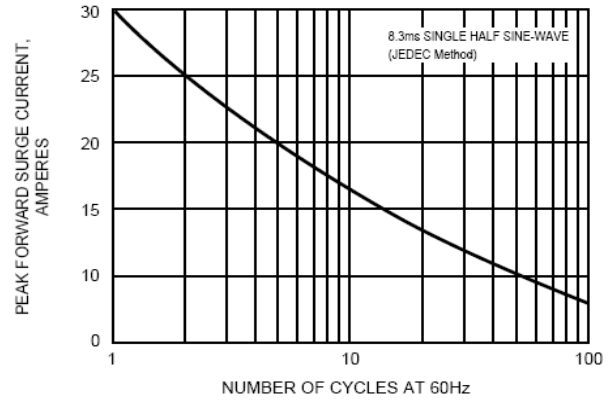


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

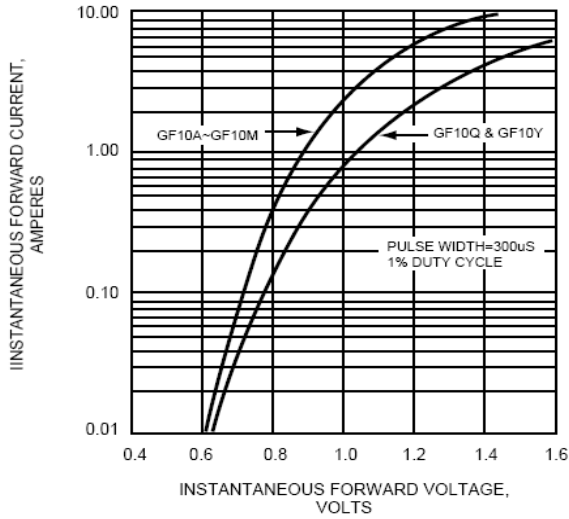


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

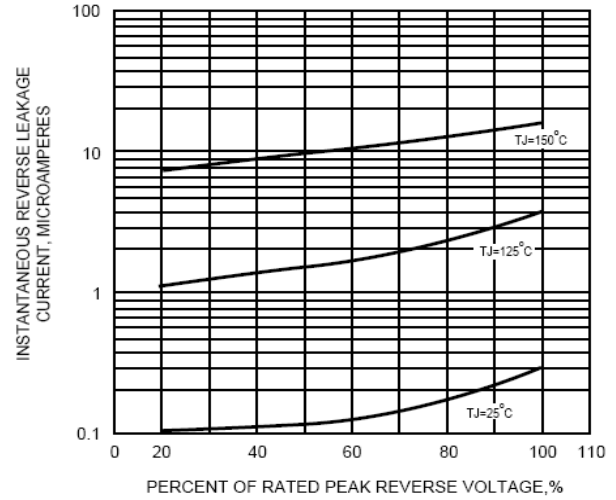


FIG.5 - TYPICAL JUNCTION CAPACITANCE

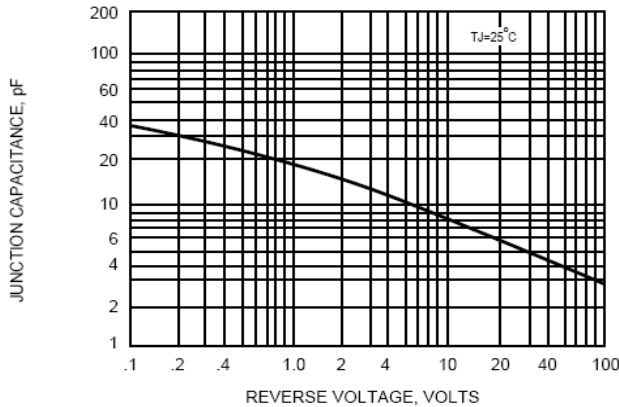
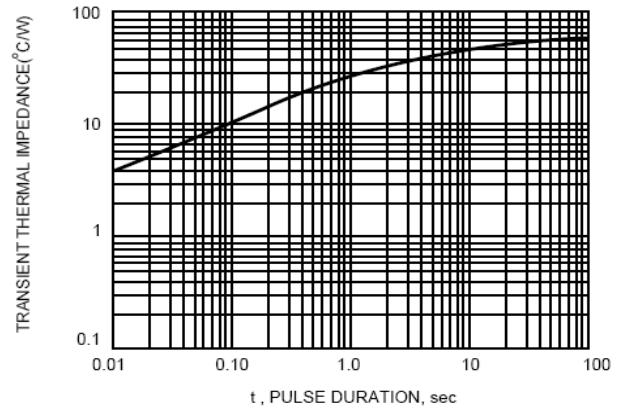
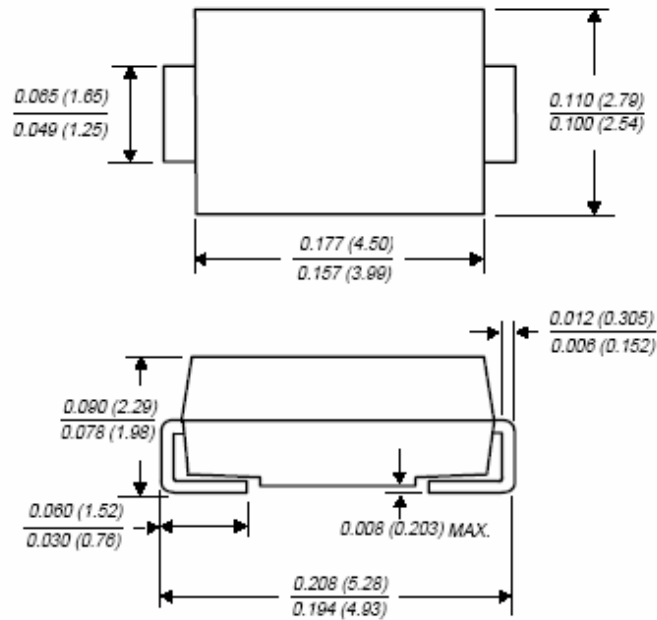


FIG.6 - TYPICAL TRANSIENT THERMAL IMPEDANCE



Dimensions in inch (mm)

*Dimensions in inches and (millimeters)***DO-214AC(SMA)****Contact us:****US HEADQUARTERS****MEI SEMI INC.****2902** Corvin Drive, Santa Clara, CA95051, USA

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