

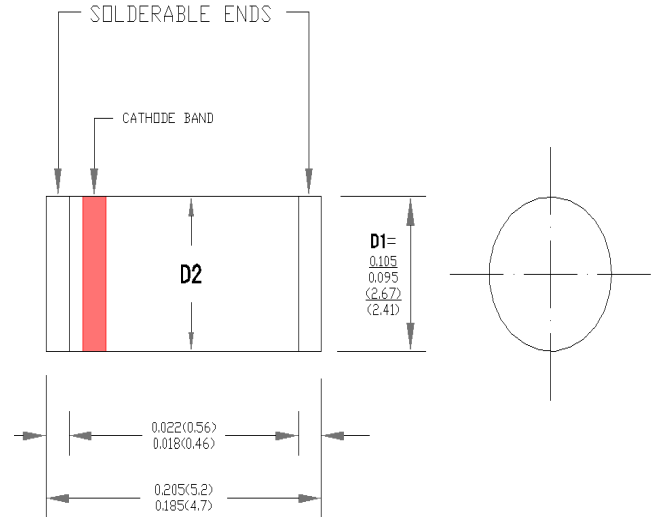
## Glass Passivated Super Fast Silicon Rectifiers

### SM4933 THRU SM4937

#### FEATURES

- Ideal for surface mounted applications
- Easy pick and place
- Low leakage current
- Fast switching
- High temperature soldering guaranteed:  
250°C/10 seconds/.375" (9.5mm) lead lengths

#### DO-213AB



$$D2 = D1^{+0}_{-0.008} (0.20)$$

Dimension inches (millimeters)

#### MECHANICAL DATA

- DO-213AB Case: Molded plastic DO-213AB
- Epoxy: UL94V-0 rate flame retardant
- Terminals: Plated terminals, solderable per MIL-STD-202, method 208
- Polarity: Color band denotes cathode end
- Mounting position: Any
- Weight: 0.12gram

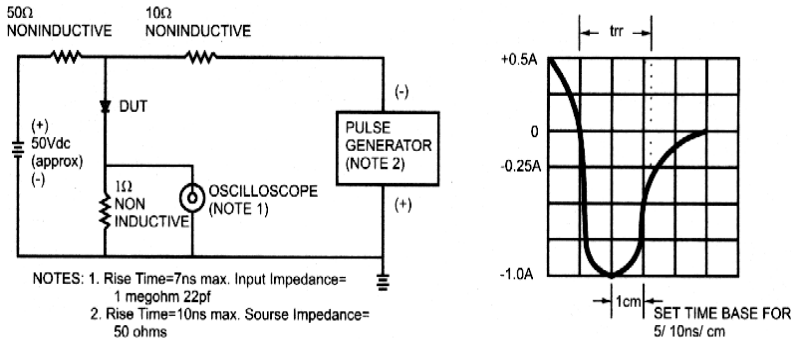
#### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C Ambient temp. Unless otherwise specified. Single phase, half sine wave, 60HZ, resistive or inductive load. For capacitive load, derate current by 20%

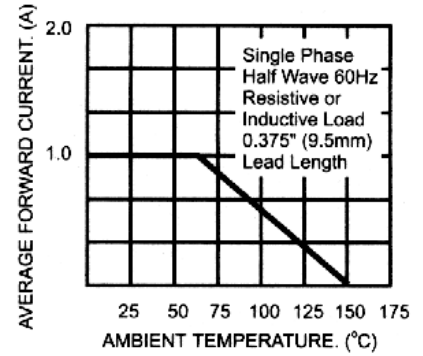
	SYMBOL	SM4933	SM4934	SM4935	SM4936	SM4937	UNITS
Maximum current Peak Reverse Voltage	VRRM	50	100	200	400	600	Volts
Maximum RMS Voltage	VRMS	35	70	140	280	420	Volts
Maximum DC Blocking Voltage	VDC	50	100	200	400	600	Volts
Maximum Average Forward Rectified Current T <sub>T</sub> =55°C	I(AV)	1.0					Amps
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC Method)	IFSM	30					Amps
Maximum Instantaneous Forward Voltage @ 1.0A	V <sub>F</sub>	1.3					Volts
Maximum DC Reverse Current @ T <sub>A</sub> =25°C at Rated DC Blocking Voltage @ T <sub>A</sub> =125°C	I <sub>R</sub>	5.0 100.0					uA
Maximum Reverse Recovery Time ( Note 1 )	T <sub>rr</sub>	200					nS
Typical Junction Capacitance ( Note 2 )	C <sub>J</sub>	15					pF
Operating AND Storage Temperature Range	T <sub>J</sub> /T <sub>STG</sub>	-55 to +150					°C

- Notes: 1. Reverse Recovery Test Conditions: I<sub>F</sub>=0.5A, I<sub>R</sub>=1.0A, I<sub>RR</sub>=0.25A  
2. Measured at 1 MHz and Applied Reverse Voltage of 4.0 V D.C.

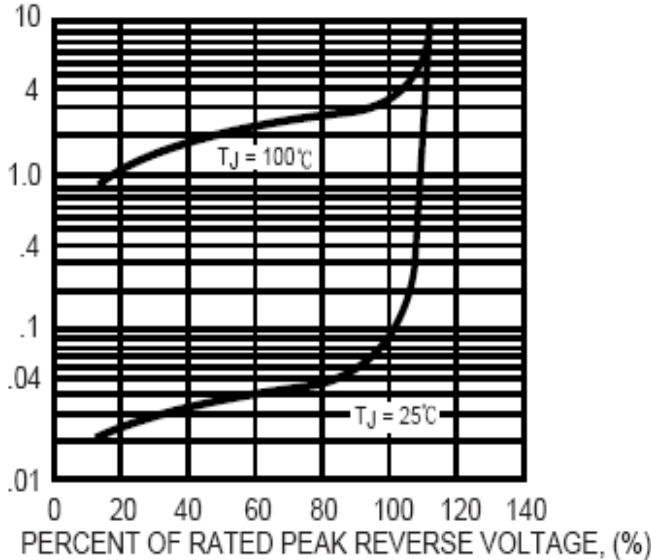
**FIG. 1 – REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM**



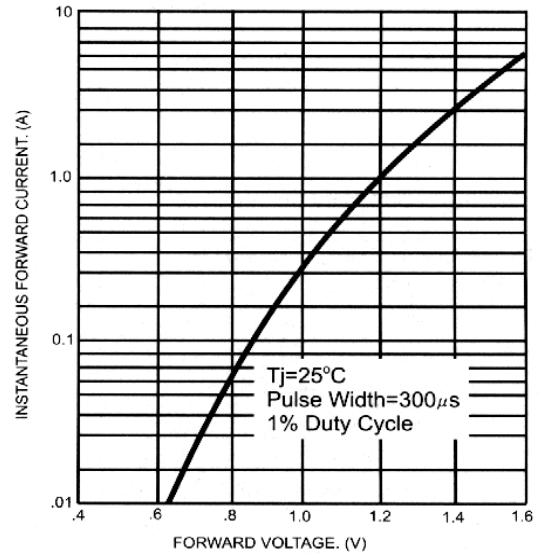
**FIG.2–TYPICAL FORWARD CURRENT DERATING CURVE**



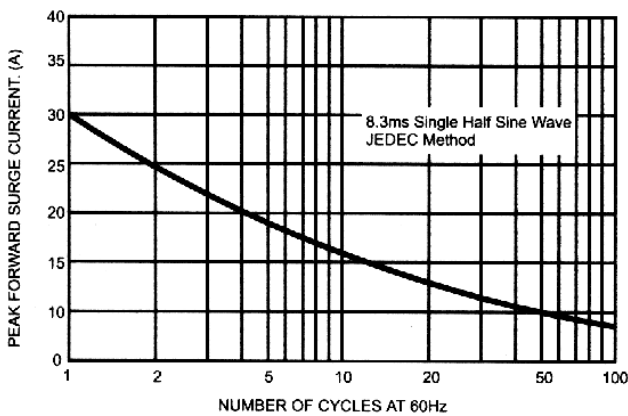
**FIG. 3 – TYPICAL REVERSE CHARACTERISTIC**



**FIG. 4 – TYPICAL FORWARD CHARACTERISTICS**



**FIG. 5 – MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT**



**FIG. 6 – TYPICAL JUNCTION CAPACITANCE**

