

SM4933 THRU SM4937

SURFACE MOUNT GLASS PASSIVATED FAST RECOVERY SILICON RECTIFIER

FEATURES

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

MECHANICAL DATA

Case: Molded plastic use UL94V-0 recognized
flame retardant epoxy

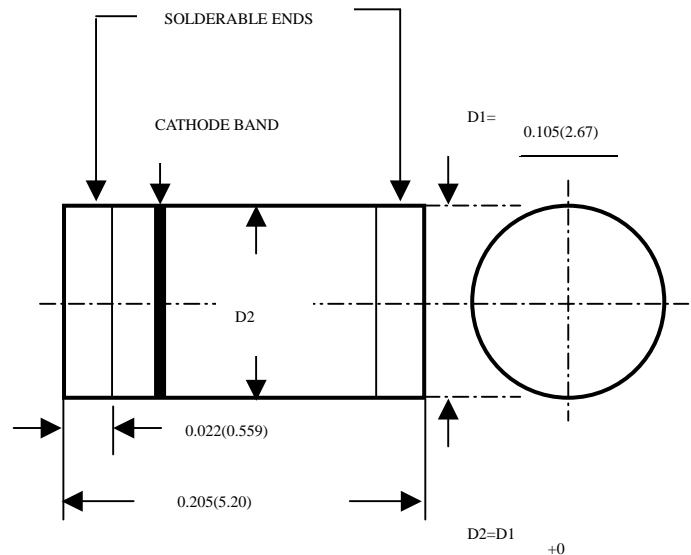
Terminals: Plated terminals, solderable per
MIL-STD-202, method 208

Polarity: Red color band on body denotes cathode

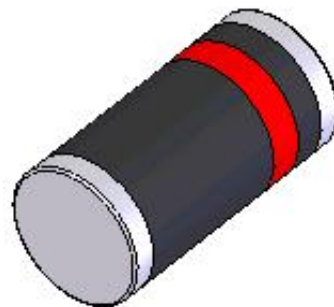
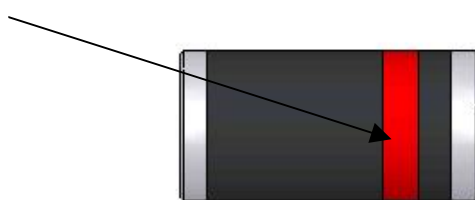
Mounting position: Any

Weight: 0.12grams

DO-213AB /MELF



陰極線



整流二極管通用符號:



RATING AND CHARACTERISTIC CURVES SM4933 THRU SM4937

FIG.1 -REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM

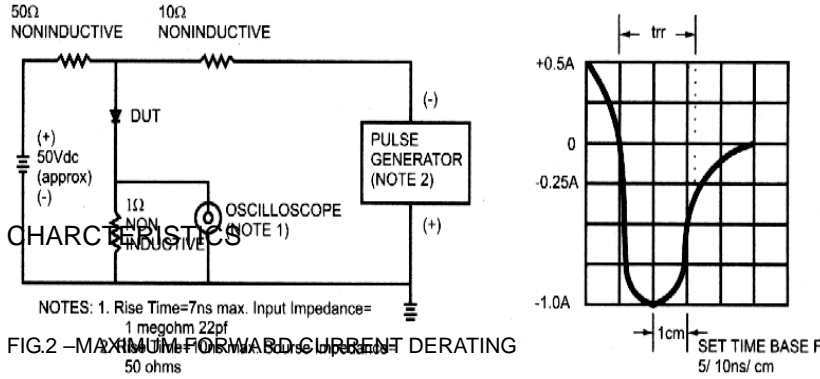


FIG.2 -MAXIMUM FORWARD CURRENT DERATING

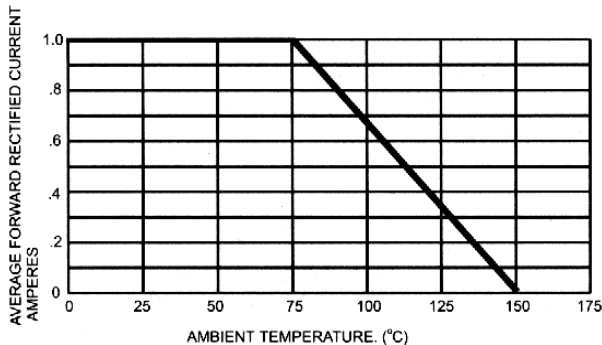


FIG.4 -MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

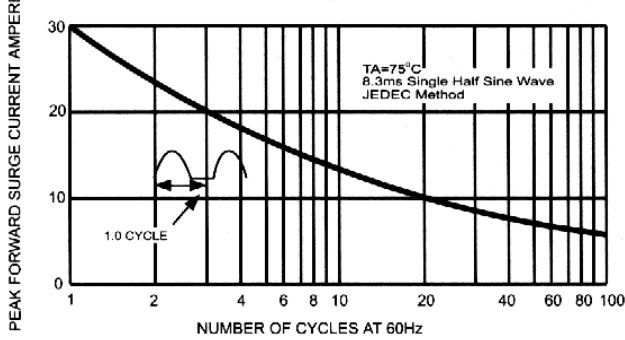


FIG.5 -TYPICAL JUNCTION CAPACITANCE

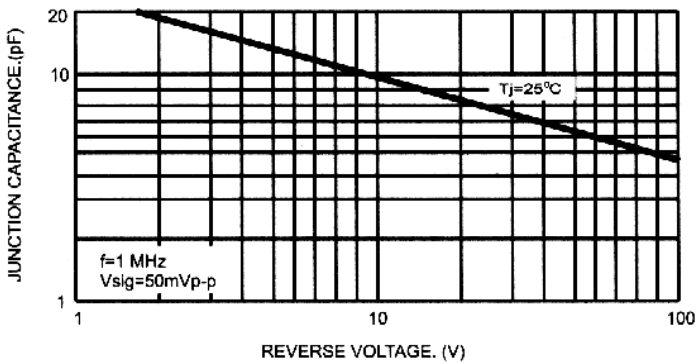


FIG.3 -TYPICAL FORWARD

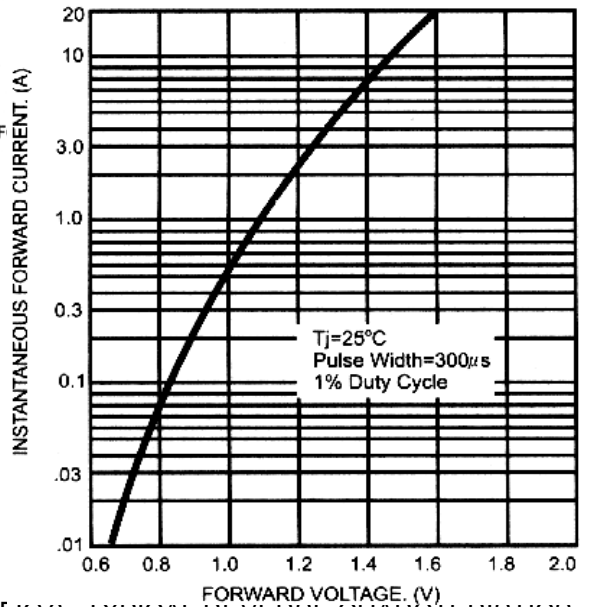
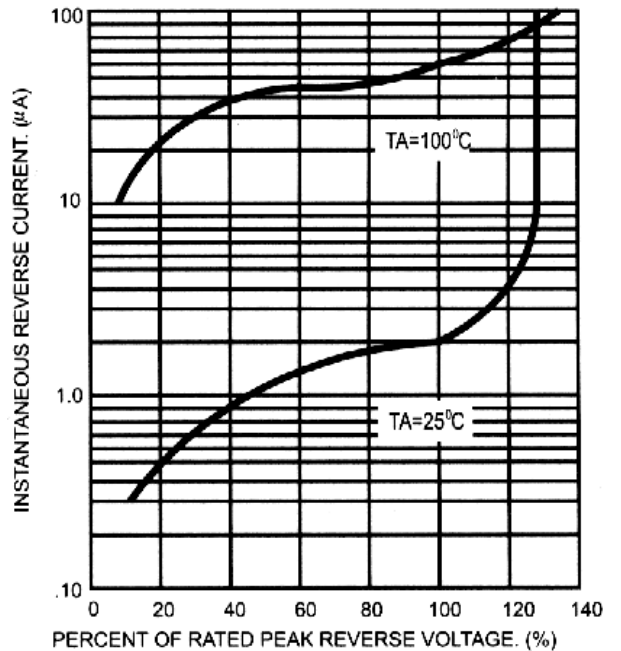


FIG.6 -TYPICAL REVERSE CHARACTERISTICS



MAXIMUM RATINGS (AT TA=25°C unless otherwise noted)

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%

RATINGS	SYMBOLS	SM 4933	SM 4934	SM 4935	SM 4936	SM 4937	UNITS
Maximum Recurrent 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 .375 (9.5mm) Lead Length @ T _T =75°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 _F	1.2					Volts
Maximum DC Reverse Current @ T _A =25 °C at Rated DC Blocking Voltage @ T _A =100 °C	I _R	5.0 100.0					uA
Maximum Reverse Recovery Time (Note 3)	T _{rr}	150					nS
Typical Junction Capacitance (Note 1)	C _J	15					PF
Typical Thermal Resistance (Note 2)	R _{θJC}	55					°C/W
Operating Temperature Range T _J	T _J , T _{STG}	-65 to +125					°C

Notes:1. Measured at 1 MHz and Applied Reverse Voltage of 4.0 V D.C.

2. Thermal Resistance from Junction to Ambient.

3. Reverse Recovery Test Conditions: I_F=0.5A, I_R=1.0A, I_{RR}=0.25A