

SURFACE MOUNT GLASS PASSIVATED SILICON RECTIFIERS

FEATURES

- . Ideal for surface mounted applications
- . Easy pick and place
- . Low leakage current
- . Glass passivated chips
- . 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

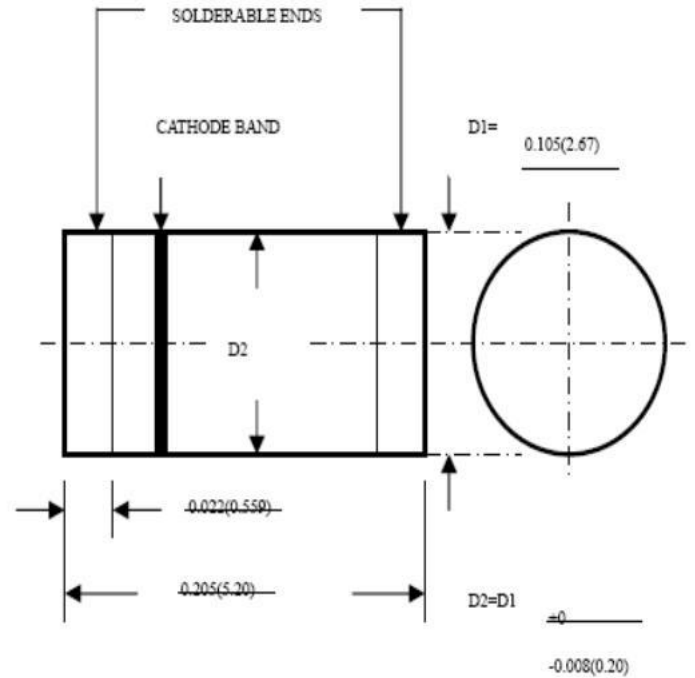
Terminals: Plated terminals, solderable per MIL-STD-202, method 208

Polarity: Red color band on body denotes Cathode

Mounting position: Any

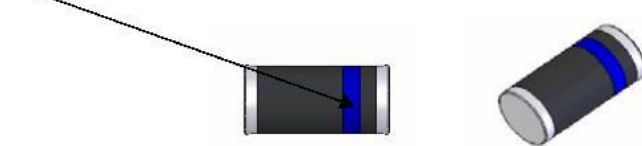
Weight: 0.12grams

DO-213AB / MELF



DEVICEMARKING

陰極線



二極管通用符號:



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	SM4001	SM4002	SM4003	SM4004	SM4005	SM4006	SM4007	UNITS
Maximum Current Peak Reverse	VRRM	50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage	VRMS	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage	VDC	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Rectified current	I(AV)	1.0							Amps
Peak Forward Surge current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC Method)	IFSM	30.0							Amps
Maximum Instantaneous Forward Voltage @1.0A	VF	1.1							Volts
Maximum DC Reverse Current @ T =25°C at Rated DC Blocking Voltage @ T =125°C	IR	5.0 100.0							μA
Typical Junction Capacitance (Note 1)	CJ	9.0							Pf
Typical Thermal Resistance (Note 2)	RθJC	50.0							°C/W
Operating and Storage Temperature Range T _J , T _{STG}	TSTG	-65 to +150							°C

2. Thermal Resistance from Junction to Ambient

RATING AND CHARACTERISTIC CURVES SM4001 THRU SM4007

FIG. 1 – DERATING CURVE FOR OUTPUT RECTIFIER CURRENT

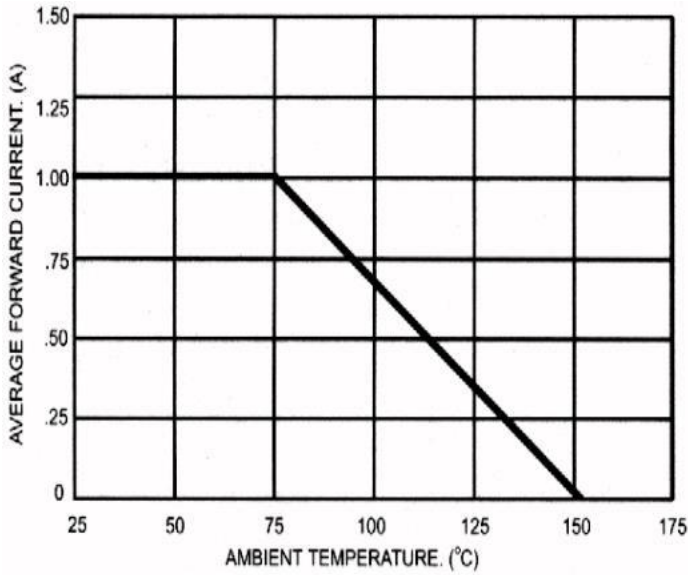


FIG. 2 – MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

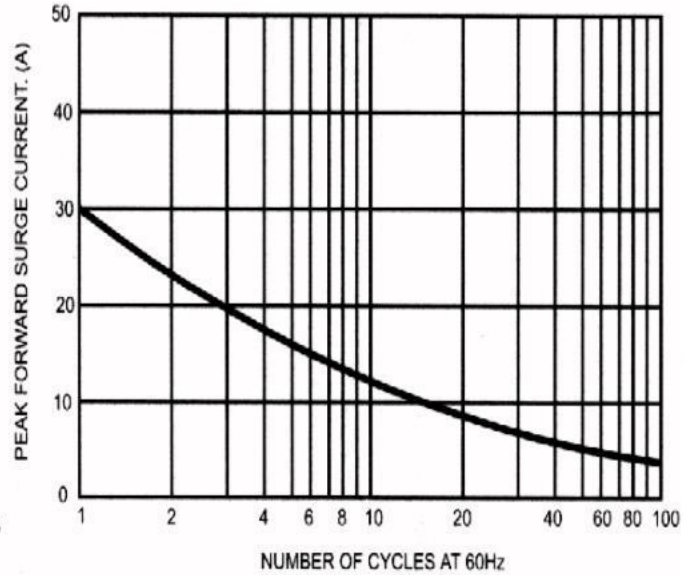


FIG. 3 – TYPICAL INSTANTANEOUS FOR CHARACTERISTICS

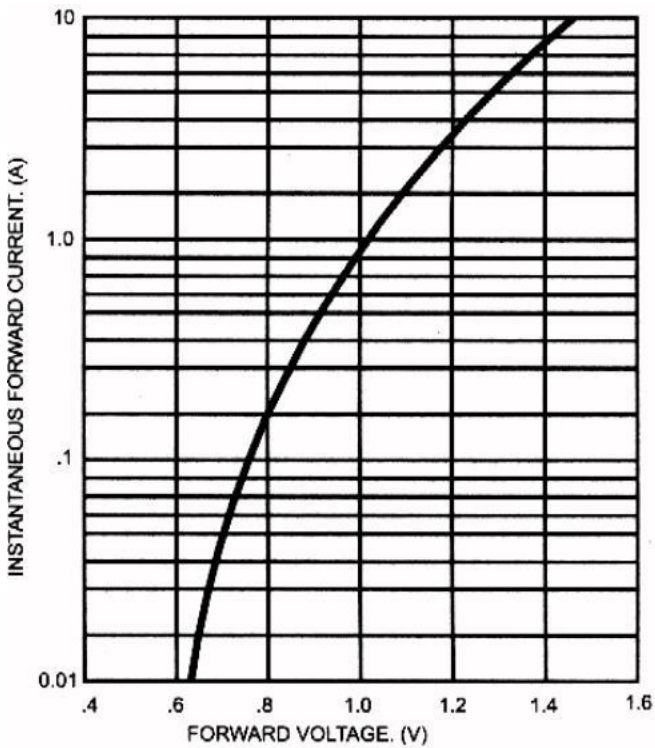


FIG. 4 – TYPICAL JUNCTION CAPACITANCE

