

SM4001 THRU SM4007

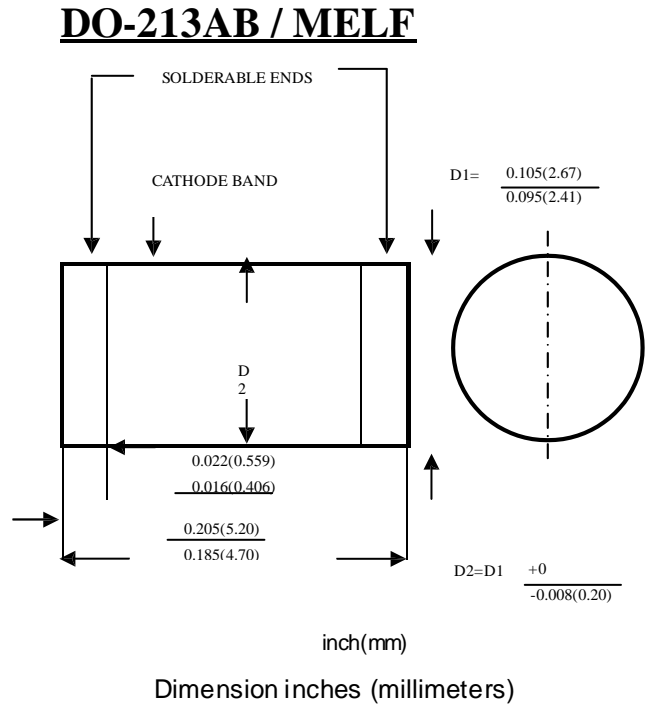
SURFACE MOUNT GLASS PASSIVATED SILICON RECTIFIER

FEATURES

- Ideal for surface mounted application
- Low reverse leakage
- High forward surge capability
- 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: Solder plated, solderable per MIL-STD-750 Method 2026
- Polarity: color band on body denotes cathode
- Mounting position: Any
- Weight: 0.1296 gram



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	SM 4001	SM 4002	SM 4003	SM 4004	SM 4005	SM 4006	SM 4007	UNITS
Maximum Current Peak Reverse Voltage	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 Single Sine-wave on Rated Load (JEDEC Method)	IFSM	30.0							Amps
Maximum Instantaneous Forward Voltage Drop at 1.0A DC	VF	1.1							Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage $T_A=25\text{ }^\circ\text{C}$ $T_A=100\text{ }^\circ\text{C}$	IR	5.0 50.0							mA
Typical Thermal Resistance	RθJA	75							°C/W
Typical Junction Capacitance VR= 4.0V, f = 1MHZ	CJ	15							pF
Operating Junction and Storage Temperature Range	TJ, TSTG	-55 to +150							°C

Rating and Characteristic Curves for SM4001 ~ SM4007

FIG. 1 – DERATING CURVE FOR OUTPUT RECTIFIER CURRENT

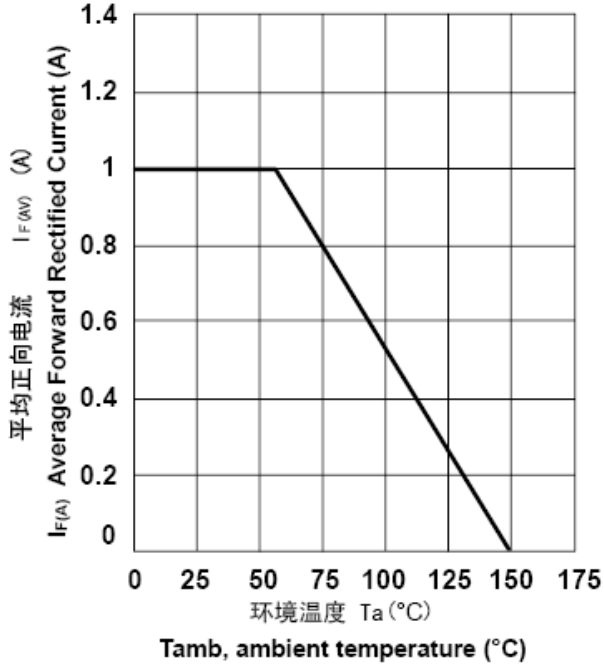


FIG. 2 – MAXIMUM NON – REPETITIVE PEAK FORWARD SURGE CURRENT

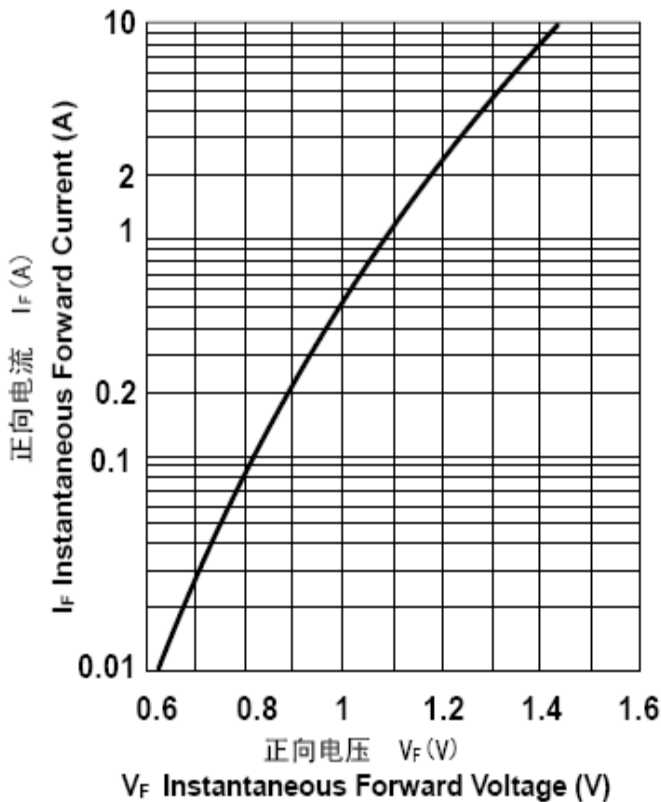
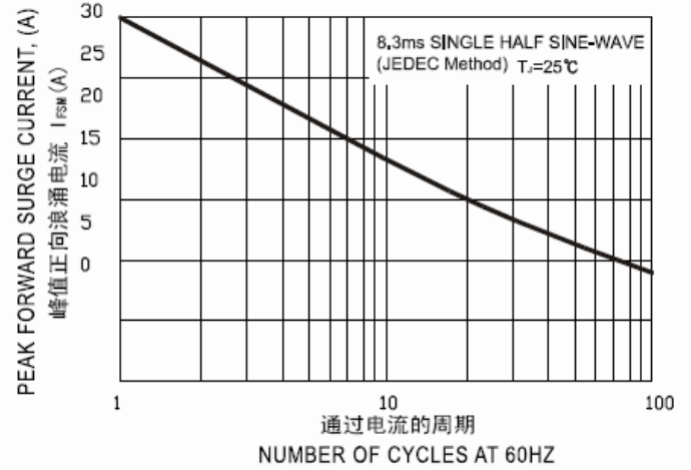


FIG. 3 – TYPICAL FORWARD CHARACTERISTICS

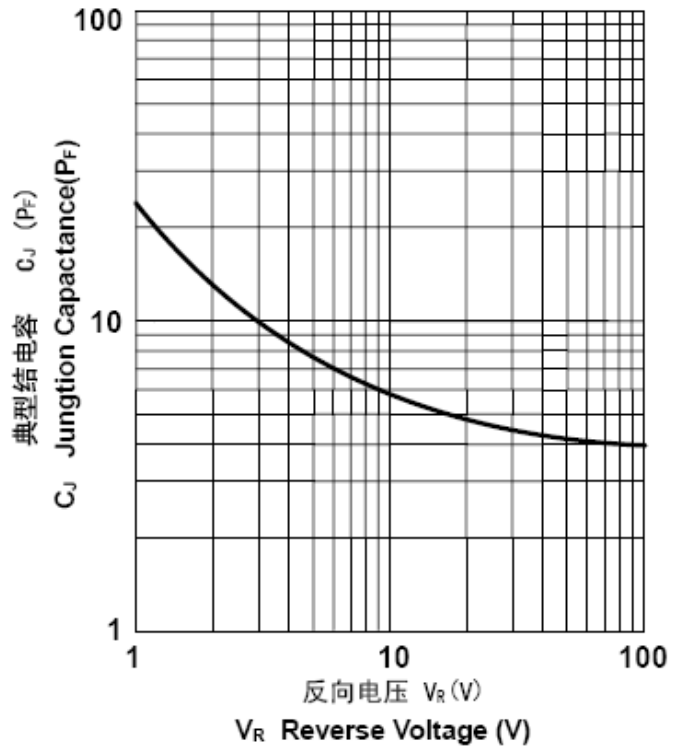


FIG. 4 – TYPICAL JUNCTION CAPACITANCE