

## SM5400 THRU SM5408

### SURFACE MOUNT GLASS PASSIVATED SILICON RECTIFIERS

#### FEATURES

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

#### MECHANICAL DATA

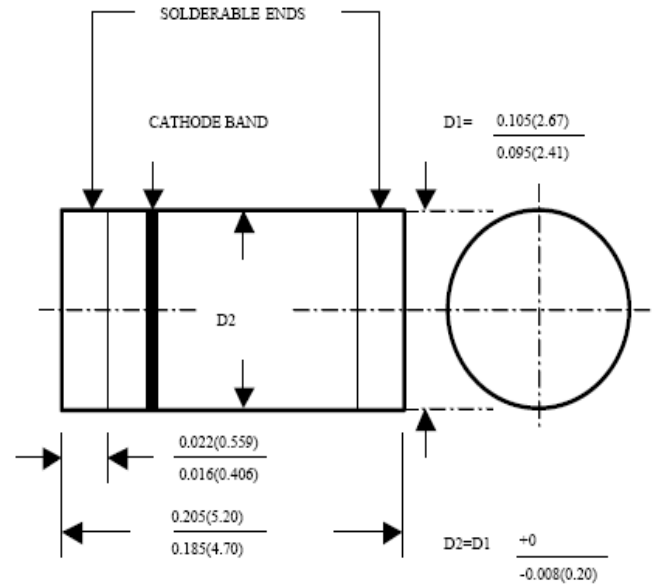
Case: Molded plastic use UL94V-0 recognized flame retardant epoxy.

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

Polarity: Color band on body denotes cathode.  
Mounting position: Any

Weight: 0.036 gram

#### DO-213AB / MELF



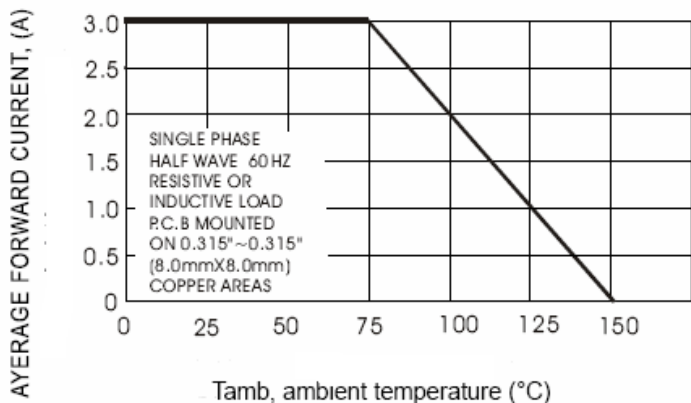
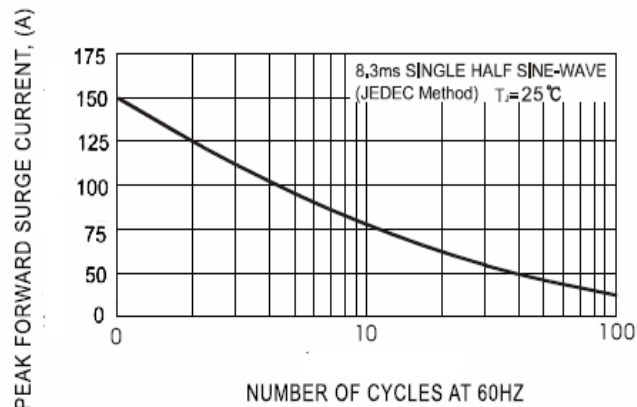
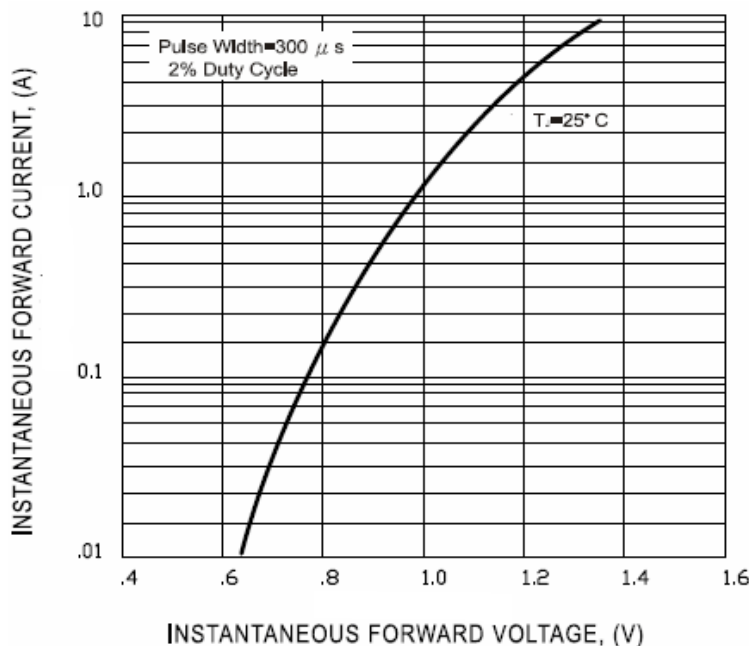
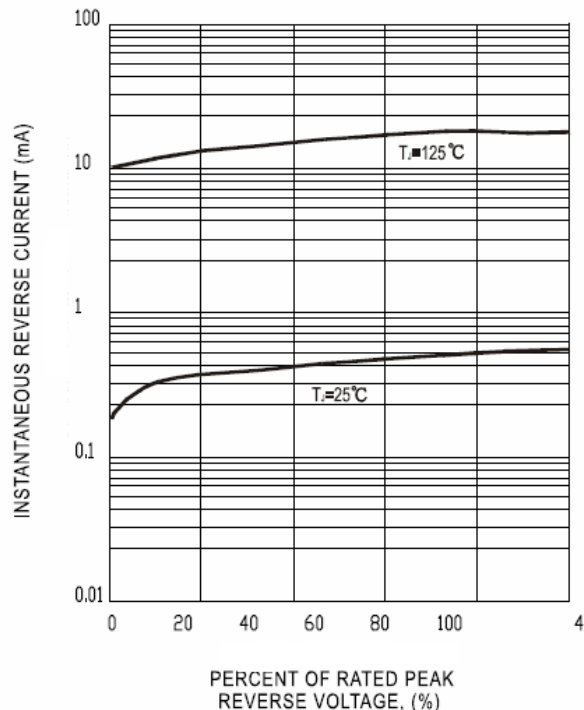
Dimension in inches (millimeters)

#### 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 5400	SM 5401	SM 5402	SM 5403	SM 5404	SM 5405	SM 5406	SM 5407	SM 5408	UNITS
Maximum Current Peak Reverse Voltage	VRRM	50	100	200	300	400	500	600	800	1000	Volts
Maximum RMS Voltage	VRMS	35	70	140	210	280	350	420	560	700	Volts
Maximum DC Blocking Voltage	VDC	50	100	200	300	400	500	600	800	1000	Volts
Maximum Average Forward Rectified Current $T_f=55^\circ\text{C}$	I(AV)	3.0									Amps
Peak Forward Surge Current Single Sine-wave on Rated Load (JEDEC Method)	IFSM	150									Amps
Maximum Instantaneous Forward Voltage Drop at 3.0A DC	VF	1.1									Volts
Maximum DC Reverse Current $T_A=25^\circ\text{C}$ at Rated DC Blocking Voltage $T_A=125^\circ\text{C}$	IR	5.0 100.0									$\mu\text{A}$
Typical Thermal Resistance	R $\theta$ JA R $\theta$ JL	40 10									$^\circ\text{C/W}$
Typical Junction Capacitance VR= 4.0V, f = 1.0MHZ	CJ	60									pF
Operating Junction And Storage Temperature Range	TJ TSTG	-55 to +150									$^\circ\text{C}$

**RATING AND CHARACTERISTIC CURVES SM5400 THRU SM5408**
**FIG. 1 – DERATING CURVE FOR OUTPUT RECTIFIER CURRENT**

**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**
