

0. 008 (0. 203) MAX



#### SURFACE MOUNT GALSS PASSIVATED JUNCTION RECTIFIER

Reverse Voltage - 50 to 1000 Volts Forward Current - 1.5Amperes

#### **FEATURES**

- . For surface mounted applications
- . Glass passivated junction
- . Low profile package
- . Built-in strain relief, ideal for automated placement
- Plastic package has Underwrites Laboratory Flammability
   Classification 94V-0
- . High temperature soldering guaranteed: 250°C/10 seconds, at terminals



. Case: JEDEC SMA(DO-214AA) molded plastic

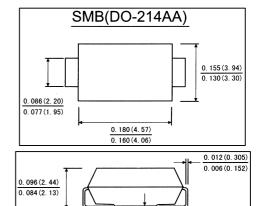
. Terminals: Plated axial leads solderable per MIL-STD-750,method 2026

. Polarity: Color band denotes cathode end

load. For capacitive load, derate current by 20%)

. Mounting Position: Any

. Weight: 0.003 ounce, 0.093 gram



Dimensions in inches and (millimeters)

0. 220 (5. 59)

0.030(0.76)

### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(Ratings at  $25^{\circ}$ C ambient temperature unless otherwise specified, Single phase, half wave 60Hz, resistive or inductive)

	Symbols	S2A	S2B	S2D	S2G	S2J	S2K	S2M	Units
Maximum Recurrent 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	100	Volts
Maximum average forward rectified current at TL=100 $^{\circ}\!\mathbb{C}$	I(AV)	1.5							Amp
Peak forward surge current (8.3ms half sing wave superimposed on rated load (JEDEC method)TL=100°C	Іғѕм				50.0				Amps
Maximum instantaneous forward voltage at 1.0 A	VF				1.15				Volts
$ \begin{array}{ll} \mbox{Maximum reverse recovery time(Note 1)} & \mbox{$T_A$=$25°C} \\ \mbox{current at rated DC Blocking Voltage} & \mbox{$T_A$=$125°C} \\ \end{array} $	I <sub>R</sub>	1.0 125							μА
Typical Thermal Resistance( Note 2)	R <sub><math> heta</math> JL</sub>	16.0 53.0						°C/W	
Typical reverse recovery time(Note 3)	Trr				2.0				μs
Typical junction capacitance(Note 1)					30.0				pF
Operating and storage temperature range	Т <sub>Ј</sub> Тѕтс	-55 to +150							$^{\circ}$

Notes: 1.Measured at 1MHz and applied reverse voltage of 4.0V DC.

2.Thermal resistance from junction to ambient and from junction to lead mounted on 0.2 X 0.2"(5.0 X 5.0mm) copper pad areas. 3.Reverse recovery test conditions:IF=0.5A,IR=1.0A,Irr=0.25A.





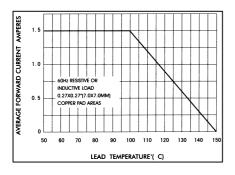
## SURFACE MOUNT GALSS PASSIVATED JUNCTION RECTIFIER

Reverse Voltage - 50 to 1000 Volts

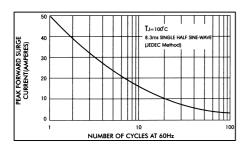
Forward Current - 1.5Amperes

### RATINGS AND CHARACTERISTIC CURVES S2A THRU S2M

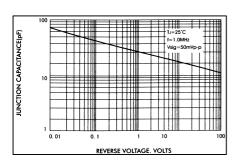
# FLG.1-FORWARD CURRENT DERATING CURVE



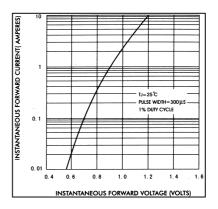
# FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT



### FIG.5-TYPICAL JUNCTION CAPACITANCE



# FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS



#### FIG.4-TYPICAL REVERSE CHARACTERISTICS

