S1A THRU S1M

1.0AMP.SURFACE MOUNT RECTIFIERS

Voltage Range
50 to 1000 Volts
Current
1.0Amperes

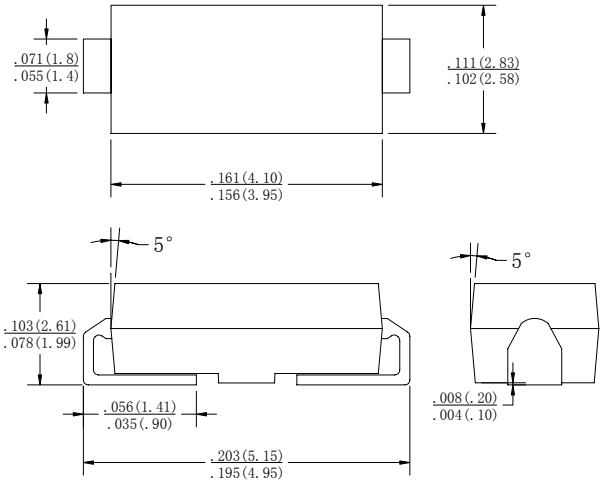
Features

- For surface mounted application
- Metal to silicon rectifier,majority carrier conduction
- Low forward voltage drop
- Easy pick and place
- High surge current capability
- Plastic materal used carriers Underwriters Laboratory Classification 94-O
- Epitaxial construction
- High temperature soldering: 260℃/10 seconds at terminals

Mechanical Data

- Case: molded plastic
- Terminals:Solder plated
- Polarity:Indicated by cathode band
- Packaging:12mm tape EIA STD RS-481
- Weight:0.064gram

SMA-W



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified.
Single phase, half wave,60Hz,resistive or inductive load.
For capacitive load,derate current by 20%

Type Number		S 1A	S1B	S 1D	S1G	S 1J	S1K	S 1M	UNITS
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current @T_L=110°C	IF(AV)	1.0							A
Peak Forward Surge Current,8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	30							A
Maximum Instantaneous Forward Voltage (Note@1.0 A	V_F	1.1							V
Maximum DC Reverse Crrent @ TA=25°C At Rated DC Blocking Voltage @ TA=125°C	I_R	5.0 50							uA
Typical Thermal Resistance (Note)	$R\theta_{JL}$ $R\theta_{JA}$	27 75					30 85		°C /W
Operating J unction Temperature Range	T_J	-55 to+150							°C
Storage Temperature Ranage	T_{STG}	-55 to+150							°C

NOTE: Measured on P.C. Board with 0.2 x 0.2" (5.0 x 5.0mm) Copper Pad Areas.

RATING AND CHARACTERISTIC CURVES
S1A THRU S1M

FIG.1-MAXIMUM NONO-REPETITIVE FORWARD SURGE CURRENT PER BRIDGE ELELMENT

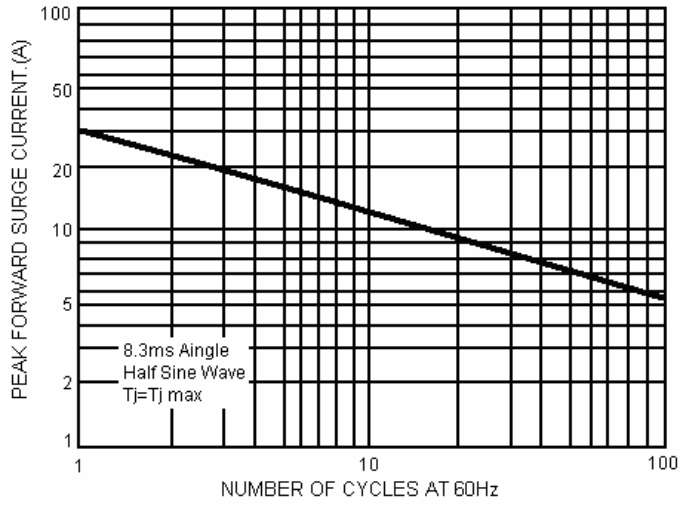


FIG.2-MAXIMUM FORWARD CURRENT DERATING CURVE

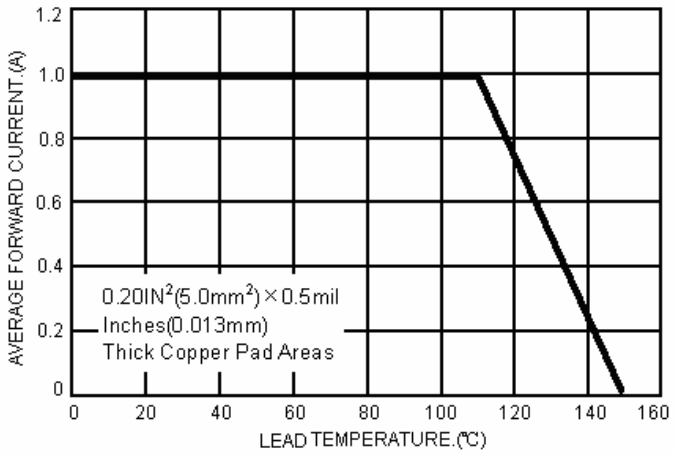


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER BRIDGE ELEMENT

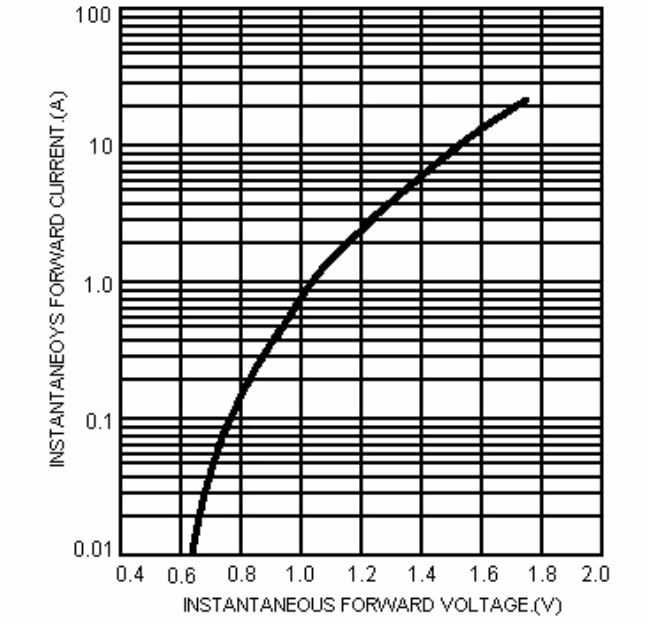


FIG.4-TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT