

S1A THRU S1M

1.0AMP.SURFACE MOUNT RECTIFIERS

Voltage Range 50 to 1000

Volts Current 1.0 Amperes

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 mater used carriers Underwriters Laboratory Classification 94-O
- ◆ Epitaxial construction
- ◆ High temperature soldering: 260°C /10 seconds at terminals

MECHANICAL DATA

Cases: molded plastic

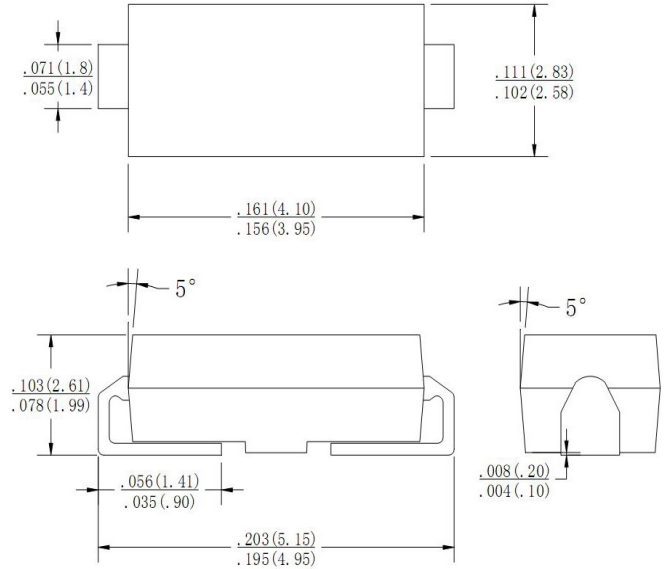
Terminals: Solder plated

Polarity: Indicated by cathode band

Packaging: :12mm tape EIA STD RS-481

Weight: 0.064 gram

SMA



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings 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		S1A	S1B	S1D	S1G	S1J	S1K	S1M	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	I _{F(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 Current @ TA=25°C	I _R	5.0							uA
At Rated DC Blocking Voltage @ TA=125°C		50							
Typical Thermal Resistance (Note)	R _{θ JL}	27					30		°C/W
	R _{θ JA}	75					85		
Operating Junction Temperature Range	T _J	-55 to +150							°C
Storage Temperature Range	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.

S1A THRU S1M

RATING AND CHARACTERISTIC CURVES S1A THRU S1M

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

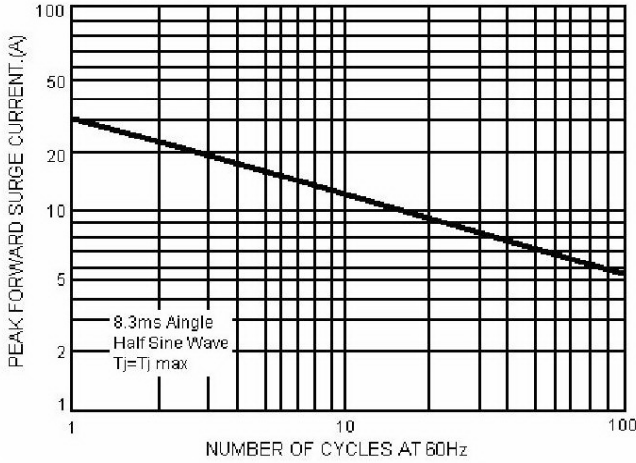


FIG.2-MAXIMUM FORWARD CURRENT DERATING CURVE

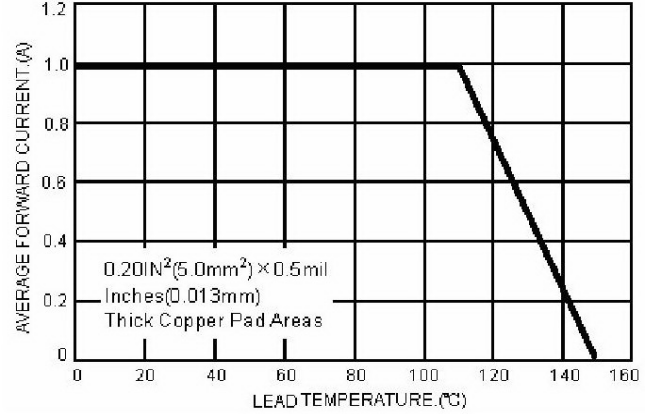


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER BRIDGE ELEMENT

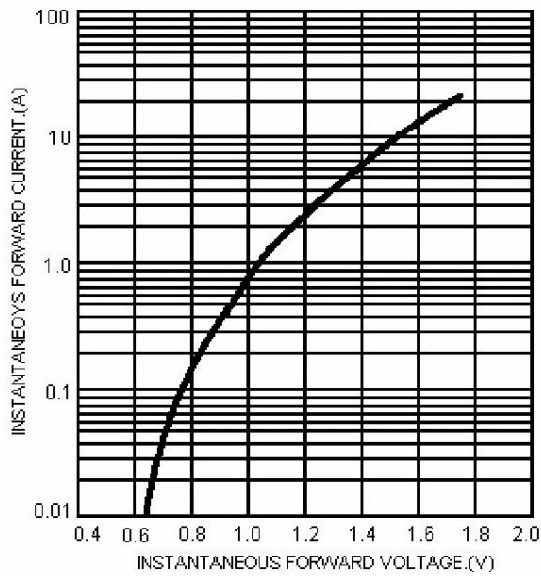
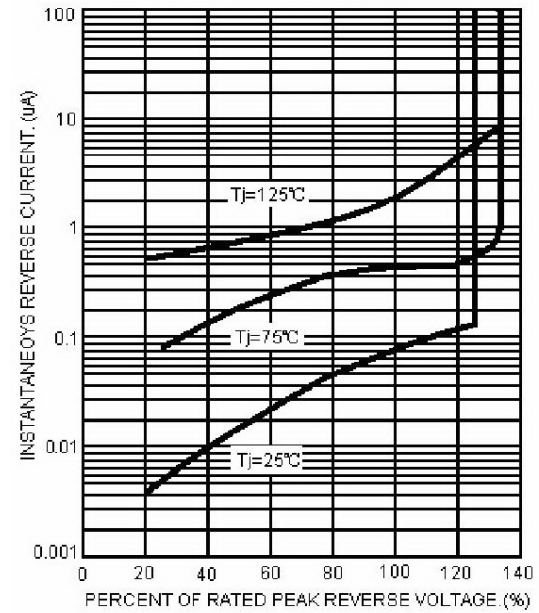


FIG.4-TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT



Note: Specifications are subject to change without notice.