SEMICONDUCTOR TECHNICAL DATA

S1A ~ **S1M**

REVERSE VOLTGE 50V~1000V

FORWARD CURRENT 1.0AMP Surface Mount Rectifiers

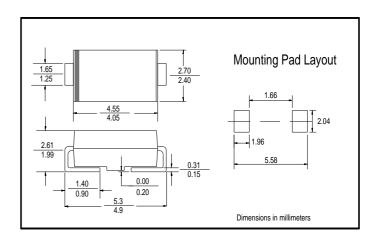
FEATURES

- * 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 Underwr Laboratory Classification 94V-0
- * Epitaxial construction
- * High temperature soldering: 260" /10 seconds at terminals
- * Glass Passivated Chip Juntion

MECHANICAL DATA

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

DO-214AC (SMA)



Maximum Ratings And Electrical Characteristics

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

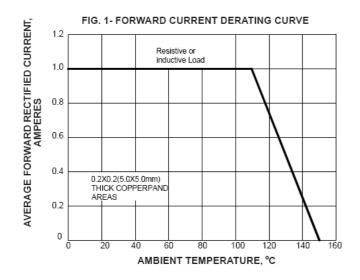
Type Number		S1A	S1B	S1D	S1G	S 1J	S1K	S1M	UNITS
Maximum Repetitive Peak Reverse Voltage	VRRM	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	VRMS	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	VDC	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current @T _L =110 ℃	IF(AV)	1.0							Α
Peak Forward Surge Current,8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	IFSM	30							А
Maximum Instantaneous Forward Voltage (Note@1.0 A	VF	1.1							V
Maximum DC Reverse Crrent @ TA=25°C At Rated DC Blocking Voltage @ TA=125°C	l _R	5.0 50							uA
Typical Thermal Resistance (Note)	R⊖jl R⊖ja	25 5 5							°C/W
Operating J unction Temperature Range	Τυ	- 55to+150							°C
Storage Temperature Ranage	Тѕтс	- 55to+150							$^{\circ}$

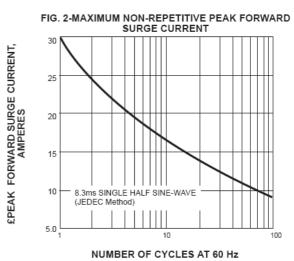
NOTE: Measured on P.C. Board with 0.2 x 0.2" (5.0 x 5.0mm) Copper Pad Areas.



Ratings and Characteristic Curves

(Ta = 25°C unless otherwise noted)





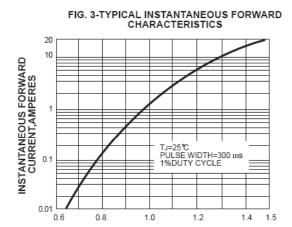
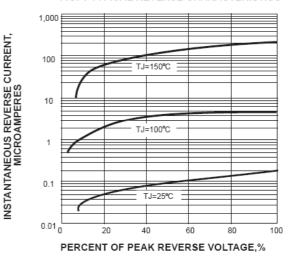


FIG. 4-TYPICAL REVERSE CHARACTERISTICS



INSTANTANEOUS FORWARD VOLEAGE, VOLTS

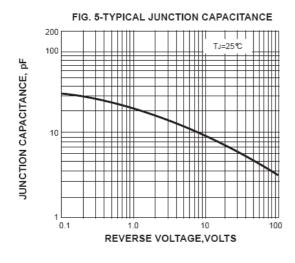
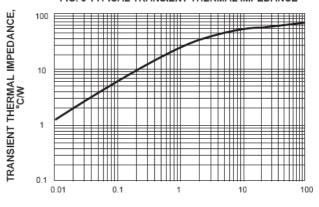


FIG. 6-TYPICAL TRANSIENT THERMAL IMPEDANCE



t,PULSE DURATION,sec.