

S1A thru S1M

SURFACE MOUNT **GLASS PASSIVATED RECTIFIER**

REVERSE VOLTAGE – 50 to 1000 Volts FORWARD CURRENT – 1.0 Ampere

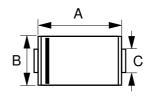
FEATURES

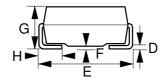
- · Glass passivated chip
- · For surface mounted applications
- Low reverse leakage current
- · Low forward voltage drop
- High current capability

MECHANICAL DATA

- · Case: Molded plastic
- · Case Material: "Green" molding compound, UL flammability classification 94V-0, (No Br. Sb. Cl.), "Halogen-free"
- Suffix "Q" with Part No. means AEC-Q101 Qualified
- Polarity: Indicated by cathode band
- Weight: 0.07 grams (Approximate)

SMA





SMA						
DIM.	MIN.	MAX				
Α	4.06	4.57				
В	2.29	2.92				
С	1.27	1.63				
D	0.15	0.31				
Е	4.83	5.59				
F	0.05	0.20				
G	1.96	2.40				
Н	0.76	1.52				
All dimension in millimeter						

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

ABSOLUTE RATINGS

PARAMETER	SYMBOL	S1A	S1B	S1D	S1G	S1J	S1K	S1M	UNIT
Maximum repetitive peak reverse voltage		50	100	200	400	600	800	1000	V
Maximum DC blocking voltage		50	100	200	400	600	800	1000	٧
Average rectified output current @ T _L =100°C @ T _C =100°C		1.0							Α
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load. (JEDEC METHOD)	I _{FSM}	30							Α
Operation and storage temperature range		-55 to +150							°C

STATIC ELECTRICAL CHARACTERISTICS

PARAMETER	TEST CONDITION	SYMBOL	MAX	UNIT
Forward voltage	I _F =1.0A	V_{F}	1.1	V
Reverse leakage current	V_R at rated $T_J=25^{\circ}C$ $T_J=125^{\circ}C$	I _R	5.0 100	uA
Typical junction capacitance (Note 1)		CJ	10	pF

THERMAL CHARACTERISTICS

PARAMETER	SYMBOL	TYP.	UNIT
Typical thermal resistance (Note 2)	RthJ∟ RthJ _C	30 30	°C/W

DYNAMIC ELECTRICAL CHARACTERISTICS

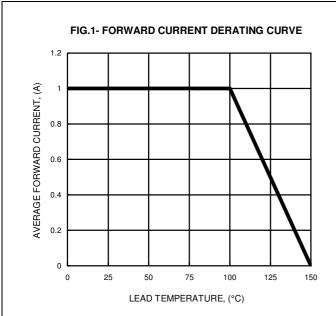
PARAMETER	TEST CONDITION	SYMBOL	TYP.	UNIT
Reverse recovery time	I _F = 0.5A, I _{RR} = 0.25A, I _R =1.0A	T_{RR}	1300	ns
Note:	REV. 14, Apr2017, KS	DA01		

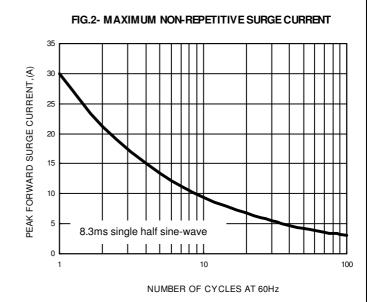
(1) Measured at 1.0MHz and applied reverse voltage of 4.0V DC.

(2) Thermal resistance junction to ambient, case and lead.

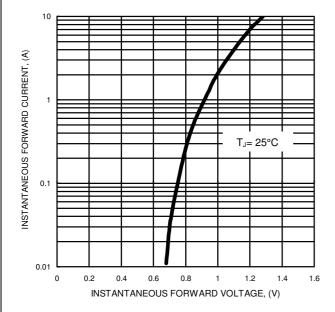
RATING AND CHARACTERISTIC CURVES S1A thru S1M



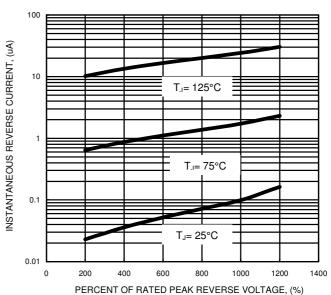














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