



FUKUCOM COMPANY LTD.

福 靈 有 限 公 司

FLAT P, 3/F., EVEREST INDUSTRIAL CENTRE, 396 KWUN TONG ROAD,
KWUN TONG, KOWLOON, HONG KONG.

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SURFACE MOUNT GLASS PASSIVATED RECTIFIER

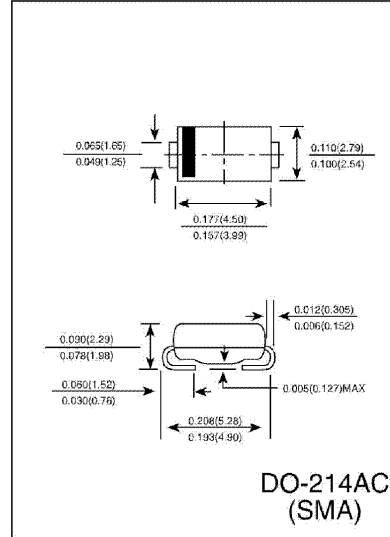
S1A THRU S1M

FEATURES

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

MECHANICAL DATA

- Case: JEDEC DO-214AC molded plastic over glass passivated chip
- Terminals: Solder plated, solderable per MIL - STD - 750, Method 2026
- Polarity: Color band denotes cathode end
- Weight: 0.002 ounce, 0.064 gram



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

- Ratings at 25°C ambient temperature unless otherwise specified

Maximum Ratings & Thermal Characteristics

Parameter	Symbol	S1A	S1B	S1D	S1G	S1J	S1K	S1M	Unit
Device marking code		SA	SB	SD	SG	SJ	SK	SM	
Maximum recurrent 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 (see fig.1)	IF(AV)	1.0							A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method) TL=110°C	IFSM	40					30		A
Typical thermal resistance (NOTE 1)	REJA	75					85		°C/W
	REJL	27					30		
Operating junction and storage temperature range	TJ, TSTG	-55 to +150							°C

Electrical Characteristics Ratings at 25°C ambient temperature unless otherwise specified.

Parameter	Symbol	S1A	S1B	S1D	S1G	S1J	S1K	S1M	Unit
Maximum instantaneous forward voltage at 1.0A	VF	1.10							V
Maximum DC reverse current at Rated DC blocking voltage TA=25°C TA=125°C	IR	1.0					5.0		µA
		50							
Typical reverse recovery time at IF = 0.5A, IR = 1.0A, IRR = 0.25A	trr	1.8							µs
Typical junction capacitance at 4.0V, 1MHz	CJ	12							pF

Note: (1) Thermal resistance from junction to ambient and from junction to lead mounted on P.C.B. with 0.2 x 0.2" (5.0 x 5.0mm) copper pad areas



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RATINGS AND CHARACTERISTIC CURVES S1A THRU S1M

Fig. 1 – Forward Current Derating Curve

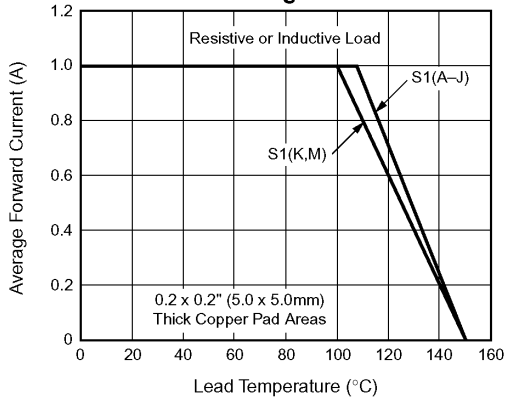


Fig. 2 – Maximum Non-Repetitive Peak Forward Surge Current

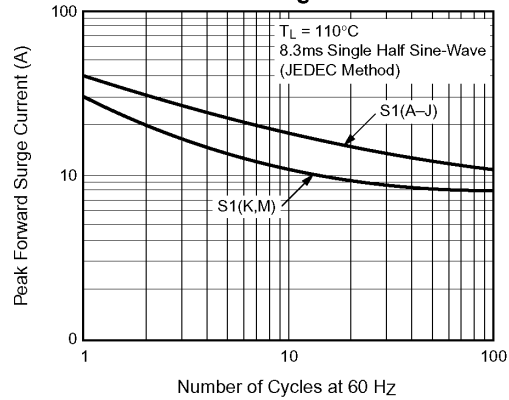


Fig. 3 – Typical Instantaneous Forward Characteristics

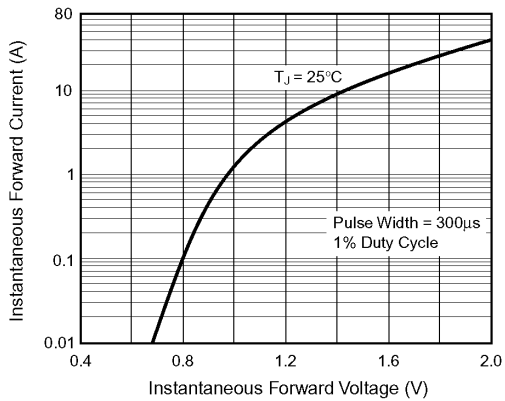


Fig. 4 – Typical Reverse Leakage Characteristics

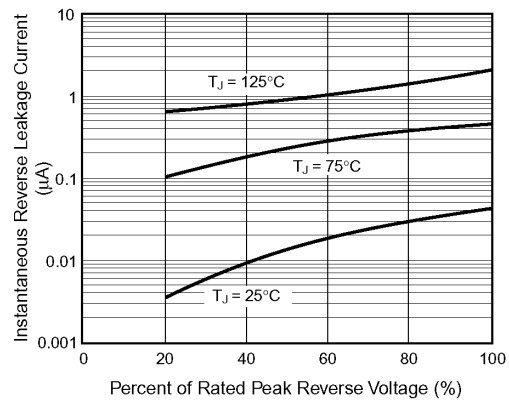


Fig. 5 – Typical Junction Capacitance

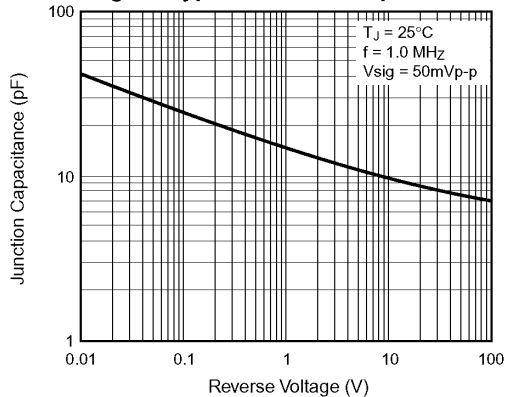


Fig. 6 – Transient Thermal Impedance

