

S3A THRU S3M

SURFACE MOUNT GLASS PASSIVATED JUNCTION RECTIFIER

FEATURES:

- For surface mounted applications
- Low profile package
- Built-in stain relief
- Easy pick and place
- Flammability Classification
- High temperature soldering: 250°C /10 second at terminals

MECHANICAL DATA

Case: JEDEC DO-214AB molded plastic Terminals: Solder plated solderable per MIL-STD-750, Method 2026 Polarity: Indicated by cathode band Standard Packaging: 16mm tape (EIA STD EIA-481) Welght:0.007 ounces,0.21 grams

SMC/DO-214AB

Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

Characteristic	Symbol	S3A	S3B	S3D	S3G	S3J	S3K	S3M	Units
Maximum recurrent peak reverse voltage	VRRM	50	100	200	400	600	800	1000	Volts
Maximum RMS voltage	VRMS	35	70	140	280	420	560	700	Volts
Maximum DC voltage	VDC	50	100	200	400	600	800	1000	Volts
Maximum average forward rectified current at T $_{\rm L}$ =75 $^{\circ}{\rm C}$	l(AV)	3.0							Amps
Peak forward surge current, 8.3ms single half sine-wave auperimposed on rated load(JEDEC Methed)	I FSM	100							Amps
Maximum Instantaneous forward voltage drop per leg at 3.0A	v _F	1.2							Volts
Maximum DC reverse current $Ta=25^{\circ}C$ at rated DC blocking voltage $Ta=125^{\circ}C$	۱ _R	5.0 250.0							μA
Typical junction Capacitance (NOTE 2)	с _ј	60.0							PF
Maximum reverse recovery time (NOTE 1)	TRR	2.5							μs
Typical thermal resistance (NOTE 3)	Rth JL Rth JA	13 47						° C/W	
Operating Junction and storage temperature range	Tj, Tstg	-65 to+150							°C

NOTE :

1.Reverse recovery test connditions: IF =0.5A, IR = 1.0A, IRR =0.25A

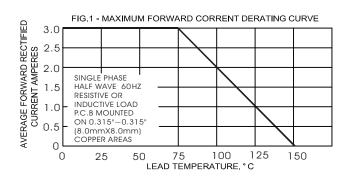
2. Measured at 1 MHZ and applied reverse voltage of 4.0 volTS

3. Thermal resistance junction to case per leg mounted on heatsink

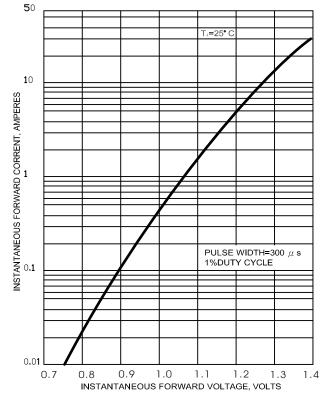


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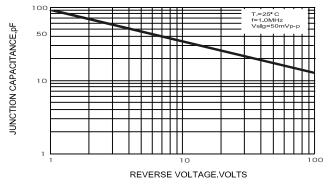
RATINGS AND CHARACTERISTIC CURVES











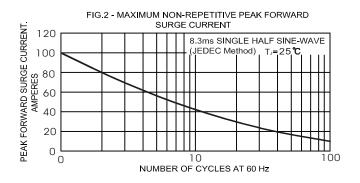
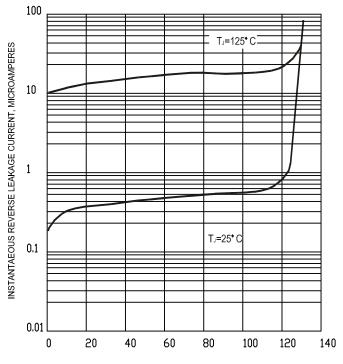
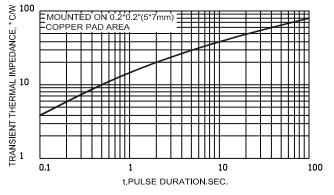


FIG.4-TYPICAL REVERSE LEAKAGE CHARACTERISTICS



PERCENT OF RATED PEAK REVERSE VOLTAGE. %







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