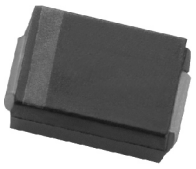
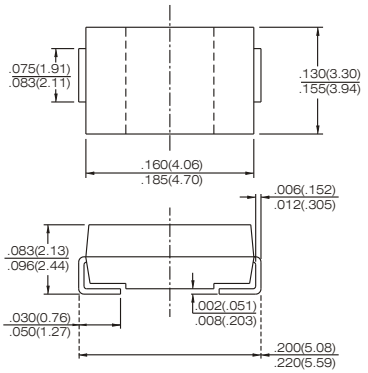
S1AB thru S1MB

SURFACE MOUNT STANDARD RECOVERY RECTIFIER

VOLTAGE - 50 TO 1000 VOLTS CURRENT - 1.0 AMPERES



SMB/DO-214AA



Dimensions in inches and (millimeters)

FEATURES

- For surface mount applications
- Glass passivated junction
- Low profile package
- High current capability
- Easy pick and place
- High surge current capability
- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- High temperature soldering : 250°C/10 seconds at terminsls

MECHANICAL DATA

Case : JEDEC DO-214AA molded plastic
Terminals : Pure tin plated, lead free
Polarity : Indicated by cathode band
Package : 12mm tape EIA STD RS-481
Weight : 0.093gram

MAXIMUM RATIXGS 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%

	SYMBOL	S1AB	S1BB	S1DB	S1GB	S1JB	S1KB	S1MB	UNITS
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Rectified Current at T_L =110°C	$I_{(AV)}$	1.0							Amps
Peak Forward Surge Current 8.3mm Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	30							Amps
Maximum Instantaneous Forward Voltage at 1.0A	V_F	1.1							Volts
Maximum DC Reverse Current T_A=25°C at Rated DC Blocking Voltage T_A=125°C	I_R	5 50							μA
Typical Junction Capacitance (NOTE 1)	C_J	12							pF
Maximum Thermal Resistance (NOTE 2)	$R_{\theta JL}$	30							°C / W
Operating and Storage Temperature Range	T_J T_{STG}	-55 to +150							°C

NOTES :
1. Measured at 1.0 MHz and applied reverse voltage of 4.0 volts
2. Measured on P.C.B. Board with 0.27″ x0.27″ (7.0x7.0mm) copper pad areas

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RATINGS AND CHARACTERISTIC CURVES S1AB THRU S1MB

FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE

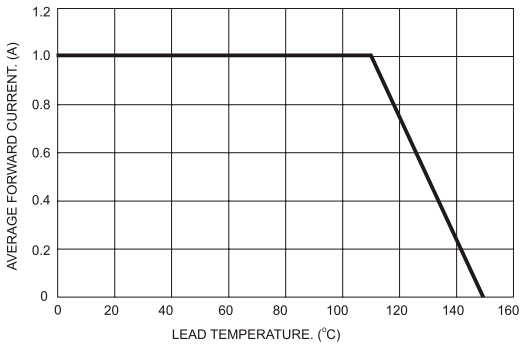

FIG.2- TYPICAL REVERSE CHARACTERISTICS

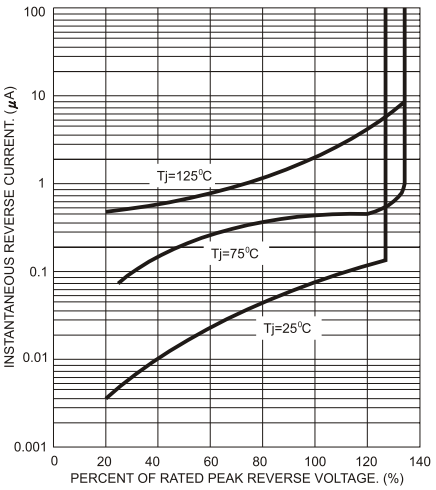

FIG.3- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

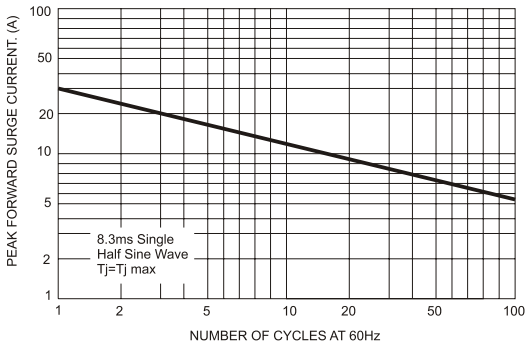

FIG.5- TYPICAL FORWARD CHARACTERISTICS

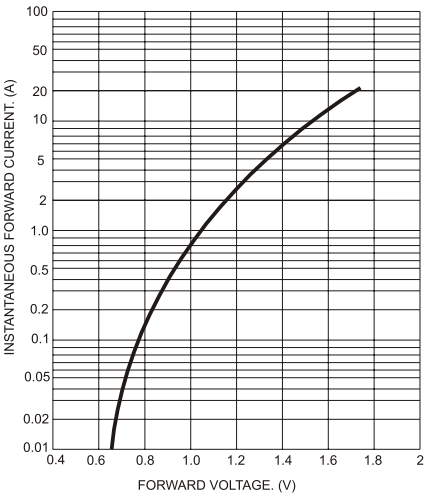

FIG.4- TYPICAL JUNCTION CAPACITANCE