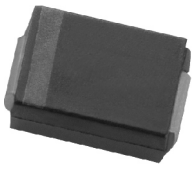
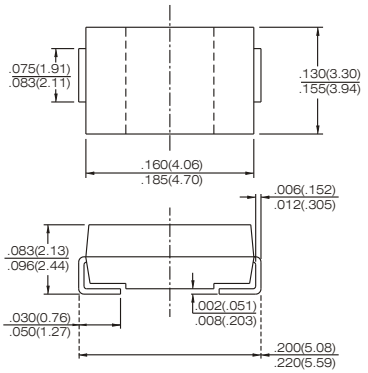
S1AB thru S1MB

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

SURFACE MOUNT STANDARD RECOVERY RECTIFIER

RATINGS AND CHARACTERISTIC CURVES S1AB THRU S1MB

FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE

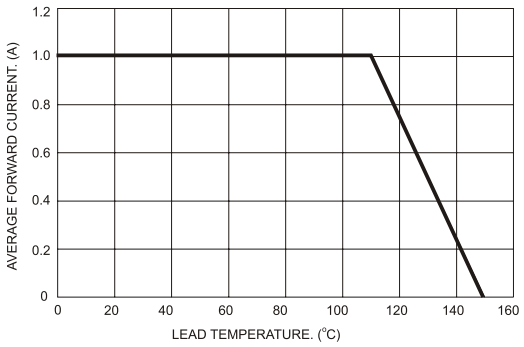


FIG.2- TYPICAL REVERSE CHARACTERISTICS

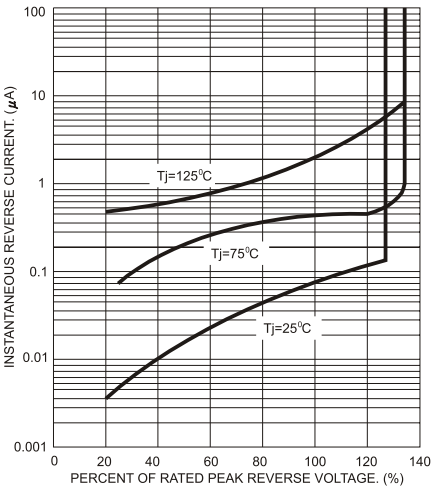


FIG.3- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

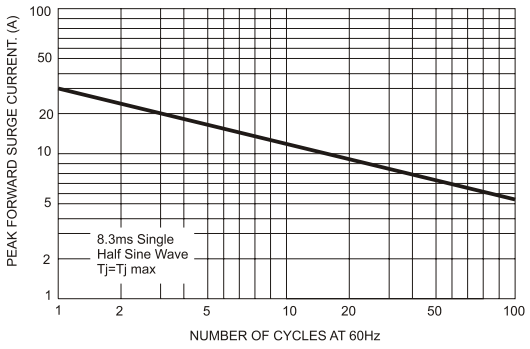


FIG.5- TYPICAL FORWARD CHARACTERISTICS

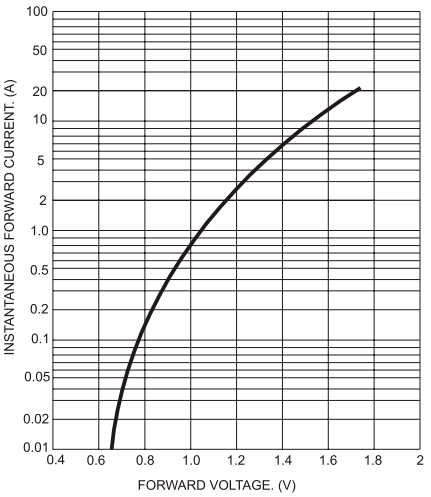


FIG.4- TYPICAL JUNCTION CAPACITANCE

