YEA SHIN TECHNOLOGY CO., LTD

S2A-A THRU S2M-A

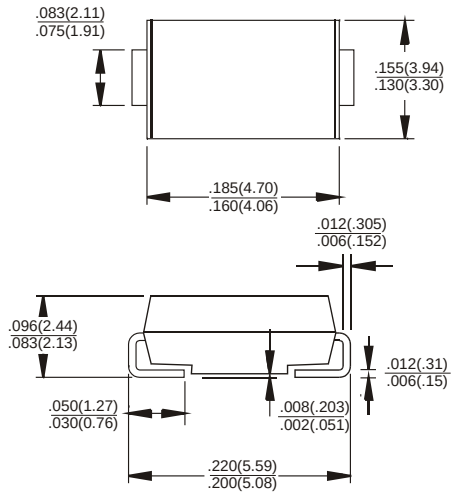
SURFACE MOUNT RECTIFIER

VOLTAGE - 50 to 1000 Volts CURRENT - 2.0 Amperes

FEATURES

- For surface mounted applications
- High temperature metallurgically bonded-no compression contacts as found in other diode-constructed rectifiers
- Glass passivated junction
- Built-in strain relief
- Easy pick and place
- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- High temperature soldering : 260°C / 10 seconds at terminals
- Pb free product at available : 99% Sn above meet RoHS environment substance directive request
- AEC-Q101 qualified

SMB/DO-214AA Unit:inch(mm)



MECHANICAL DATA

- Case: JEDEC DO-214AA molded plastic
- Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity: Indicated by cathode band
- Standard packaging: 12mm tape (EIA-481)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25℃ ambient temperature unless otherwise specified. Single phase, half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

PARAMETER	SYMBOL	S2A	S2B	S2D	S2G	S2J	S2K	S2M	UNIT
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current @TL=100℃	$I_{F(AV)}$	2							A
Peak Forward Surge Current, 8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	60							A
I^2t Rating for Fusing (t<8.3ms)	I^2t	14.945							A^2S
Maximum Instantaneous Forward Voltage at 2A	V_F	1.1							V
Maximum DC Reverse Current at T_A=25℃	I_R	5							uA
at Rated DC Blocking Voltage T_A=125℃		125							uA
Typical Junction Capacitance (Note 1)	C_J	30							pF
Typical Thermal Resistance (Note 2)	$R_{\theta JL}$	16							℃/W
Operating and Storage Temperature Range	T_J, T_{STG}	-55 to +150							℃

Notes: 1. Measured at 1 MHz and applied reverse voltage of 4.0 VDC.

2. Thermal Resistance from Junction to lead mounted on PCB with 0.3" x 0.3" (8.0mm x 8.0mm) copper pad areas.

DEVICE CHARACTERISTICS

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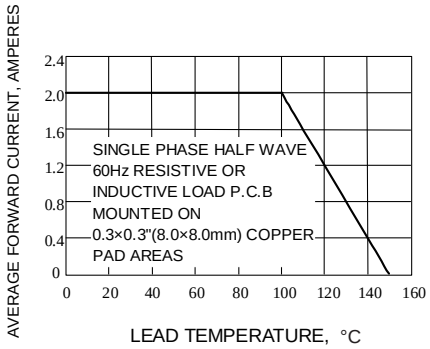

Fig. 1-FORWARD CURRENT DERATING CURVE

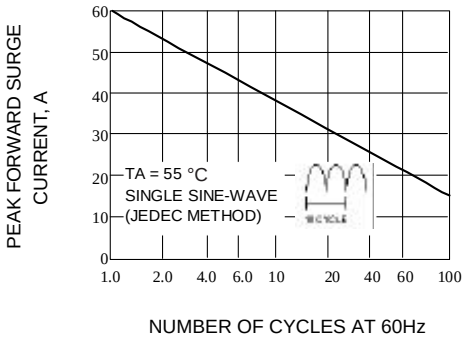

Fig. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

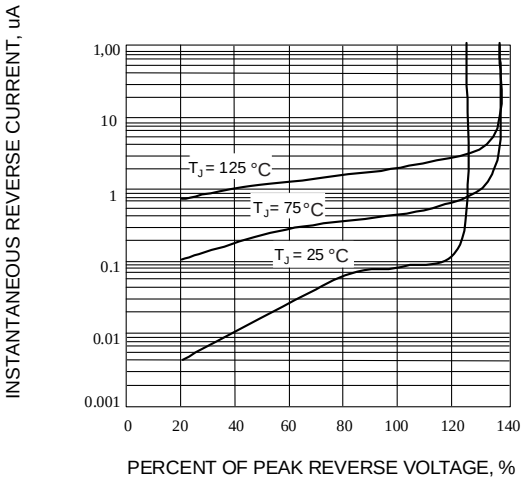

Fig. 3-TYPICAL REVERSE CHARACTERISTICS

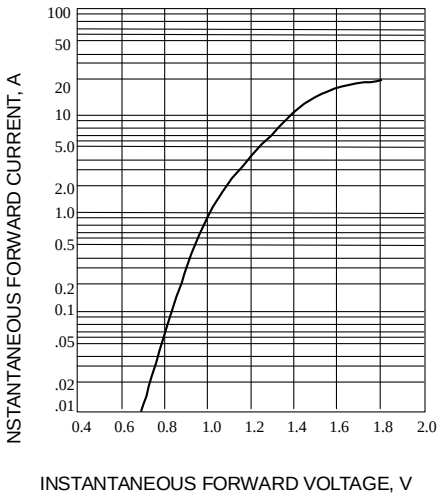

Fig. 4-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

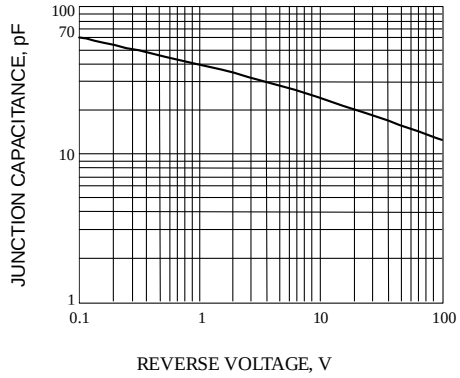

Fig. 5-TYPICAL JUNCTION CAPACITANCE