SS22B THRU SS220B

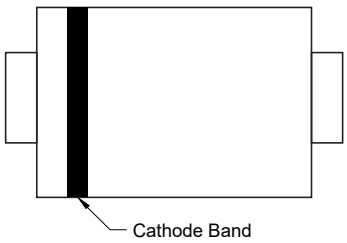
SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

Reverse Voltage - 20 to 200 Volts Forward Current - 2.0 Ampere

Features

- Metal silicon junction, majority carrier conduction
- For surface mounted applications
- Low power loss, high efficiency
- High forward surge current capability
- For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications

DO-214AA/SMB RoHS COMPLIANT



Equivalent circuit

Mechanical Data

Case : DO-214AA/SMB molded plastic body

Terminals :Solderable per MIL-STD-750,Method2026

Polarity : Cathode line denotes the cathode end

Position: Any

Approx. Weight : 0.095g / 0.003oz

Absolute 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 by 20 %

Parameter	SYMBOLS	SS22B	SS24B	SS26B	SS28B	SS210B	SS212B	SS215B	SS220B	UNITS
Marking Code		SS22	SS24	SS26	SS28	SS210	SS212	SS215	SS220	
Maximum repetitive peak reverse voltage	V_{RRM}	20	40	60	80	100	120	150	200	V
Maximum RMS voltage	V_{RMS}	14	28	42	56	70	84	105	140	V
Maximum DC blocking voltage	V_{DC}	20	40	60	80	100	120	150	200	V
Maximum average forward rectified current @Fig.1	$I_{F(AV)}$	2.0								A
Peak forward surge current 8.3ms single half sine-wave superimposed onrated load (JEDEC Method)	I_{FSM}	55				45				A
Maximum instantaneous forward voltage at 2.0A	V_F	0.55		0.70		0.85		0.95		V
Maximum DCreverse current at rated DCblocking voltage TA=25℃	I_R	0.5			0.3					mA
TA=125℃		5.0			3.0					
Typical junction capacitance (NOTE 1)	C_J	220			110					pF
Typical thermal resistance (NOTE 2)	$R_{\theta JA}$	60								℃/W
Operating junction temperature range	T_J	-55 to +125								℃
Storage temperature range	T_{STG}	-55 to +150								℃

Note:1.Measured at 1MHz and applied reverse voltage of 4.0V D.C.

2.PC.B.mounted with 0.2"X0.2"(5 X5 mm) copper pad areas.

Typical Characteristics

Fig.1 Forward Current Derating Curve

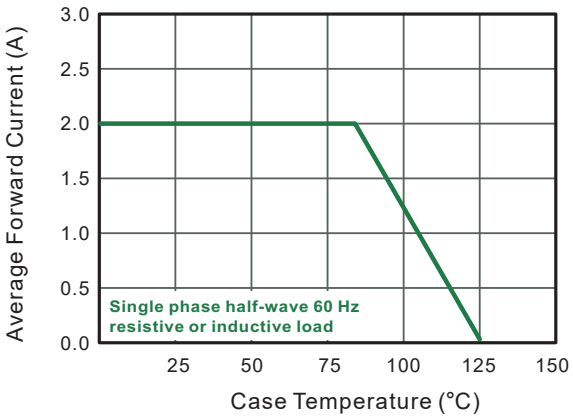


Fig.2 Typical Reverse Characteristics

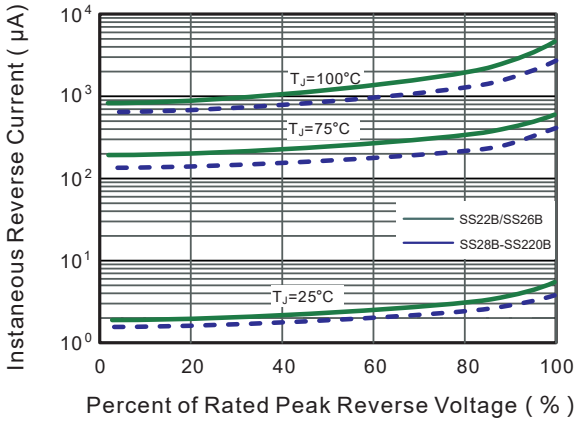


Fig.3 Typical Forward Characteristic

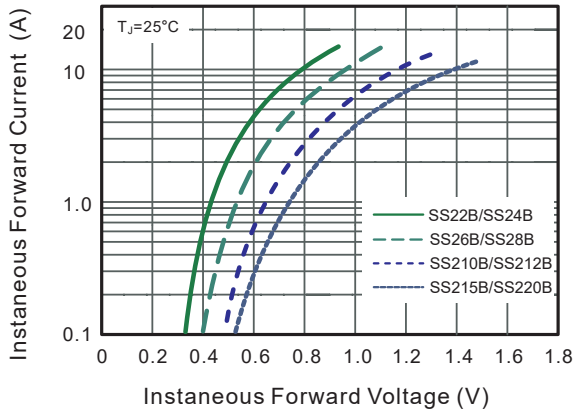


Fig.4 Typical Junction Capacitance

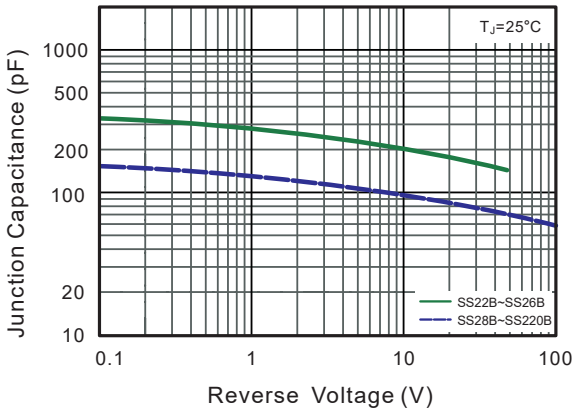


Fig.5 Maximum Non-Repetitive Peak Forward Surage Current

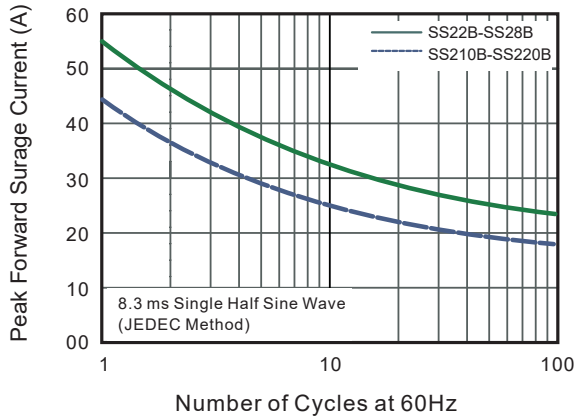
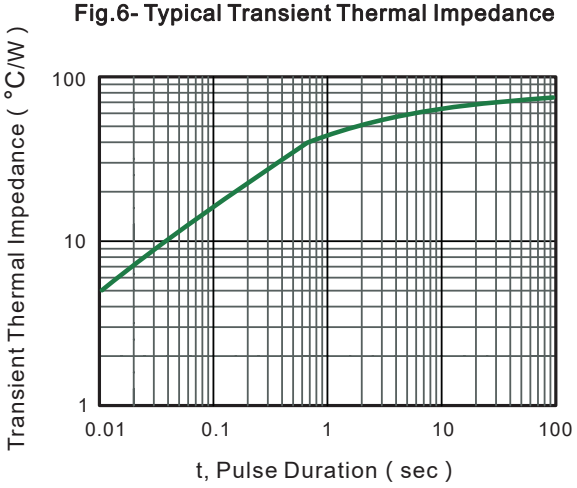
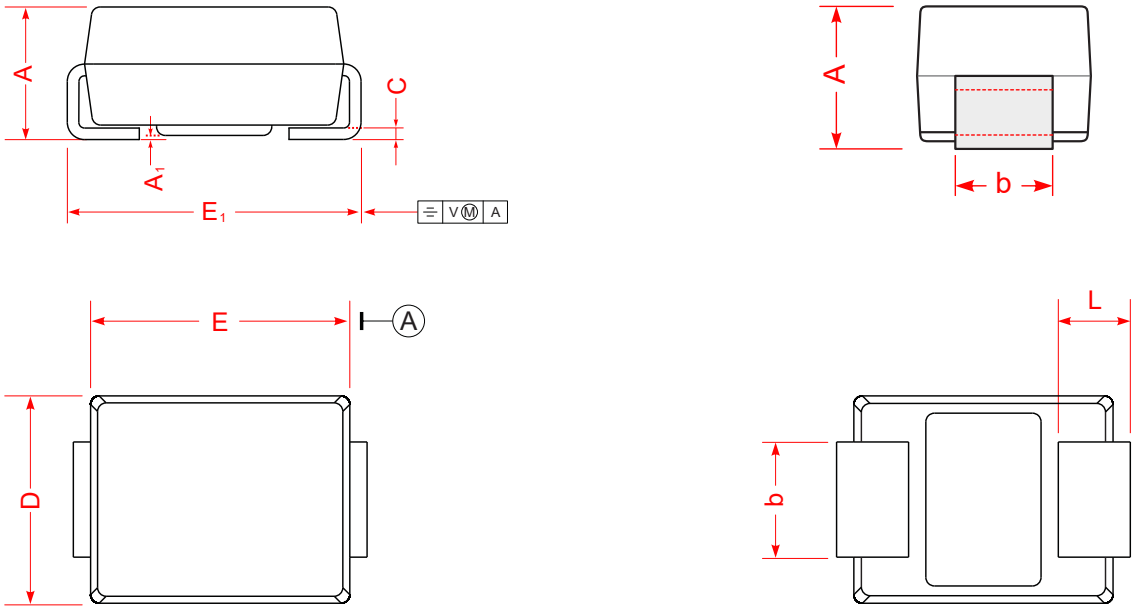


Fig.6- Typical Transient Thermal Impedance

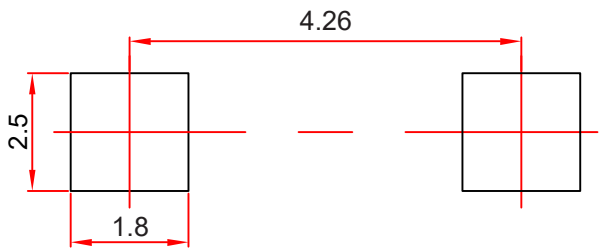


DO-214AA/SMB Package Outline Dimensions



Symbol	imensions In Millimeters		imensions In Inches	
	Min	Max	Min	Max
A	2.13	2.44	0.084	0.096
C	0.15	0.31	0.006	0.012
D	3.30	3.95	0.130	0.156
E	4.06	4.70	0.160	0.185
E_1	5.08	5.59	0.200	0.220
b	1.90	2.20	0.075	0.087
L	0.80	1.50	0.031	0.059
A_1	0.2 REF		0.008 REF	

DO-214AA/SMB Suggested Pad Layout



Note:
1. Controlling dimension:in/millimeters.
2. General tolerance: ±0.05mm.
3. The pad layout is for reference purposes only.