Surface Mount Schottky Barrier Rectifier

Reverse Voltage - 20 to 200 V

Forward Current - 8 A

Pinning

1.Cathode	2.Anode



DO-214AA/SMB

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
- Lead free in comply with EU RoHS 2011/65/EU directives

lead-free ROHS

MECHANICAL DATA

- Case: DO-214AA/SMB
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 0.095g / 0.003oz

Marking Code

SS82	SS82
SS84	SS84
SS86	SS86
SS88	SS88
SS810	SS810
SS812	SS812
SS815	SS815
SS820	SS820

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	SS82	SS84	SS86	SS88	SS810	SS812	SS815	SS820	Units
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	$I_{F(AV)}$	8.0								A
Peak Forward Surge Current, 8.3ms Single Half Sine-wave Superimposed On Rated Load (JEDEC method)	I_{FSM}	170								A
Maximum Instantaneous Forward Voltage at 8 A	V_F	0.55		0.70		0.85		0.90		V
Maximum Instantaneous Reverse Current T_A = 25°C at Rated DC Reverse Voltage T_A = 100°C	I_R	1.0 50		0.3 25						mA
Typical Junction Capacitance (1)	C_j	650		420						pF
Typical Thermal Resistance (2)	$R_{\theta JA}$	10								°C/W
Operating Junction Temperature Range	T_j	-55 ~ +150								°C
Storage Temperature Range	T_{stg}	-55 ~ +150								°C

(1) Measured at 1 MHz and applied reverse voltage of 4 V D.C
(2) P.C.B. mounted with 2.0" X 2.0" (5 X 5 cm) copper pad areas.

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Fig.1 Forward Current Derating Curve

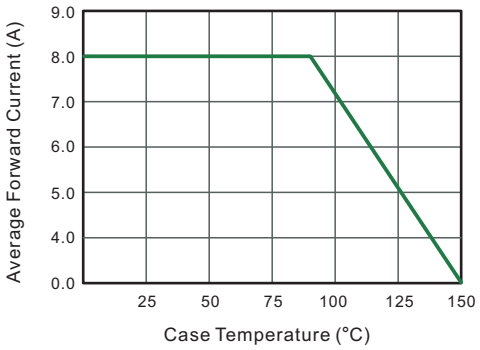


Fig.2 Typical Reverse Characteristics

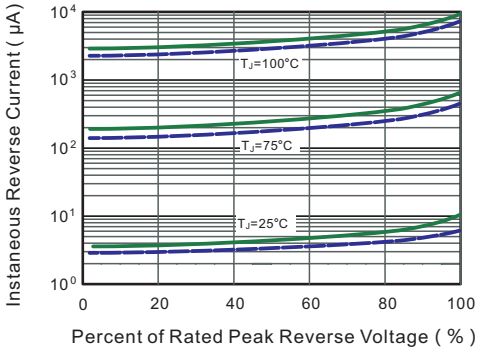


Fig.3 Typical Forward Characteristic

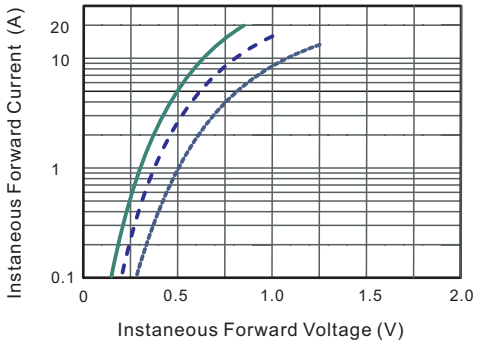


Fig.4 Typical Junction Capacitance

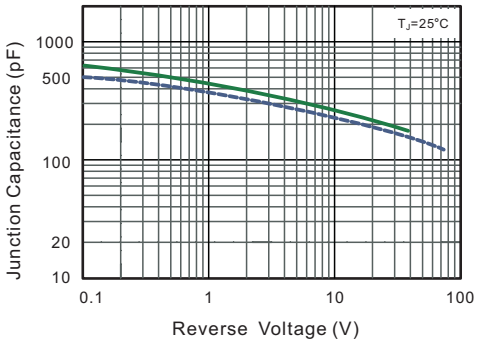


Fig.5 Maximum Non-Repetitive Peak Forward Surage Current

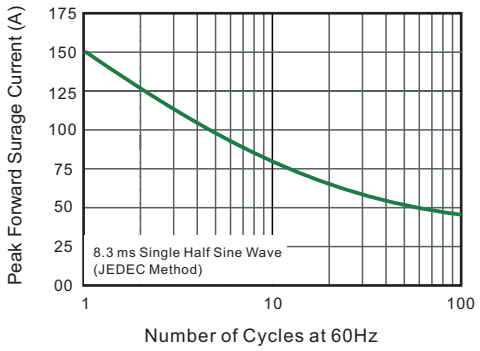
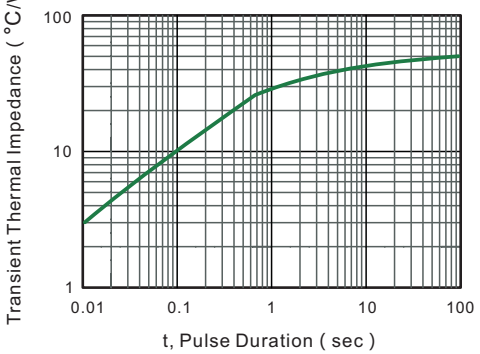


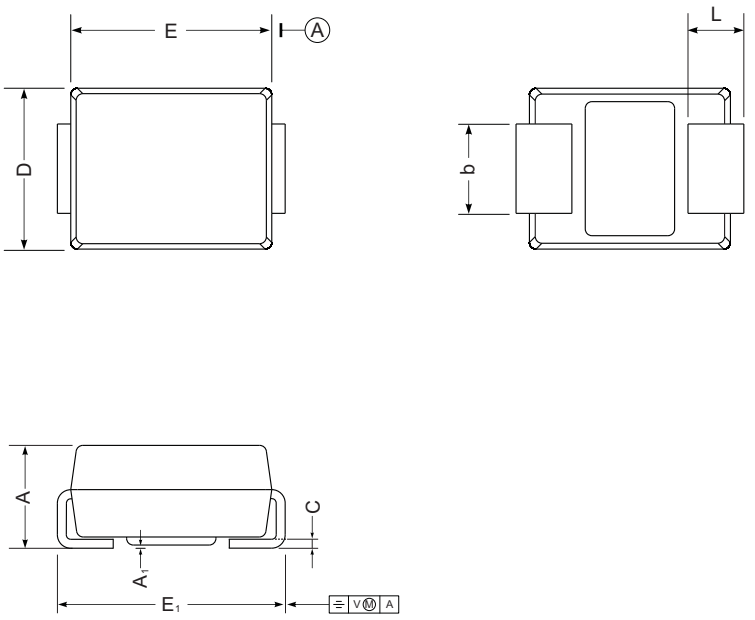
Fig.6- Typical Transient Thermal Impedance



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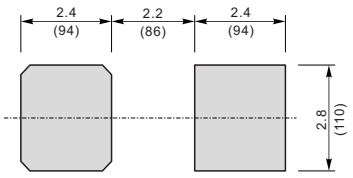
Package Outline DO-214AA SMB

Plastic surface mounted package; 2 leads



UNIT		A	E	D	E_1	A_1	L	C	b
mm	max	2.44	4.70	3.94	5.59	0.20	1.5	0.305	2.2
	min	2.13	4.06	3.3	5.08	0.05	0.8	0.152	1.9
mil	max	96	185	155	220	7.9	59	12	87
	min	84	160	130	200	2.0	32	6	75

The recommended mounting pad size



Unit : mm (mil)

Summary of Packing Options

Package	Packing Description	Packing Quantity	Industry Standard
DO-214AA SMB	Tape/Reel,13”reel	3000	EIA-481-1

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