

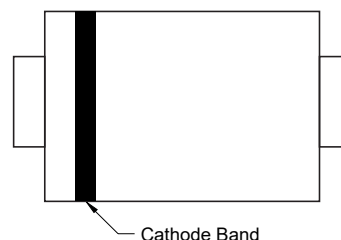
SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

Reverse Voltage - 20 to 200 Volts Forward Current - 3.0 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-214AB/SMC **RoHS**
COMPLIANT



Mechanical Data

Case : DO-214AB/SMC molded plastic body

Terminals :Solderable per MIL-STD-750,Method2026

Polarity : Cathode line denotes the cathode end

Position: Any

Approx. Weight : 0.22g / 0.0077oz

Equivalent circuit



Absolute Maximum Ratings 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 by 20 %

Parameter	SYMBOLS	SS32C	SS34C	SS36C	SS38C	SS310C	SS312C	SS315C	SS320C	UNITS
Marking Code		SS32	SS34	SS36	SS38	SS310	SS312	SS315	SS320	
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 at Tc=100 °C	I _{F(AV)}	3.0								A
Peak forward surge current 8.3ms single half sine-wave superimposed onrated load (JEDEC Method)	I _{FSM}	80								A
Maximum instantaneous forward voltage at 3.0A	V _F	0.55		0.70		0.85		0.95		V
Maximum DCreverse current at rated DCblocking voltage T _A =25°C T _A =125°C	I _R	0.5			0.3					mA
		5.0			3.0					
Typical junction capacitance (NOTE 1)	C _J	450			350					pF
Typical thermal resistance (NOTE 2)	R _{θJA}	50								°C/W
Operating junction temperature range	T _J	-55 to +150								°C
Storage temperature range	T _{STG}	-55 to +150								°C

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

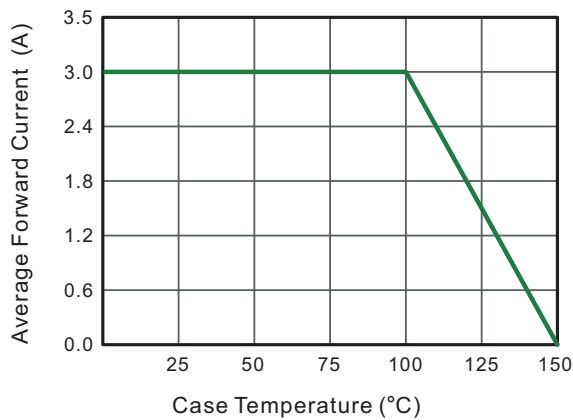


Fig.2 Typical Reverse Characteristics

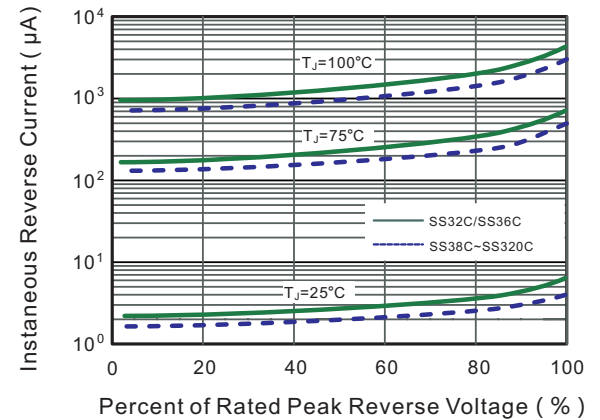


Fig.3 Typical Forward Characteristic

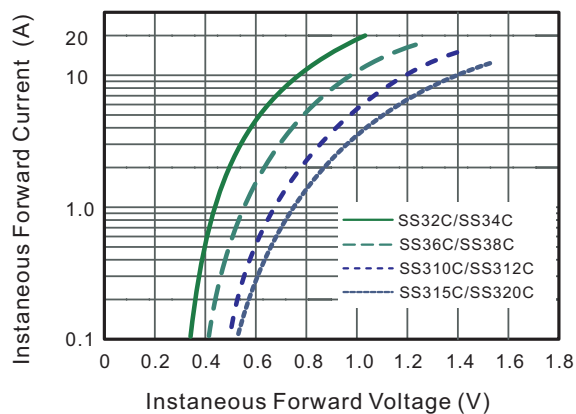


Fig.4 Typical Junction Capacitance

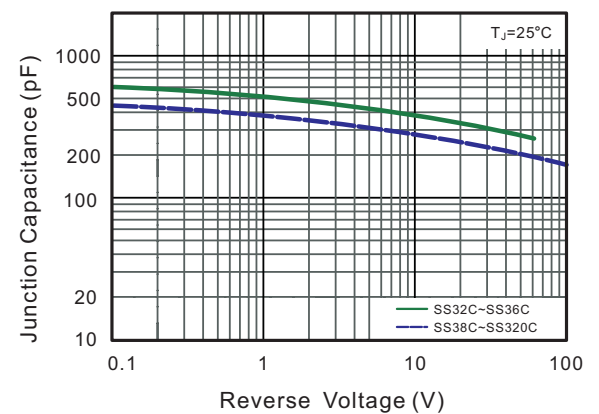


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

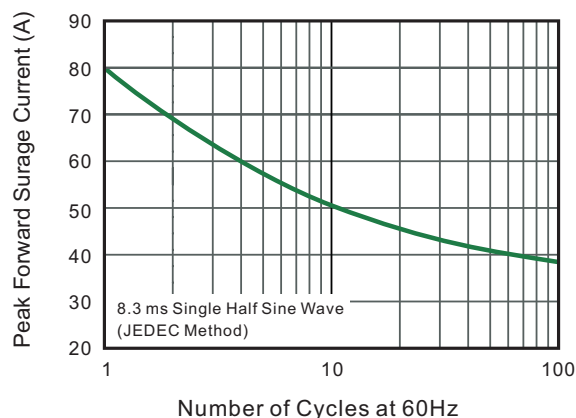
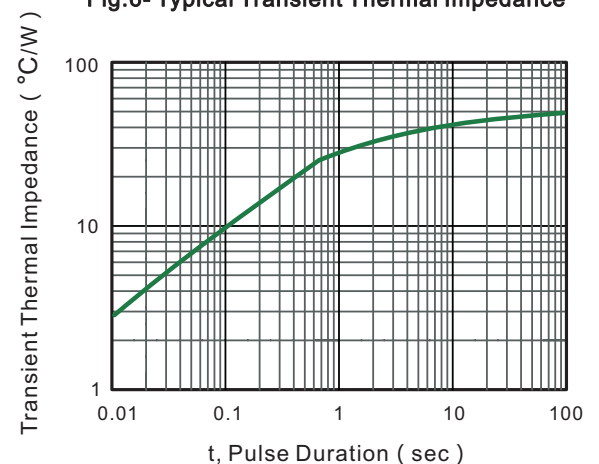
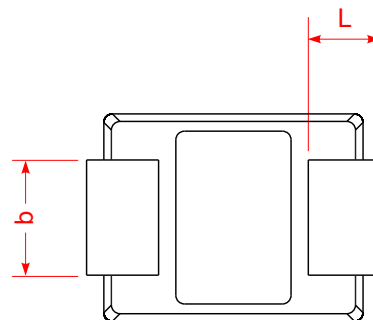
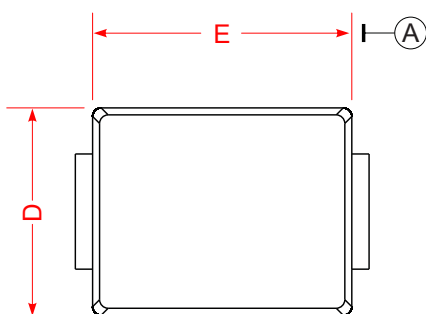
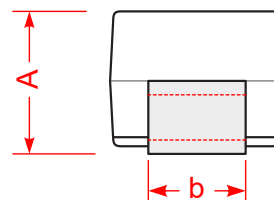
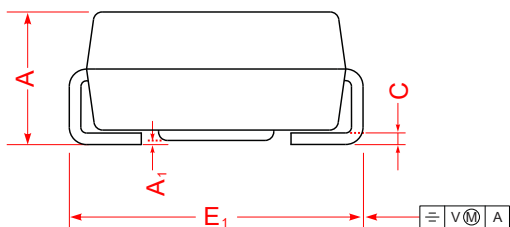


Fig.6- Typical Transient Thermal Impedance

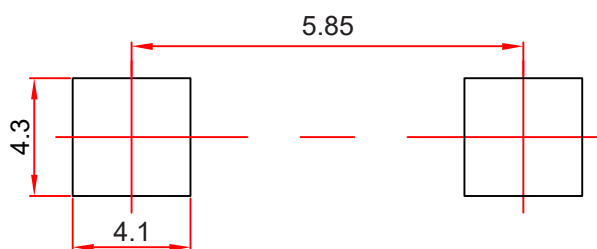


DO-214AB/SMC Package Outline Dimensions



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	2.00	2.62	0.078	0.103
C	0.15	0.31	0.006	0.012
D	5.60	6.20	0.220	0.244
E	6.50	7.00	0.256	0.276
E ₁	7.60	8.00	0.229	0.315
b	2.75	3.25	0.108	0.128
L	0.90	1.60	0.035	0.063
A ₁	0.2 REF		0.008 REF	

DO-214AB/SMC Suggested Pad Layout



Note:

1. Controlling dimension: in/millimeters.
2. General tolerance: $\pm 0.05\text{mm}$.
3. The pad layout is for reference purposes only.