

Reverse Voltage - 20 to 200 V

Forward Current - 3.0A

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

MECHANICAL DATA

- Case: SMA
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 60mg / 0.0021oz

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 %

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



Top View
Marking Code: SS32~SS320
Simplified outline SMA and symbol

Parameter	Symbols	SS32	SS34	SS34A	SS36	SS38	SS310	SS312	SS315	SS320	Units						
Maximum Repetitive Peak Reverse Voltage	V _{RRM}	20	40	45	60	80	100	120	150	200	V						
Maximum RMS voltage	V _{RMS}	14	28	31.5	42	56	70	84	105	140	V						
Maximum DC Blocking Voltage	V _{DC}	20	40	45	60	80	100	120	150	200	V						
Maximum Average Forward Rectified Current	I _{F(AV)}	3.0									A						
Peak Forward Surge Current, 8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I _{FSM}	80									A						
Max Instantaneous Forward Voltage at 3A	V _F	0.55	0.70			0.85	0.95			V							
Maximum DC Reverse Current T _a = 25°C at Rated DC Reverse Voltage T _a = 100°C	I _R	0.5 5			0.3 3			mA									
Typical Junction Capacitance ⁽¹⁾	C _j	450			400			pF									
Typical Thermal Resistance ⁽²⁾	R _{θJA}	70									°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.

Fig.1 Forward Current Derating Curve

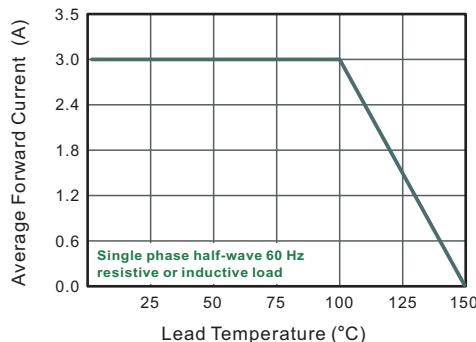


Fig.2 Typical Reverse Characteristics

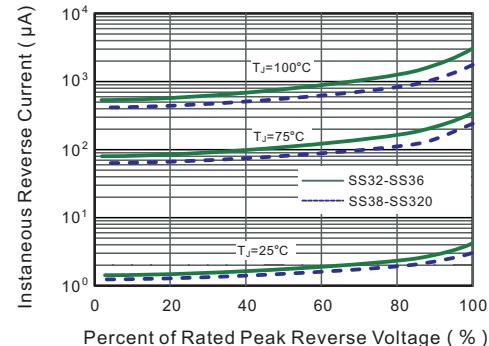


Fig.3 Typical Forward Characteristic

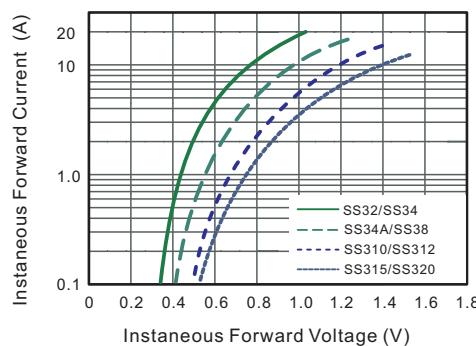


Fig.4 Typical Junction Capacitance

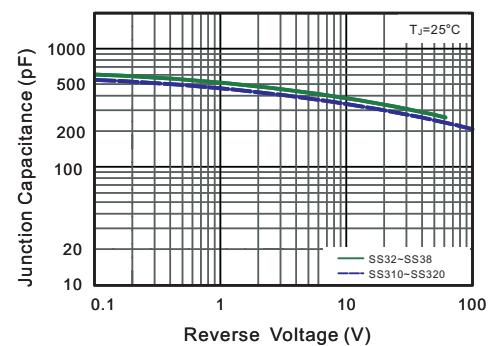


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

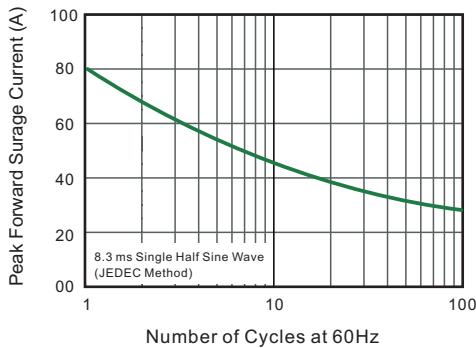
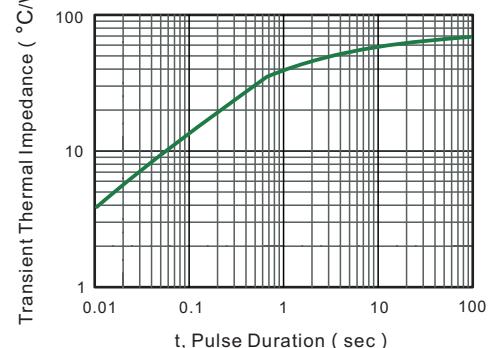
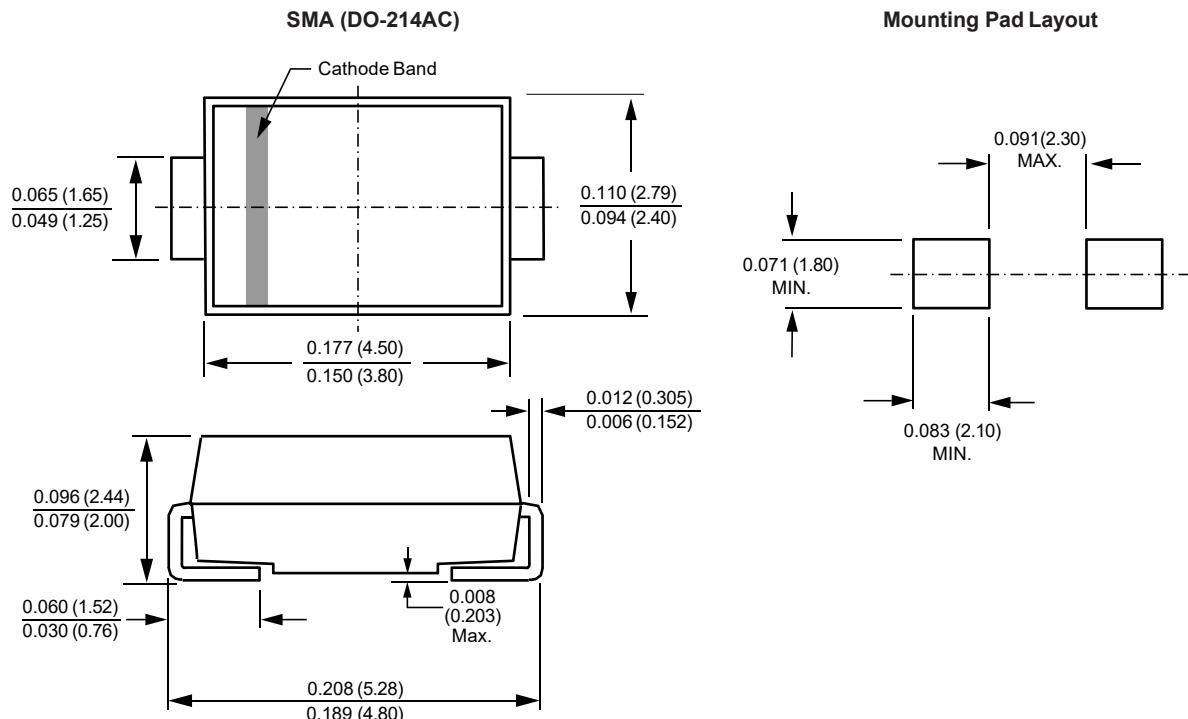


Fig.5- Typical Transient Thermal Impedance



PACKAGE OUTLINE

Plastic surface mounted package; 2 leads



Ordering Information (Example)

PREFERRED P/N	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
SS32 THRU SS320	5000	10000	80000	13" reel

Marking

Type number	Marking code
SS32	SS32
SS34	SS34
SS34A	SS34A
SS36	SS36
SS38	SS38
SS310	SS310
SS312	SS312
SS315	SS315
SS320	SS320