Surface Mount Schottky Barrier Rectifier

Reverse Voltage - 40V~200V

Forward Current – 3.0 A

Pinning

1.Cathode	2.Anode

SMA(2010)

FEATURES

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

MECHANICAL DATA

- ♦Case:SMA(2010)
- ♦Terminals: Solderable per MIL-STD-750, Method2026
- ♦Approx. Weight: 30mg /0.0010oz

Marking Code	
SS34	SS34
SS36	SS36
SS310	SS310
SS315	SS315
SS320	SS320

Absolute Maximum Ratings and Electrical characteristics
Ratings at25 ° ambient temperature unless otherwise specified.Single phase, half wave, 60Hz resistive or inductive load, for capacitive load, derate by 20 %

Parameter	Symbols	SS34	SS36	SS310	SS315	SS320	Units
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	40	60	100	150	200	V
Maximum RMS voltage	V_{RMS}	28	42	70	105	140	V
Maximum DC Blocking Voltage	V_{DC}	40	60	100	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
Maximum Instantaneous Forward Voltageat 3 A	V_F	0.55	0.70	0.85	0.95		V
Maximum DC Reverse Current TA = 25°C at Rated DC Blocking Voltage TA = 100°C	I_R	0.5 10	0.3 5				mA
Typical Junction Capacitance (1)	Cj	180	150				pF
Typical Thermal Resistance (2)	$R_{\Theta ja}$	100					°C/W
Operating Junction Temperature Range	Tj	-55 ~ +125					°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 3.81 X 3.81 cm copper pad areas.

Fig.1 Forward Current Derating Curve

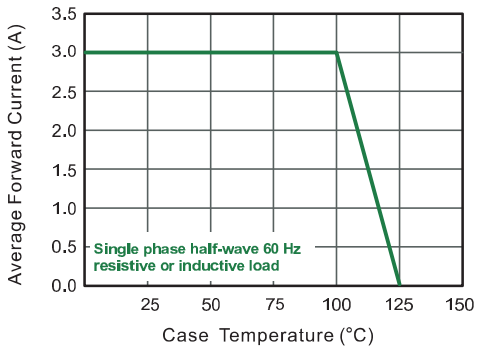


Fig.2 Typical Reverse Characteristics

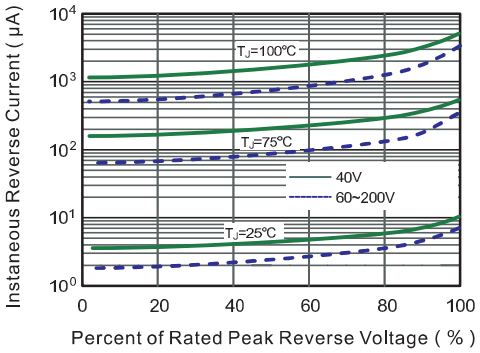


Fig.3 Typical Forward Characteristic

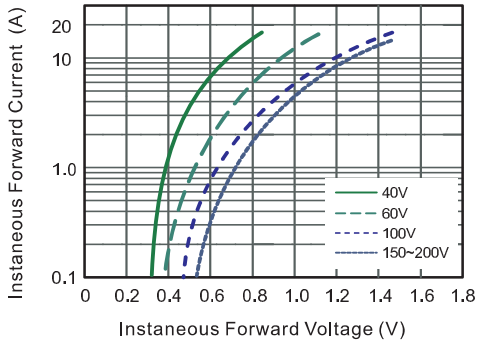


Fig.4 Typical Junction Capacitance

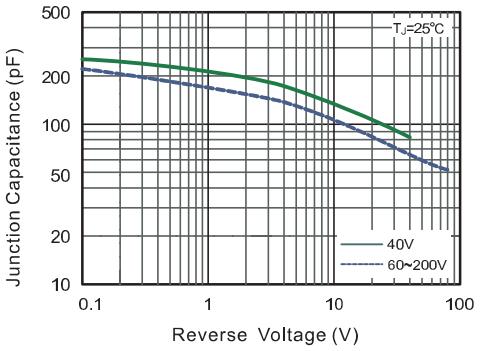


Fig.5 Maximum Non-Repetitive Peak Forward Surage Current

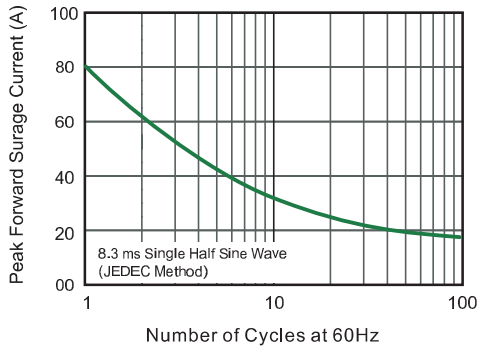
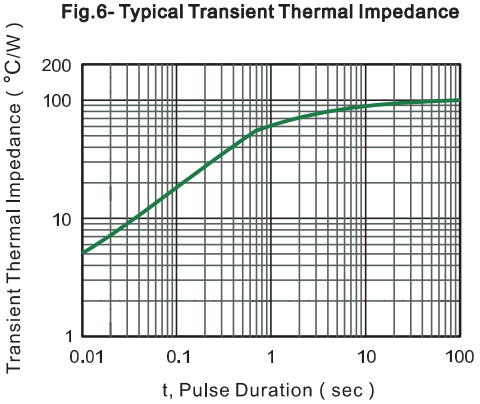
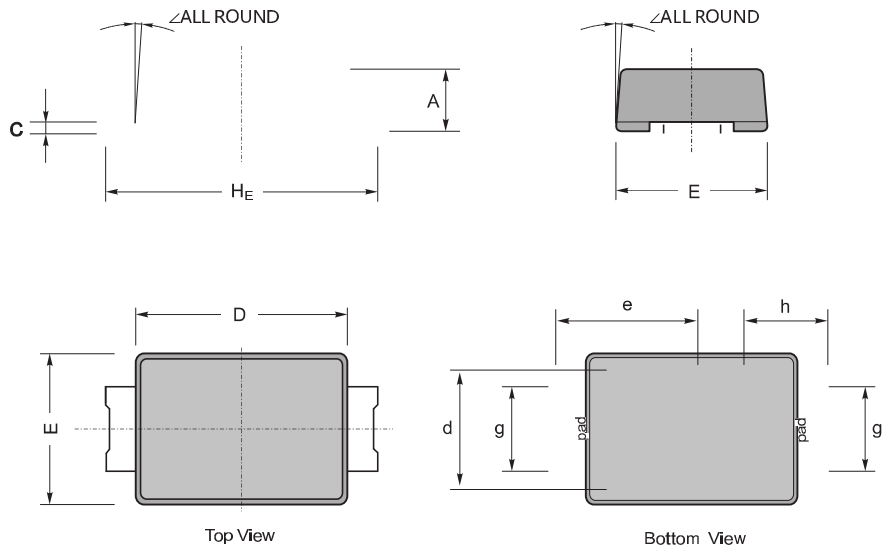


Fig.6- Typical Transient Thermal Impedance



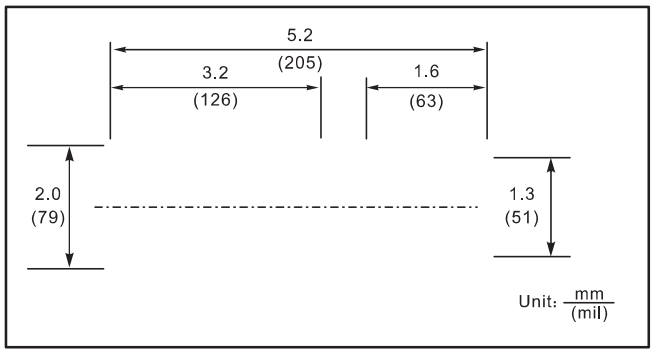
Package Outline SMA(2010)

Plastic surface mounted package; 2 leads



UNIT		A	C	D	E	H_E	d	e	g	h	∠
mm	max	1.20	0.35	4.10	2.70	5.20	1.90	3.05	1.50	1.2	12°
	min	0.90	0.20	3.70	2.30	4.80	1.70	2.85	1.30	1.0	
mil	max	47	13.8	161	106	205	75	120	59	47	
	min	35	7.9	145	90	189	67	112	51	39	

The recommended mounting pad size



Summary of Packing Options

Package	Package Description	Packing Quantity	Industry Standard
SMA(2010)	Tape/Reel,7"reel	3000	EIA-481-1