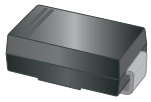
Schottky Barrier Rectifier

SS345

■ 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

SMA



Top View
Simplified outline SMA and Symbol

PIN DESCRIPTION

PIN	DESCRIPTION
1	Cathode
2	Anode

■ Absolute Maximum Ratings and Electrical characteristics

Ratings at 25℃ ambient temperature unless otherwise specified.
Single phase, half-wave 60 Hz resistive or inductive load, for capacitive load current derate by 20 %.

Parameter		Symbol	SS345	Unit
Maximum Repetitive Peak Reverse Voltage		V_{RRM}	45	V
Maximum RMS voltage		V_{RMS}	31.5	
Maximum DC Blocking Voltage		V_{DC}	45	
Maximum Instantaneous Forward Voltage at 3 A		V_F	0.7	
Maximum Average Forward Rectified Current at T_C= 100℃		$I_{F(AV)}$	3	A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load		I_{FSM}	80	
Maximum DC Reverse Current	T_a=25℃	I_R	0.5	mA
at Rated DC Blocking Voltage	T_a=100℃		5	
Typical Junction Capacitance	*1	C_j	450	pF
Typical thermal resistance	*2	R_{thJA}	70	℃/W
Junction Temperature		T_j	150	℃
Storage Temperature		T_{stg}	-55 ~ +150	

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

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■ Typical Characterisitics

Fig.1 Forward Current Derating Curve

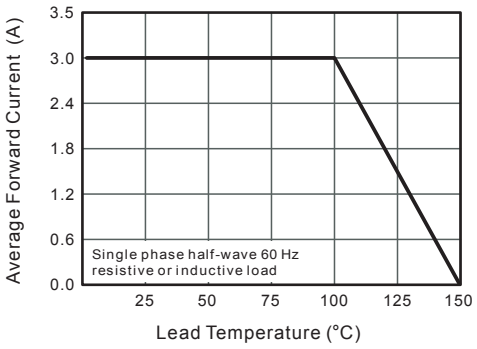


Fig.2 Typical Reverse Characteristics

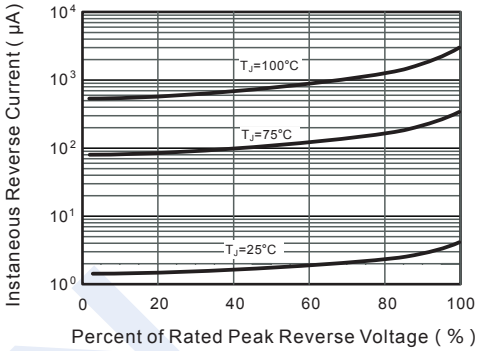


Fig.3 Typical Forward Characteristic

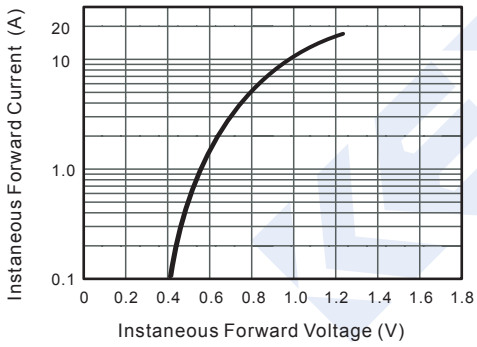


Fig.4 Typical Junction Capacitance

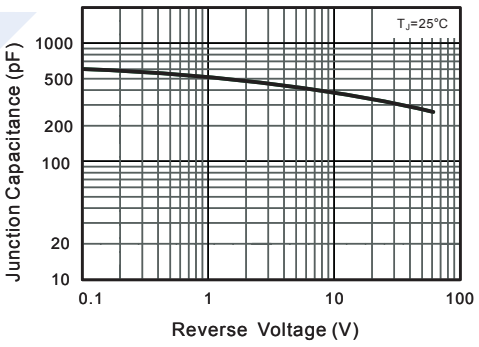


Fig.5 Maximum Non-Repetitive Peak Forward Surage Current

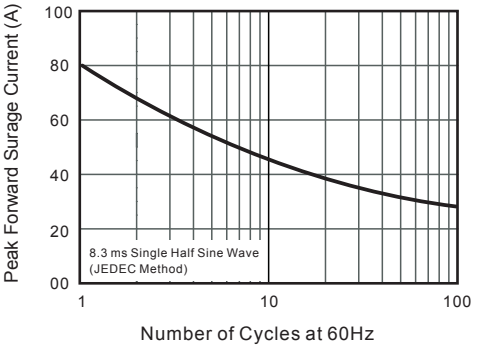
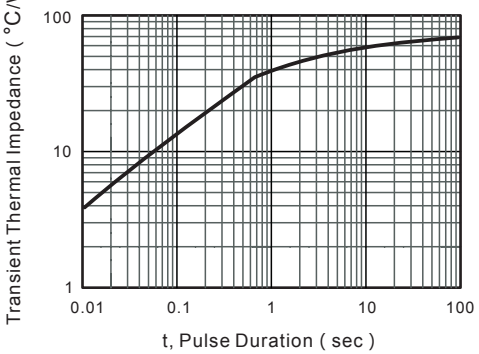


Fig.5- Typical Transient Thermal Impedance



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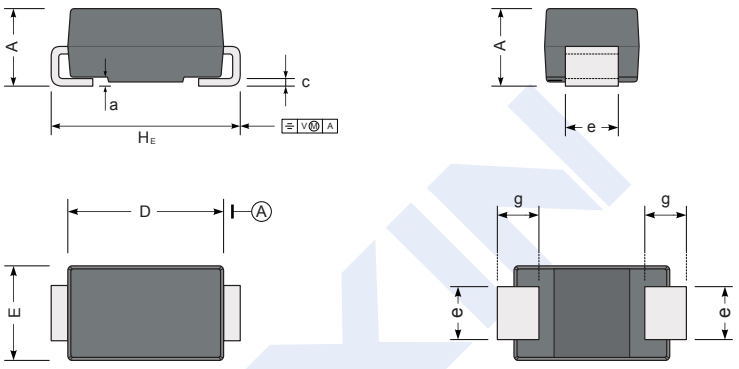
■ Package Outline Dimensions

Plastic surface mounted package; 2 leads SMA



UNIT		A	D	E	H_E	c	e	g	a
mm	max	2.2	4.5	2.7	5.2	0.31	1.6	1.5	0.3
	min	1.9	4.0	2.3	4.7	0.15	1.3	0.9	
mil	max	87	181	106	205	12	63	59	12
	min	75	157	91	185	6	51	35	

■ The recommended mounting pad size