

# SS32 THUR SS320

## SS32 THUR SS320 Schottky Barrier Rectifiers

### General description

3.0Amp Surface Mounted Schottky Barrier Rectifiers

### FEATURES

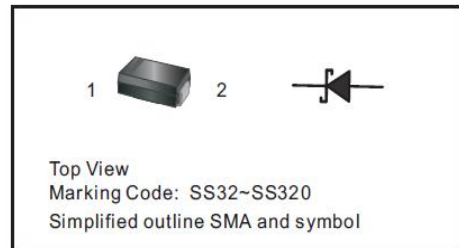
- Flammability Classification 94V-O
- For surface mounted applications
- Low profile package
- Built-in strain relief
- Metal to silicon rectifier. majority carrier conduction
- Low power loss,high efficiency
- High surge capacity
- For use in low voltage high frequency inverters, free wheeling, and polarity protection applications
- Pb free product are available : 99% Sn can meet Rohs environment substance directive request

### MECHANICAL DATA

- Terminals:Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity: Color band denotes positive end (cathode)

### PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



### Maximum Ratings And Electrical Characteristics

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 3 A	$V_F$	0.6	0.75			0.9		0.95			V
Maximum DC Reverse Current $T_a = 25^\circ\text{C}$ at Rated DC Reverse Voltage $T_a = 100^\circ\text{C}$	$I_R$	0.5			0.3		3				mA
Typical Junction Capacitance <sup>(1)</sup>	$C_j$	450			400						pF
Typical Thermal Resistance <sup>(2)</sup>	$R_{\theta JA}$	70									$^\circ\text{C/W}$
Operating Junction Temperature Range	$T_j$	-55 ~ +150									$^\circ\text{C}$
Storage Temperature Range	$T_{stg}$	-55 ~ +150									$^\circ\text{C}$

(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.

## Rating And Characteristic Curves

Fig.1 Forward Current Derating Curve

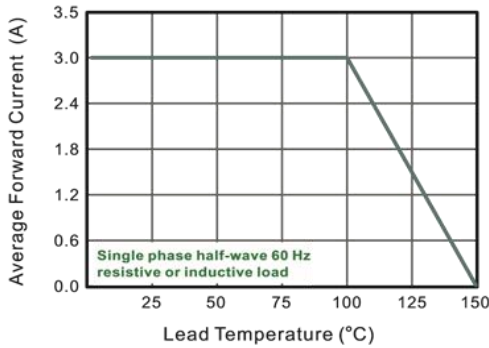


Fig.2 Typical Reverse Characteristics

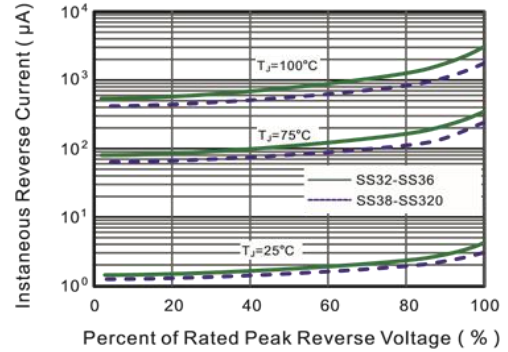


Fig.3 Typical Forward Characteristic

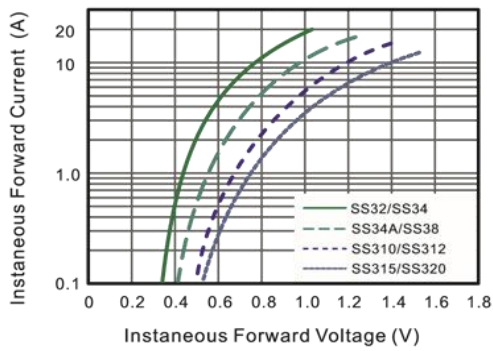


Fig.4 Typical Junction Capacitance

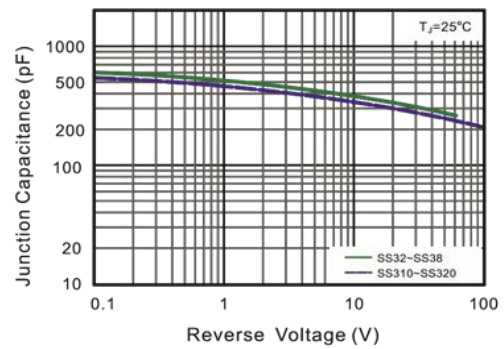


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

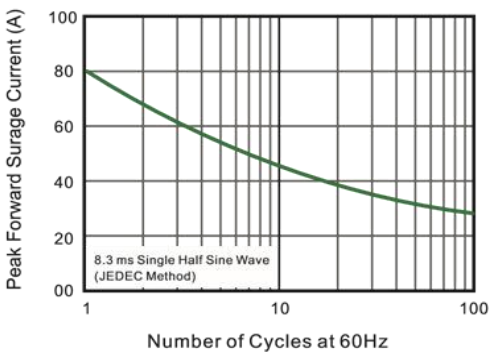
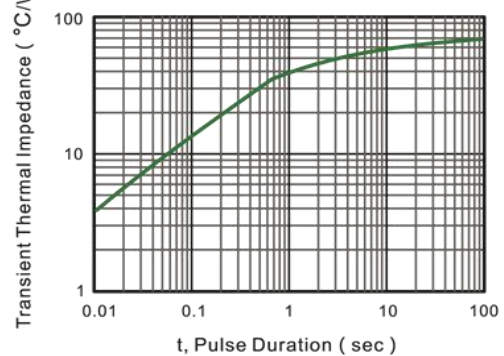
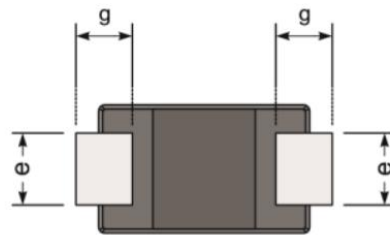
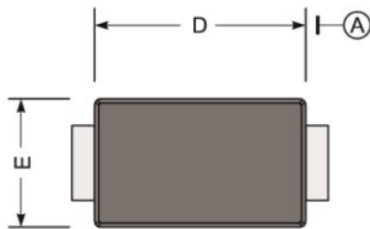
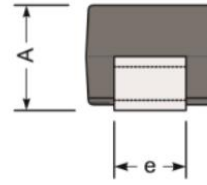
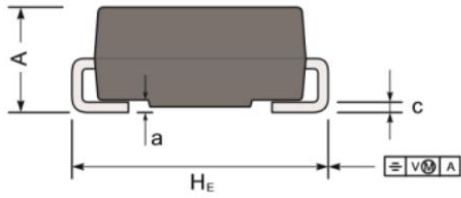


Fig.5- Typical Transient Thermal Impedance



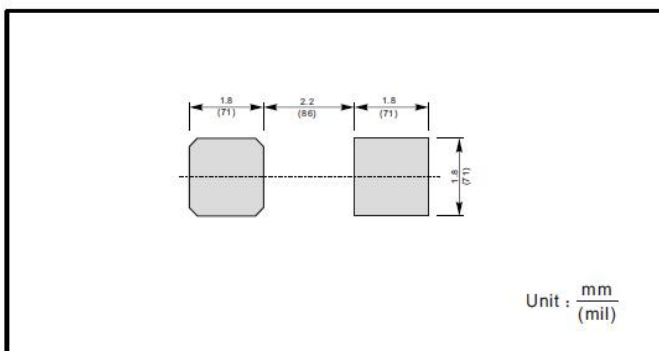
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## SMA PACKAGE OUTLINE



UNIT		A	D	E	HE	c	e	g	a
mm	max	2.5	4.5	2.8	5.3	0.31	1.7	1.5	0.3
	min	1.9	3.9	2.3	4.7	0.15	1.3	0.76	
mil	max	98	181	110	208	12	67	59	12
	min	75	153	91	185	6	51	30	

### The recommended mounting pad size



### Marking

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

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