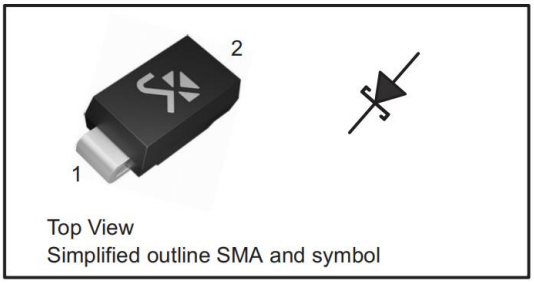
SS32G THRU SS320G

Surface Mount Schottky Barrier Rectifier

Reverse Voltage -20V to 200V
Forward Current -3.0A

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



Top View
Simplified outline SMA and symbol

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

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		Symbol	SS 32G	SS 34G	SS 345G	SS 36G	SS 38G	SS 310G	SS 312G	SS 315G	SS 320G	Unit
Maximum Repetitive Peak Reverse Voltage		V_{RRM}	20	40	45	60	80	100	120	150	200	V
Maximum RMS Voltage		V_{RMS}	14	28	32	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@Fig.1		$I_{F(AV)}$	3.0									A
Peak Forward Surge Current,8.3ms Single Half Sine-wave Superimposed On Rated Load(JEDEC method)		I_{FSM}	80									A
Peak Forward Surge Current,1.0ms Single Half Sine-wave Superimposed On Rated Load(JEDEC method)		I_{FSM}	160									A
I^2t Rating for fusing (3ms≤8.3ms)		I^2t	26.5									A^2S
Max Instantaneous Forward Voltage at 3A		V_F	0.55			0.70	0.85		0.95			V
Maximum DC Reverse Current at Rated DC Reverse Voltage	T_a = 25°C	I_R	0.5				0.3					mA
	T_a =100°C		5				3					
Typical Junction Capacitance(1)		C_j	135			107	83		68		50	pF
Typical Thermal Resistance(2)		$R_{\theta JA}$	100									°C/W
		$R_{\theta JC}$	20									
		$R_{\theta JL}$	25									
Operating Junction Temperature Range		T_j	-55~+125									°C
Storage Temperature Range		T_{stg}	-55~+150									°C

(1)Measured at 1MHz and applied reverse voltage of 4V D.C
(2)P.C.B. mounted with 0.2"x0.2"(5×5mm) copper pad areas

Typical Characteristics

Fig.1 Forward Current Derating Curve

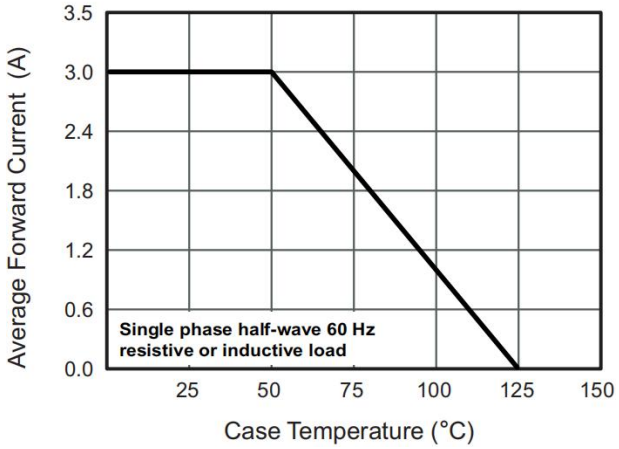


Fig.2 Typical Reverse Characteristics

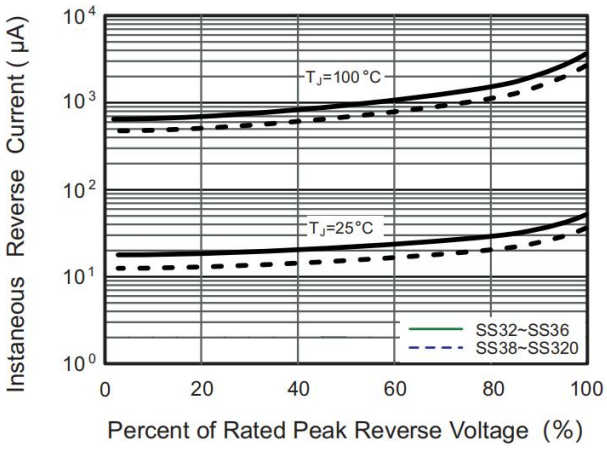


Fig.3 Typical Forward Characteristic

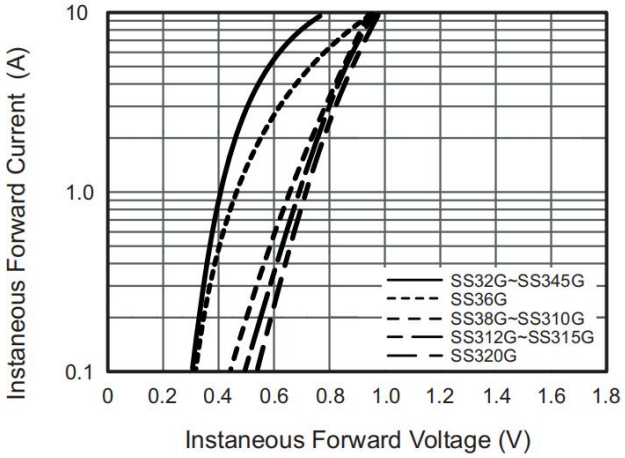


Fig.4 Typical Junction Capacitance

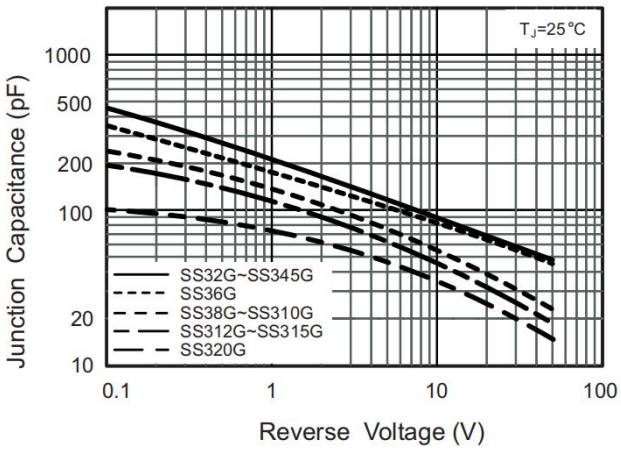
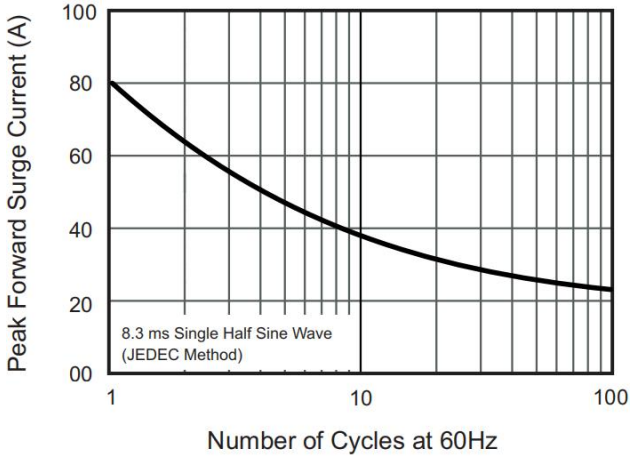


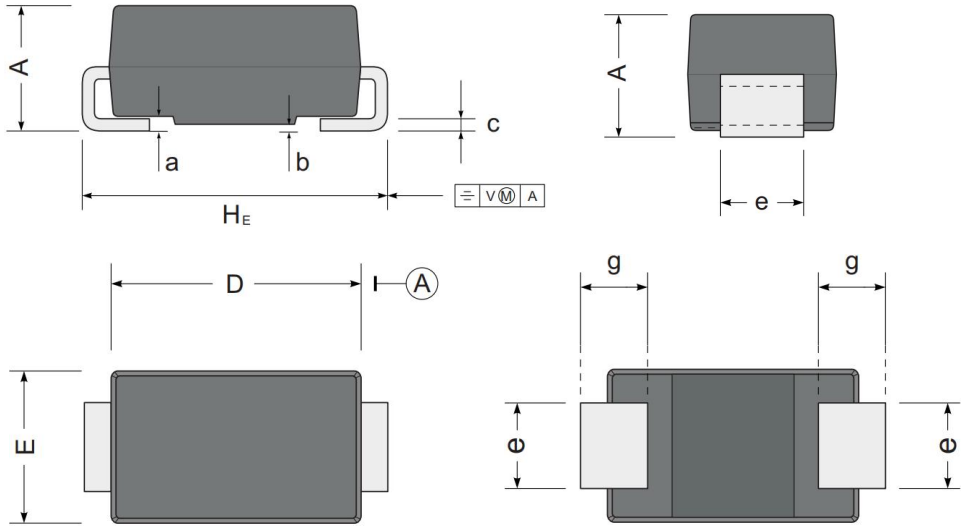
Fig.5 Maximum Non-Repetitive Peak Forward Surge Current



Package Information

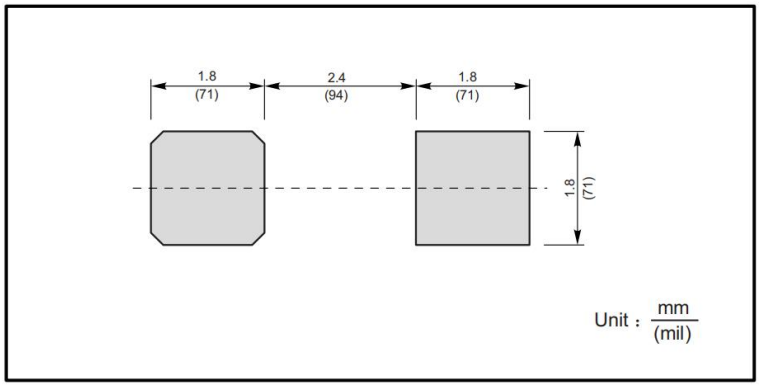
SMA

Dimensions in mm



UNIT		A	D	E	H_E	c	e	g	b	a
mm	max	2.2	4.5	2.7	5.2	0.31	1.6	1.5	0.2	0.3
	min	1.9	4.0	2.3	4.7	0.15	1.3	0.9	0.05	
mil	max	87	181	106	205	12	63	59	7.9	12
	min	75	157	91	185	6	51	35	2	

The recommended mounting pad size



Marking

Type number	Marking code
SS32G	SS32
SS34G	SS34
SS345G	SS345
SS36G	SS36
SS38G	SS38
SS310G	SS310
SS312G	SS312
SS315G	SS315
SS320G	SS320

Shikues Disclaimer

1.Accuracy of Information and Right to Modify

The information provided in this document is for reference only. Shikues reserves the right to make changes to this document and to the specifications of the products described herein at any time, without prior notice, for the purpose of improving reliability, function, design, or for any other reason. It is the customer's responsibility to obtain and verify the latest product information and specifications before making any final design, procurement, or usage decisions.

2.No Warranty

Shikues makes no express or implied warranties, representations, or guarantees regarding the suitability of its products for any particular purpose.

Shikues assumes no liability for any assistance provided or for the design of customer products. All products are supplied "as is."

3.Intended Use and Limitation of Liability

The products described in this document are intended for use in general-purpose electronic devices. They are neither designed nor tested nor authorized for use in transportation equipment or applications requiring high reliability. Unless expressly authorized in writing by Shikues, these products must not be used as critical components in life-support systems or any applications where failure could directly pose a risk to human life (including, but not limited to, medical devices, transportation systems, aerospace equipment, nuclear facilities, and safety-critical systems).

Shikues assumes no responsibility or liability for any consequences arising from the use of its products in unauthorized or unintended applications.

Neither Shikues nor its representatives shall be held liable for any resulting damages.

4.Intellectual Property

This document does not grant any express or implied license—whether by estoppel, implication, or otherwise—to use any intellectual property rights of Shikues.