Surface Mount Schottky Barrier Rectifier
Reverse Voltage - 20 to 200 V
Forward Current - 3.0A

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



Top View
Marking Code: SS32 — SS320
Simplified outline SMAF 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

MECHANICAL DATA
- Case: SMAF
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 27mg / 0.00095oz

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	Symbols	SS32F	SS34F	SS34AF	SS36F	SS38F	SS310F	SS312F	SS315F	SS320F	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	0.55		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	250				180					pF
Typical Thermal Resistance (2)	$R_{\theta JA}$ $R_{\theta JC}$	70 18									°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

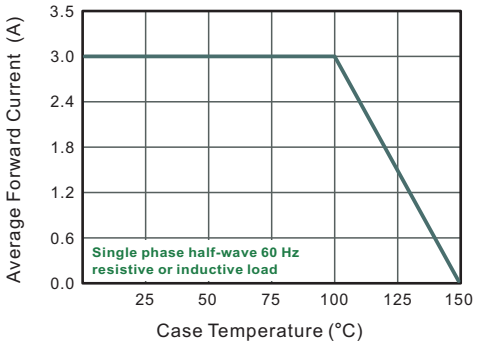


Fig.2 Typical Reverse Characteristics

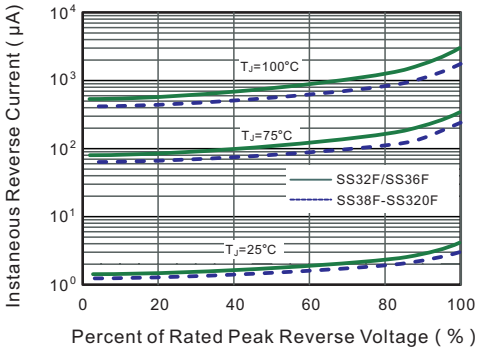


Fig.3 Typical Forward Characteristic

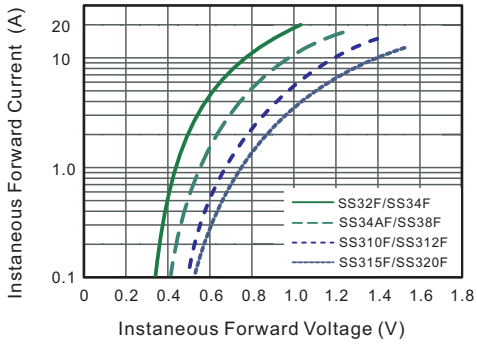


Fig.4 Typical Junction Capacitance

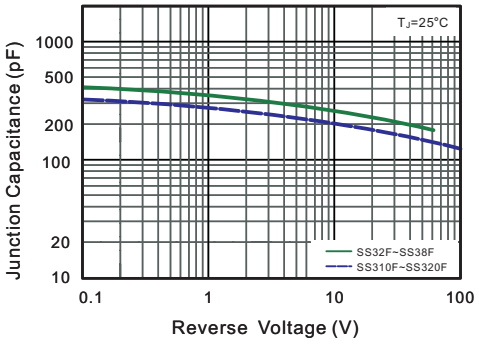


Fig.5 Maximum Non-Repetitive Peak Forward Surage Current

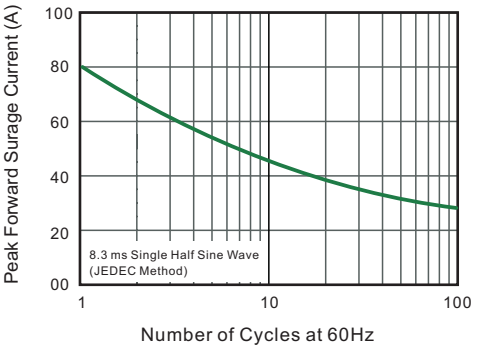
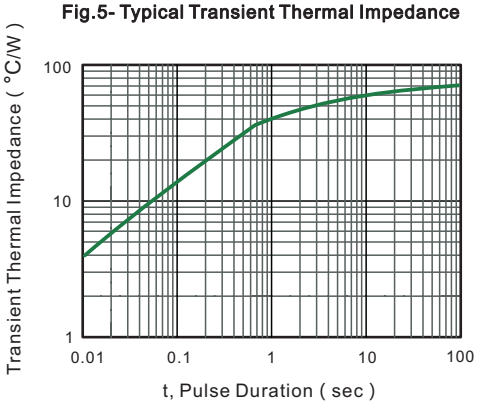
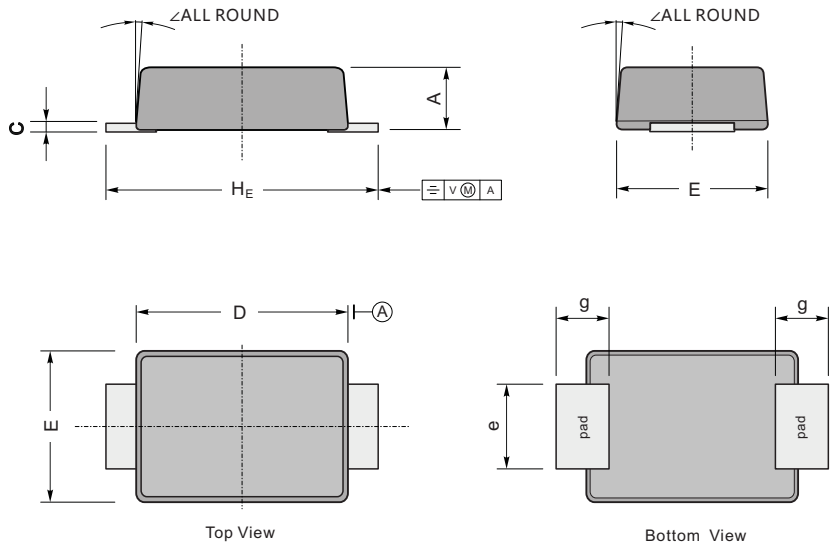


Fig.5- Typical Transient Thermal Impedance



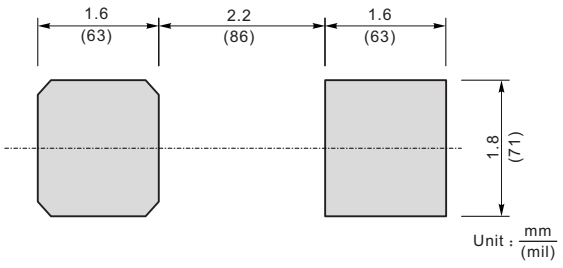
PACKAGE OUTLINE

Plastic surface mounted package; 2 leads



UNIT		A	C	D	E	e	g	H_E	∠
mm	max	1.2	0.20	3.7	2.7	1.6	1.2	4.9	7°
	min	0.9	0.12	3.3	2.4	1.3	0.8	4.4	
mil	max	47	7.9	146	106	63	47	193	
	min	35	4.7	130	94	51	31	173	

The recommended mounting pad size



Marking

Type number	Marking code
SS32F	SS32
SS34F	SS34
SS34AF	SS34A
SS36F	SS36
SS38F	SS38
SS310F	SS310
SS312F	SS312
SS315F	SS315
SS320F	SS320