SS32GF~SS320GF

ROHS

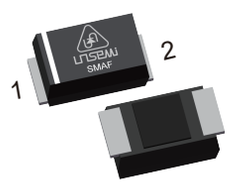
Surface Mount Schottky Barrier Rectifier

www.unsemi.com.tw

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

SMAF



1：Cathode

2：Anode

Mechanical Data

- ◆ Case: SMAF
- ◆ Quantity Per Reel : 3,000pcs
- ◆ Approx. Weight : 27mg/0.00095oz
- ◆ Terminals: Solderable per MIL-STD-750, Method 2026

Maximum Ratings and Electrical Characteristics

Ratings at 25℃ ambient temperature unless otherwise specified.

Single phase half-wave 60Hz, resistive or inductive load, for capacitive load current derate by 20%.

Parameter		Symbol	SS 32GF	SS 34GF	SS 36GF	SS 38GF	SS 310GF	SS 312GF	SS 315GF	SS 320GF	Units
Maximum Repetitive Peak Reverse Voltage		V_{RRM}	20	40	60	80	100	120	150	200	V
Maximum RMS Voltage		V_{RMS}	14	28	42	56	70	84	105	140	V
Maximum DC Blocking Voltage		V_{DC}	20	40	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 3A		V_F	0.55		0.70		0.85		0.95		V
Maximum DC Reverse Current at Rated DC Reverse Voltage	Ta=25℃	I_R	0.5			0.3					mA
	Ta=100℃	I_R	5.0			3.0					
Typical Junction Capacitance (1)		Cj	250			180					pF
Typical Thermal Resistance (2)		$R_{\theta JA}$	70								℃/W
Operating Junction Temperature Range		T_J	-55 ~ +150								℃
Storage Temperature Range		Tstg	-55 ~ +150								℃

Note:(1) Measured at 1 MHz and applied reverse voltage of 4VDC.

(2) P.C.B. mounted with 2.0" X 2.0" (5 X 5cm) copper pad areas.

Electrical Characteristics Curves

Fig.1 Forward Current Derating Curve

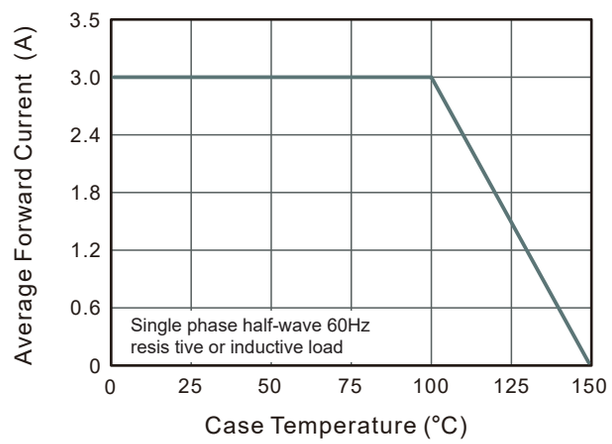


Fig. 2 Typical Reverse Characteristics

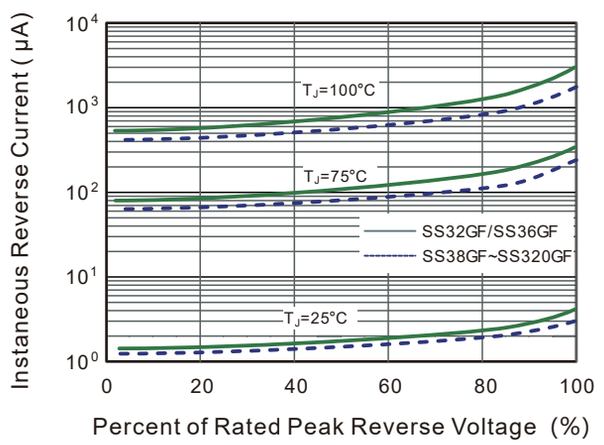


Fig.3 Typical Forward Characteristic

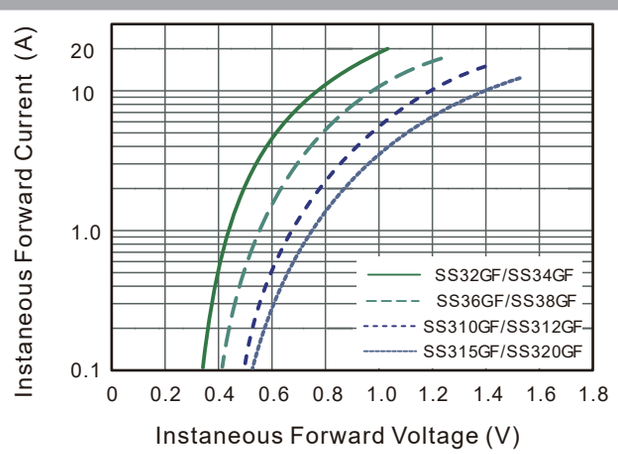


Fig. 4 Typical Junction Capacitance

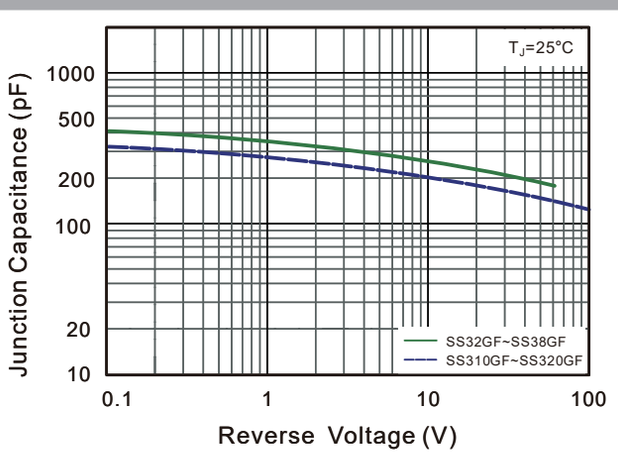


Fig.5 Maximum Non-Repetitive Peak Forward Surage Current

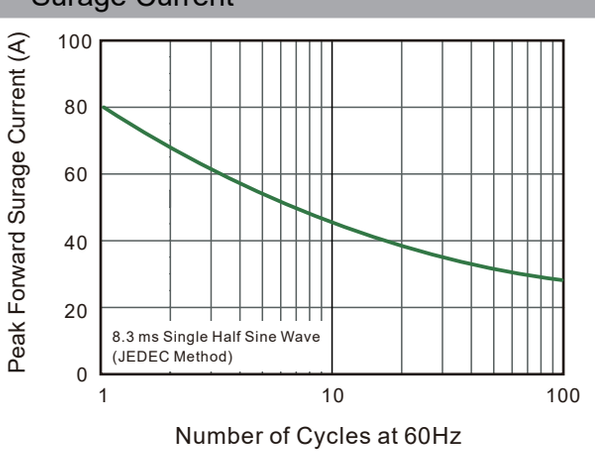
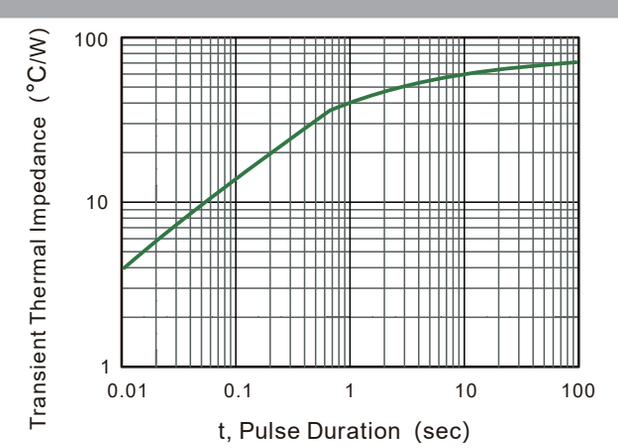
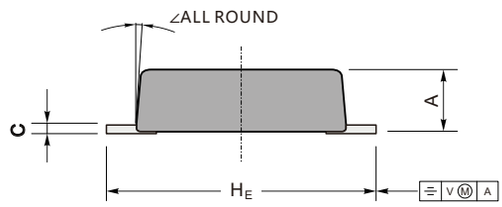
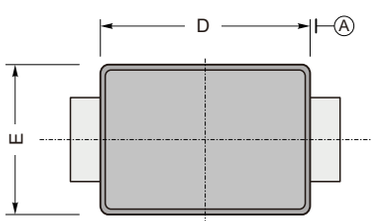


Fig. 6 Typical Transient Thermal Impedance

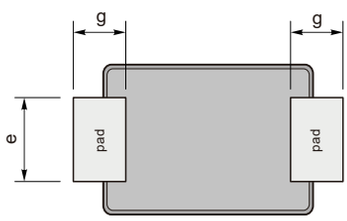


Package Outline & Dimensions





Top View



Bottom View

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	

Marking

Type Number	SS32GF	SS34GF	SS36GF	SS38GF	SS310GF	SS312GF	SS315GF	SS320GF
Making	SS32	SS34	SS36	SS38	SS310	SS312	SS315	SS320

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