Surface Mount Schottky Barrier Rectifier

Reverse Voltage - 40 to 60 V

Forward Current - 5 A

Pinning

1.Cathode	2.Anode

SMAF

Marking Code	
SSL54F	YFW SSL54
SSL56F	YFW SSL56

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
- Lead free in comply with EU RoHS 2011/65/EU directives

MECHANICAL DATA

- Case: SMAF
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 27mg /0.00086oz

Absolute 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, derate by 20 %

Parameter	Symbols	SSL54F	SSL56F	Units
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	40	60	V
Maximum RMS voltage	V_{RMS}	28	42	V
Maximum DC Blocking Voltage	V_{DC}	40	60	V
Maximum Average Forward Rectified Current	$I_{F(AV)}$	5.0		A
Peak Forward Surge Current, 8.3ms Single Half Sine-wave Superimposed On Rated Load (JEDEC method)	I_{FSM}	150		A
Maximum Instantaneous Forward Voltage at 5 A	V_F	0.45	0.55	V
Maximum Instantaneous Reverse Current T_A = 25°C at Rated DC Reverse Voltage T_A = 100°C	I_R	1.0 50		mA
Typical Junction Capacitance (1)	C_j	800	500	pF
Typical Thermal Resistance (2)	$R_{\theta JA}$	55		°C/W
Operating Junction Temperature Range	T_j	-55 ~ +125		°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

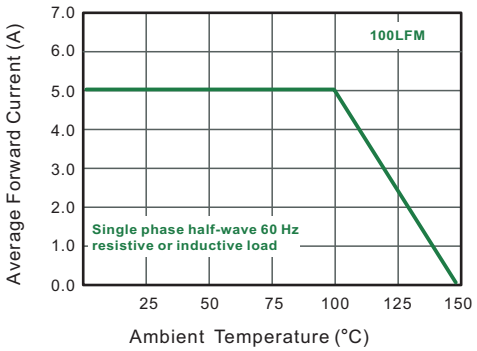


Fig.2 Typical Reverse Characteristics

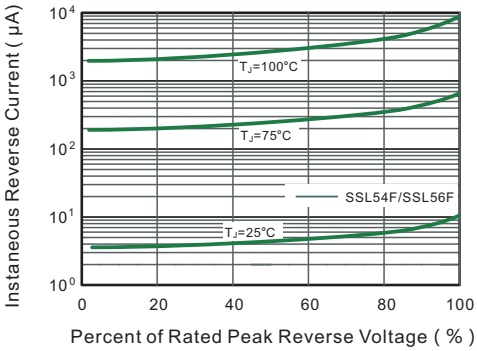


Fig.3 Typical Forward Characteristic

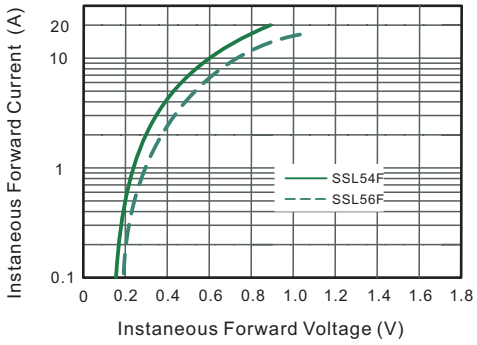


Fig.4 Typical Junction Capacitance

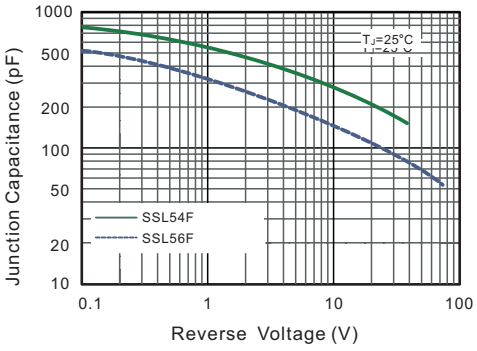


Fig.5 Maximum Non-Repetitive Peak Forward Surage Current

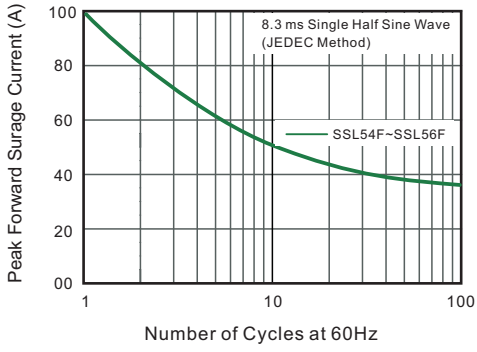
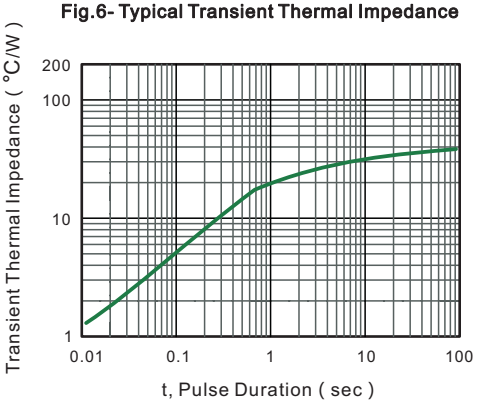
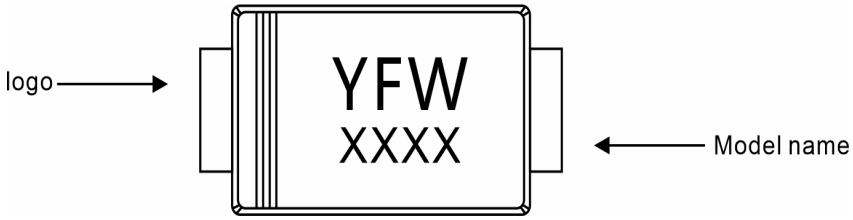


Fig.6- Typical Transient Thermal Impedance



Marking Diagram

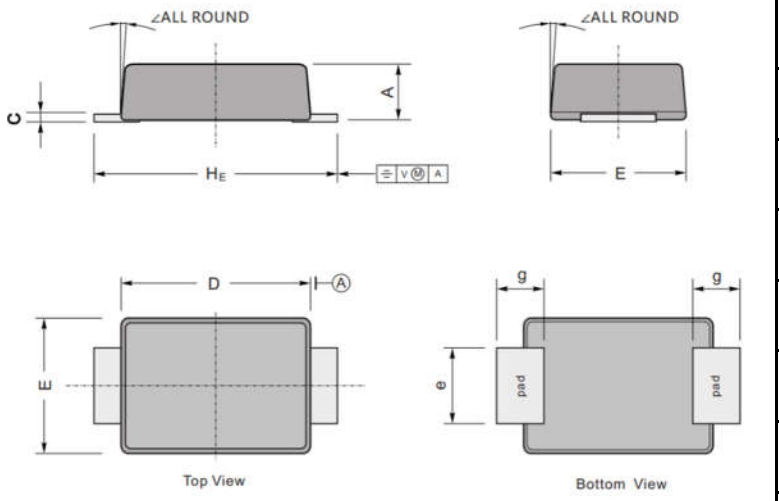


Ordering information

Package	Packing Description	Packing Quantity
SMAF	Tape/Reel,13"reel	10000PCS/Reel 100000PCS/Carton
	Tape/Reel,7"reel	3000PCS/Reel 120000PCS/Carton

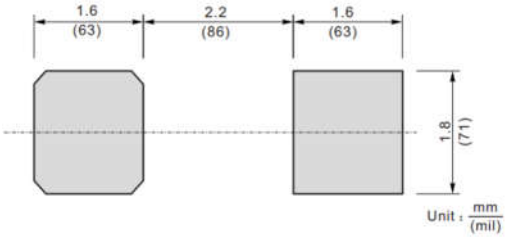
Package Dimensions

SMAF



Dim.	Millimeter(mm)		mil	
	Min.	Max.	Min.	Max.
A	0.9	1.1	35	43
C	0.12	0.20	4.7	7.9
D	3.3	3.7	130	146
E	2.4	2.7	94	106
e	1.3	1.6	51	63
g	0.8	1.2	31	47
HE	4.4	4.9	173	193
∠	7°			

The recommended mounting pad size



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