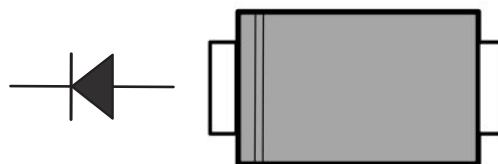


Surface Mount Schottky Barrier Rectifier

Parameter	Value	Unit
V_{RRM}	20~200	V
$I_{F(AV)}$	5.0	A



SMAF

Features

- Metal silicon junction, majority carrier conduction
- For surface mounted applications
- Low power loss, high efficiency
- High forward surge current capability

Applications

- For use in low-voltage, high-frequency inverters, free-wheeling applications, DC/DC converters, and polarity protection circuits.

Absolute Maximum Ratings and Characteristics (at $T_J = 25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	SS52F	SS54F	SS56F	SS58F	SS510F	SS512F	SS515F	SS520F	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	$I_{F(AV)}$	5.0								A
Peak Forward Surge Current, 8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	100								A
Max Instantaneous Forward Voltage at 5A	V_F	0.55		0.70		0.85		0.95		V
Maximum DC Reverse Current at Rated DC Reverse Voltage	I_R	0.5 10								mA
Typical Junction Capacitance(1)	C_j	800		500						pF
Typical Thermal Resistance(2)	$R_{\theta JA}$	45								$^\circ\text{C/W}$
Operating Junction Temperature Range	T_j	-55 ~ +150								$^\circ\text{C}$
Storage Temperature Range	T_{stg}	-55 ~ +150								$^\circ\text{C}$

Notes:

- (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 .

Typical characteristics

Fig.1 Forward Current Derating Curve

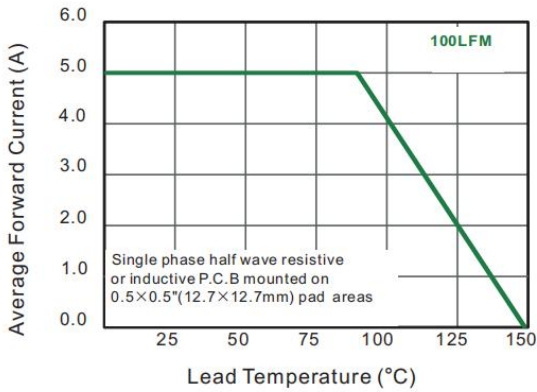


Fig.2 Typical Reverse Characteristics

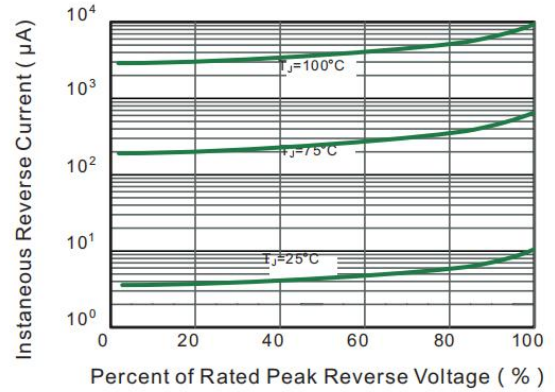


Fig.3 Typical Forward Characteristic

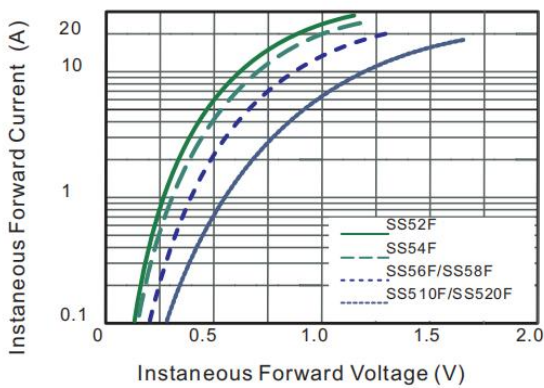


Fig.4 Typical Junction Capacitance

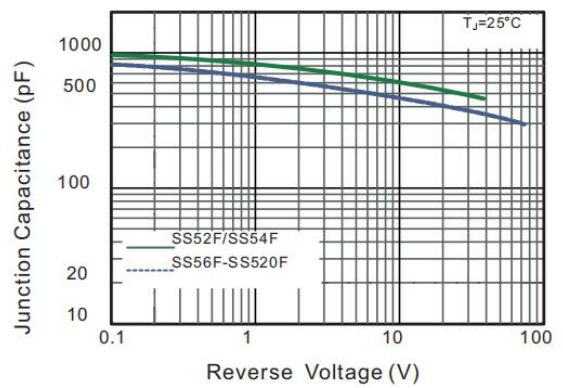


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

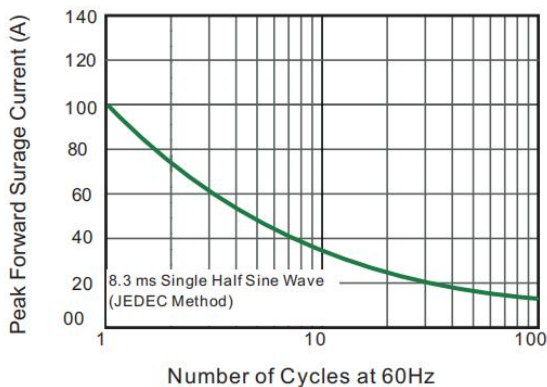
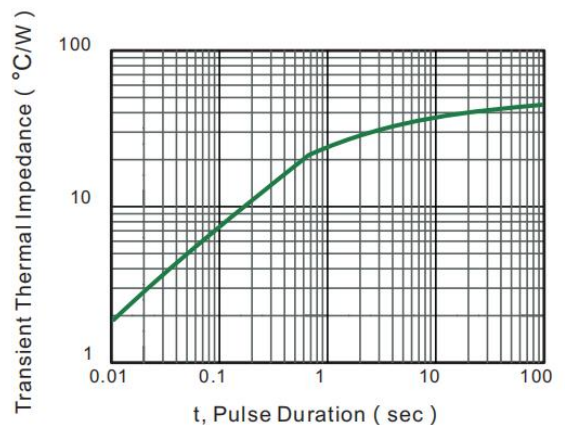
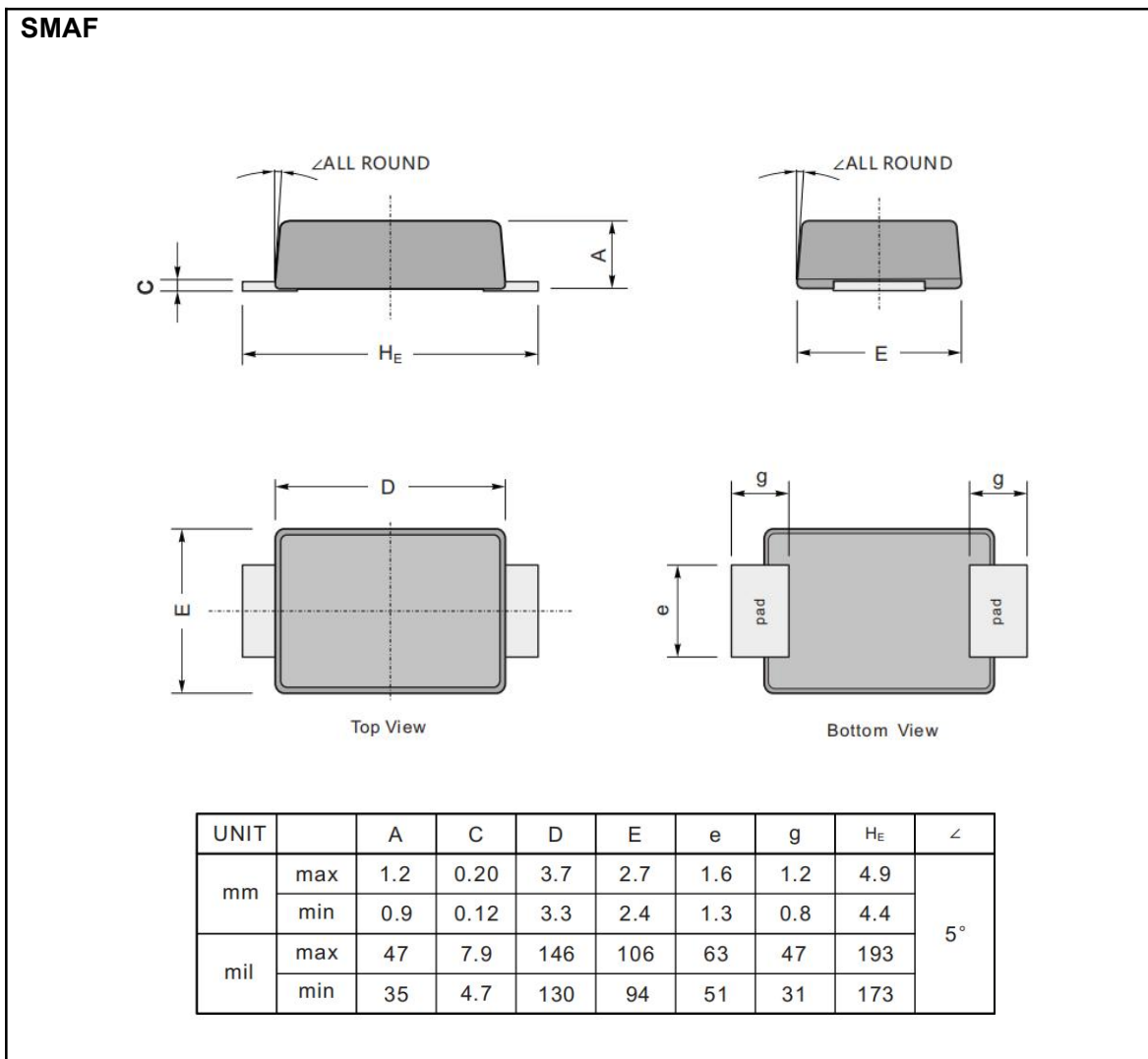


Fig.6- Typical Transient Thermal Impedance

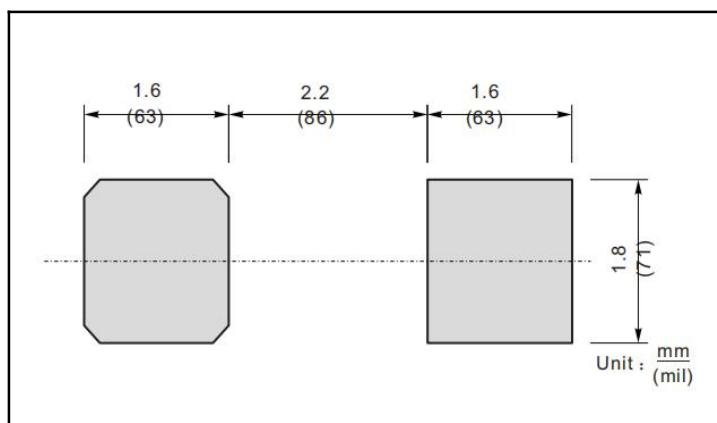


Package outlines

Plastic surface mounted package; 2 leads



The recommended mounting pad size



Marking

Type number	Marking code
SS52F	SS52F
SS54F	SS54F
SS56F	SS56F
SS58F	SS58F
SS510F	SS510F
SS512F	SS512F
SS515F	SS515F
SS520F	SS520F

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