

Schottky Barrier Rectifier 1A, 20~200V SOD-123FL

SS12FL to SS120FL

MERITEK

FEATURE

- Operating Temperature: -50 ~ 125°C
- Ultrafast reverse recovery time
- Low Profile Construction
- Low forward voltage drop
- High surge capability
- Low power losses, high efficiency



ELECTRICAL CHARACTERISTICS

Parameter	Symbol	SS 12FL	SS 13FL	SS 14FL	SS 16FL	SS 18FL	SS 110FL	SS 115FL	SS 120FL
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	20V	30V	40V	60V	80V	100V	150V	200V
Maximum RMS Voltage	V_{RMS}	14V	21V	28V	42V	56V	70V	105V	140V
Maximum DC Blocking Voltage	V_{DC}	20V	30V	40V	60V	80V	100V	150V	200V
Maximum Average Forward Rectified Current	I_{AV}	1.0A							
Peak Forward Surge Current (JEDEC method)	I_{FSM}	25.0A							
Maximum Forward Voltage at 1.0A ^{Note 1}	V_F	0.55V	0.55V	0.55V	0.75V	0.85V	0.85V	0.95V	0.95V
Maximum Reverse Current at Rated DC Blocking Voltage	I_R	1.0mA, $T_J = 25^\circ\text{C}$							
		20.0mA, $T_J = 100^\circ\text{C}$							
Typical Thermal Resistance ^{Note 2}	$R_{\theta JA}$	88.0°C/W							
Operating Junction Temperature	T_J	-50 ~ 125°C							
Storage Temperature Range	T_{stg}	-50 ~ 125°C							

Notes:

1. Pulse Test: 300µs pulse width, 1% duty cycle

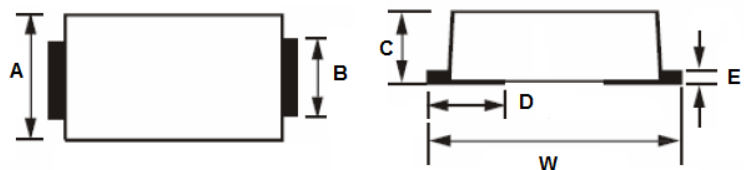
2. P.C.B. mounted with 0.9 x 1.5mm copper pad areas

3. $T_A = 25^\circ\text{C}$ unless otherwise specified. Single phase, half wave, 60 Hz, resistive or inductive load, for capacitive load, derate current by 20%.

DIMENSIONS

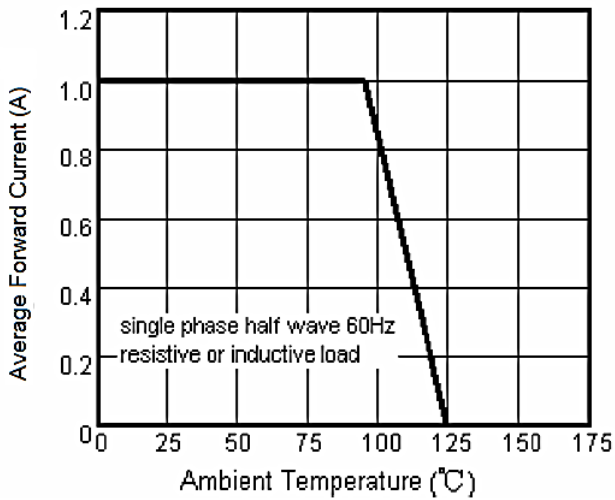
Item	Min (mm)	Max (mm)
W	3.50	3.90
A	1.50	2.00
B	0.60	1.00
C	0.80	1.40
D	0.50	1.10
E	0.05	0.25

SOD-123FL Package

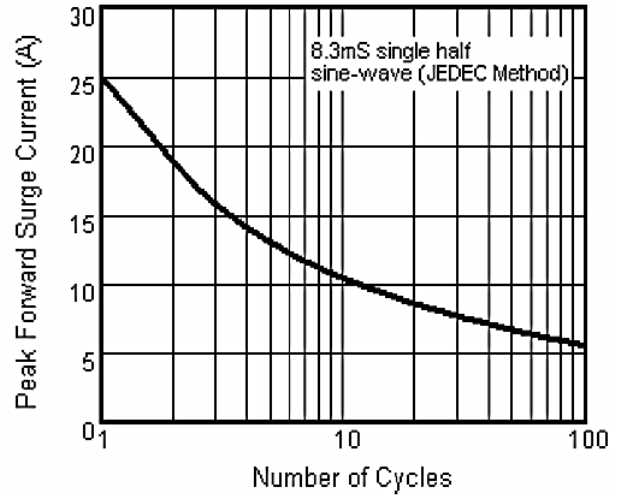


CHARACTERISTIC CURVES

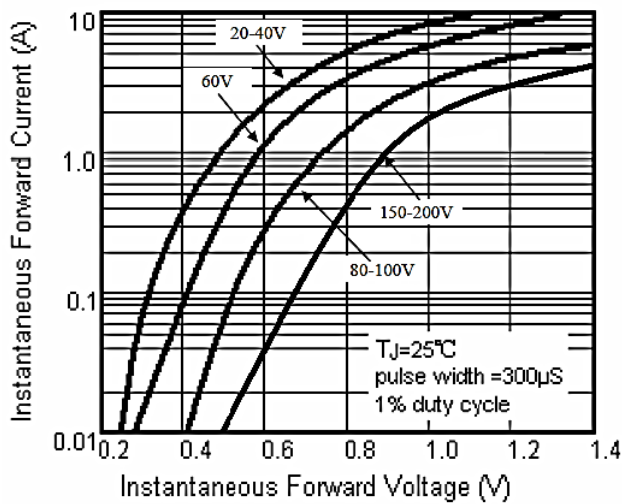
Forward Current Derating Curve



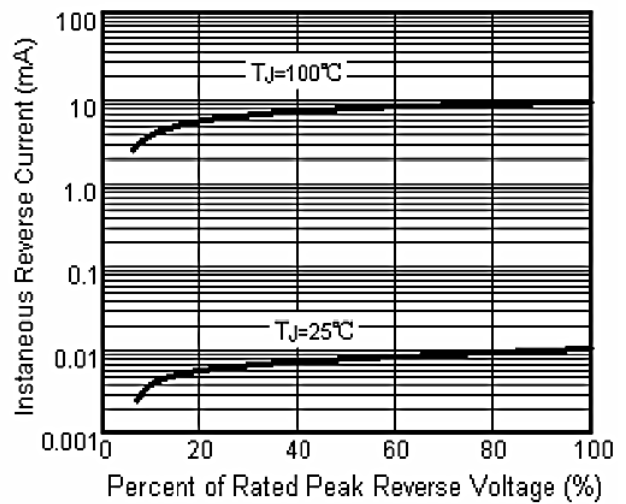
Maximum Non-Repetitive Peak Forward Surge Current



Typical Instantaneous Forward Characteristics



Typical Reverse Characteristics



Meritek Discrete Components Series: <http://www.meritekusa.com/EN/productlist/node/22>

Meritek Product Series: <http://www.meritekusa.com/EN/products>

*Specifications subject to change without notice.