

Schottky Barrier Rectifier 1A DO-214AC SMA

SS1x Series

MERITEK

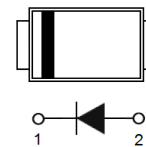
FEATURES

- Surge Overload Rating to 30A Peak
- Low Power Loss, High Efficiency
- Metal to Silicon Rectifier. Majority Carrier Conduction
- Flammability Classification: UL 94V-0
- Application: Low-Voltage, High-Frequency Inverters, Free Wheeling, and Polarity Protection Application



MECHANICAL DATA

- Case: Molded Plastic, DO-214AC(SMA)
- Terminals: Solder Plated, Solderable Per MIL-STD-750, Method 2026
- Polarity: Color Band Denotes Cathode End



ELECTRICAL CHARACTERISTICS

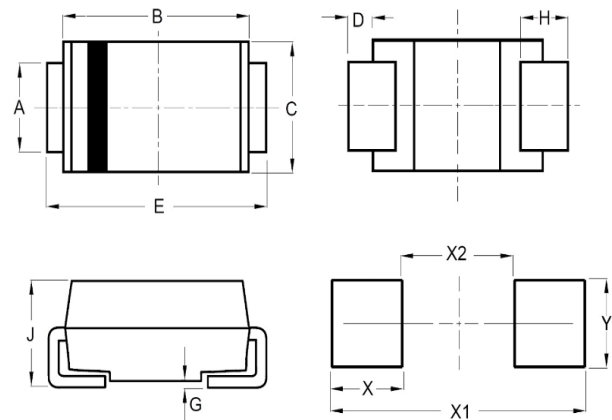
Parameter		Symbol	SS12	SS13	SS14	SS15	SS16	SS18	SS110	SS115	SS120	Unit
Maximum Recurrent Peak Reverse Voltage		V _{RRM}	20	30	40	50	60	80	100	150	200	V
Maximum RMS Voltage		V _{RMS}	14	21	28	35	42	56	71	105	140	V
Maximum DC Blocking Voltage		V _{DC}	20	30	40	50	60	80	100	150	200	V
Maximum Average Forward Rectified Current at T _L		I _(AV)	1.0									A
Peak Forward Surge Current (JEDEC method)		I _{FSM}	30.0									A
Maximum Forward Voltage at 1.0A		V _F	0.55			0.70		0.85		0.95		V
Maximum Reverse Current at Rated DC Blocking Voltage	T _A =25°C	I _R	0.5							0.2		mA
	T _A =100°C		10.0							5.0		
Typical Thermal Resistance		R _{θJL}	35.0									°C/W
Operating Junction Temperature Range		T _J	-65 to +125					-65 to +150				°C
Storage Temperature Range		T _{STG}	-65 to +150									°C

Note:

1. Ratings at 25°C ambient temperature unless otherwise specified.
2. Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%. Pulse test: 300μs pulse width, 1% duty cycle
3. Thermal resistance from junction to lead mounted on P.C.B. with 0.2" x 0.2" (5.0 x 5.0 mm) copper pad areas

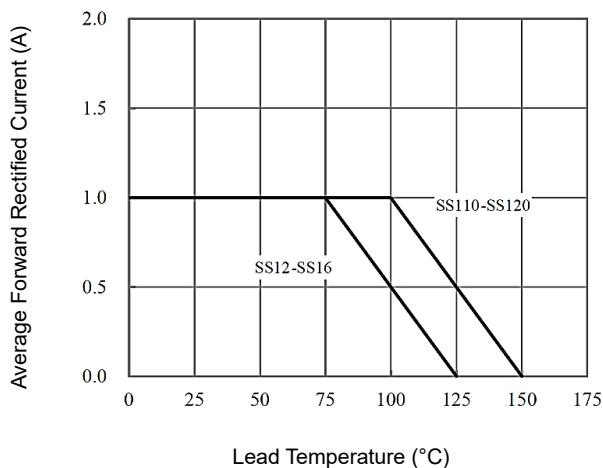
DIMENSIONS

Item	Min (mm)	Max (mm)
A	1.230	1.700
B	4.000	4.600
C	2.180	2.900
D	0.152	0.305
E	4.700	5.310
G	0.000	0.203
H	0.760	1.520
J	1.700	2.440
X	2.500	
X1	6.500	
X2	1.500	
Y	1.700	

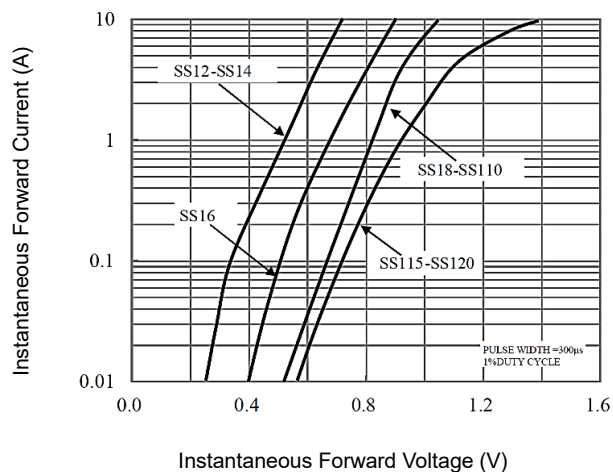


CHARACTERISTIC CURVES

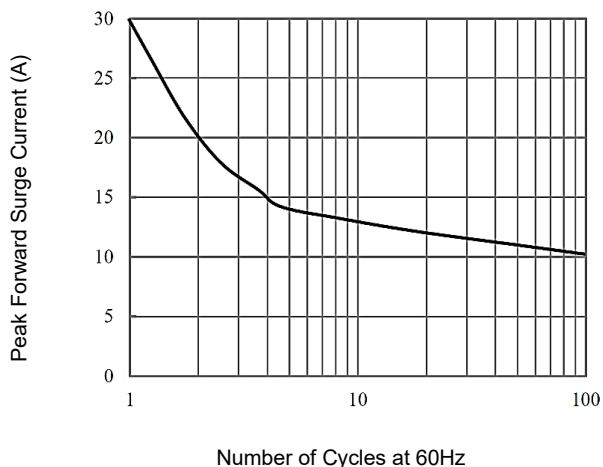
Typical Forward Current Derating Curve



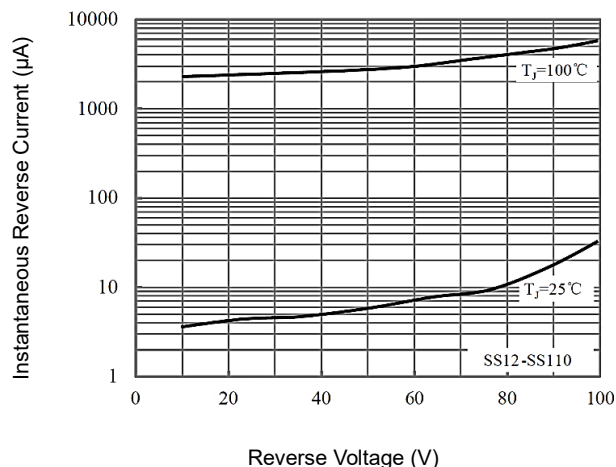
Typical Instantaneous Forward Characteristics



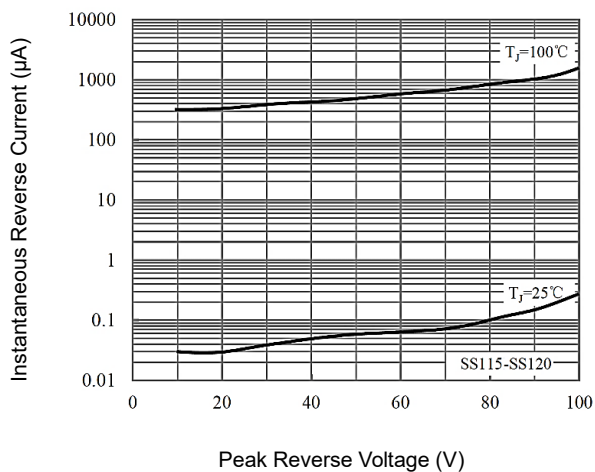
Maximum Non-Repetitive Forward Surge Current



Typical Reverse Characteristics



Typical Reverse Characteristics



*Specifications subject to change without notice