



SS12 THRU SS120

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

REVERSE VOLTAGE: 20 to 200 VOLTS
FORWARD CURRENT: 1.0 AMPERE

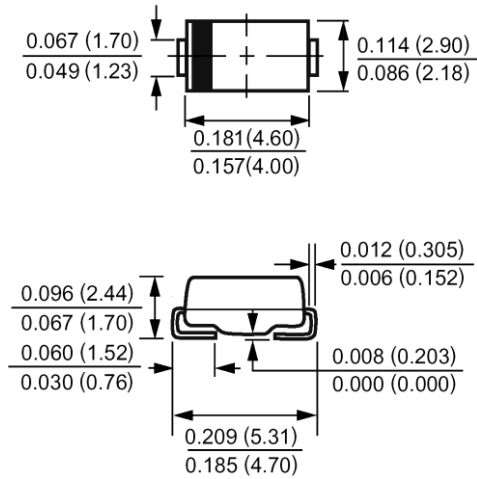
FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- For surface mounted applications
- High current capacity
- Built-in strain relief
- Low profile package
- Metal to silicon rectifier, majority carrier conduction
- High surge capacity
- Low power loss, high efficiency
- For use in low voltage high frequency inverters, free wheeling, and polarity protection applications
- Suffix "H" indicates Halogen-free parts, ex. SS12H

MECHANICAL DATA

Case : Molded plastic, DO-214AC(SMA)
 Terminals : Solder plated, solderable per MIL-STD-750, method 2026 guaranteed
 Polarity : Color band denotes cathode end

DO-214AC(SMA)



Dimensions in inches and (millimeters)

Maximum Ratings and Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

Parameter	Symbols	SS12	SS13	SS14	SS15	SS16	SS18	SS110	SS115	SS120	Units
Maximum Recerrent Peak Reverse Voltage	V_{RRM}	20	30	40	50	60	80	100	150	200	Volts
Maximum RMS Voltage	V_{RMS}	14	21	28	35	42	56	71	105	140	Volts
Maximum DC Blocking Voltage	V_{DC}	20	30	40	50	60	80	100	150	200	Volts
Maximum Average Forward Rectified Current at T_L (See Fig. 1)	$I_{(AV)}$	1.0									Amp
Peak Forward Surge Current, 8.3ms single half-sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	30.0									Amp
Maximum Forward Voltage at 1.0A (Note 1)	V_F	0.50	0.55	0.70	0.85	0.95					Volts
Maximum Reverse Current at $T_A=25^\circ C$ at Rated DC Blocking Voltage $T_A=125^\circ C$	I_R	0.5									mAmp
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	88.0									°C/W
	$R_{\theta JL}$	28.0									
Operating Junction Temperature Range	T_J	-65 to +125				-65 to +150					°C
Storage Temperature Range	T_{stg}	-65 to +150									°C

NOTES:

- 1- Pulse test: 300µs pulse width, 1% duty cycle
- 2- P.C.B. mounted with 0.2 x 0.2" (5.0 x 5.0mm) Copper Pad Areas



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RATINGS AND CHARACTERISTIC CURVES

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

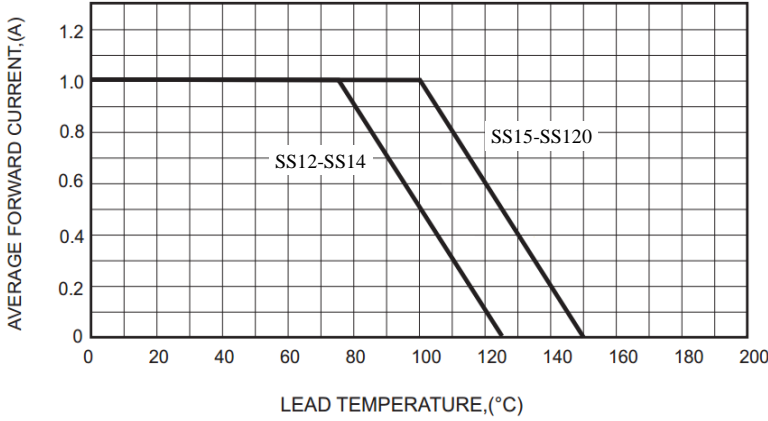


FIG.2-TYPICAL FORWARD CHARACTERISTICS

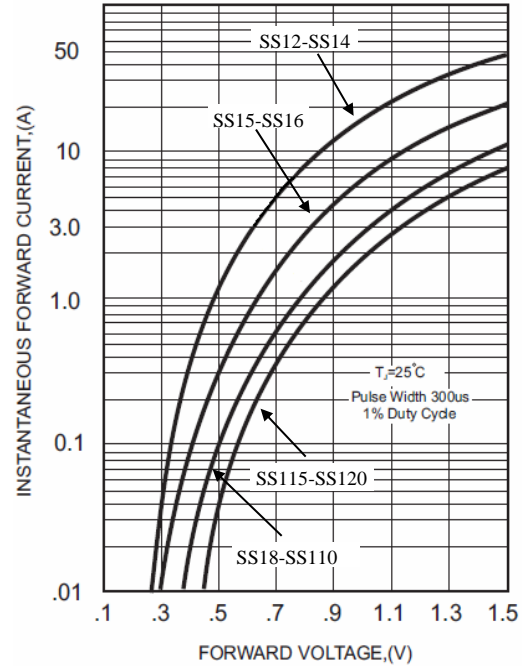


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

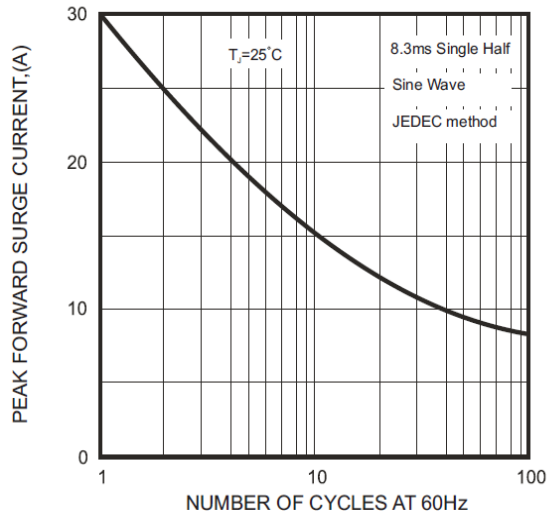


FIG.4-TYPICAL REVERSE CHARACTERISTICS

