



# SS12 THRU SS120

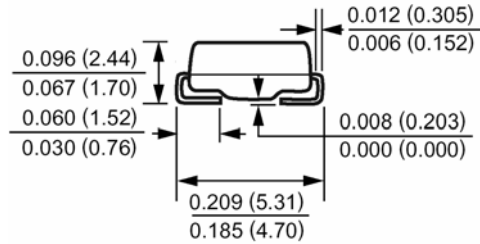
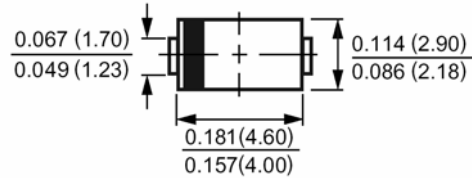
## SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

**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

DO-214AC(SMA)



Dimensions in inches and (millimeters)

### 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

### 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 Recurrent 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					10				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

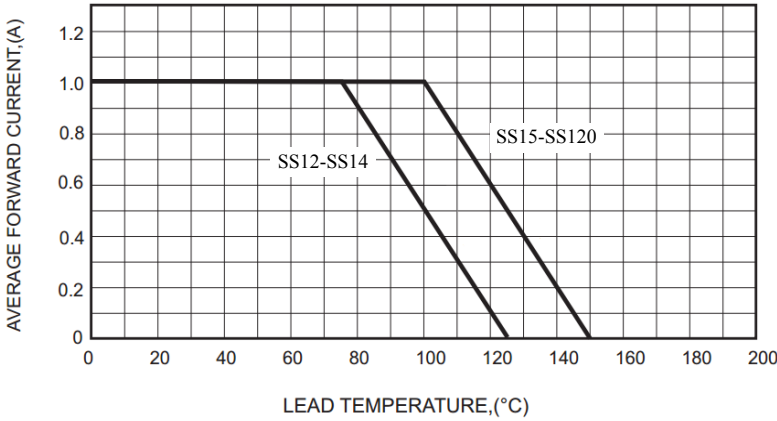


FIG.2-TYPICAL FORWARD CHARACTERISTICS

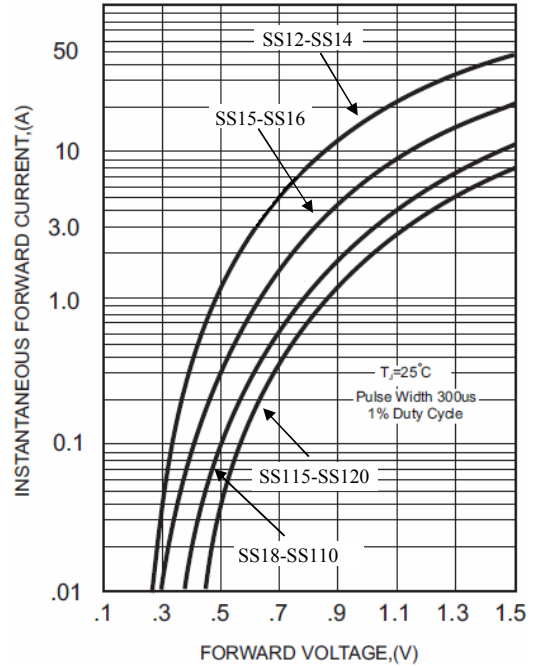


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

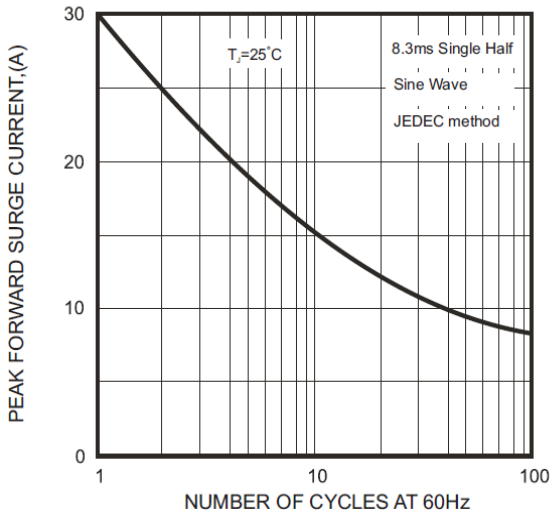


FIG.4- TYPICAL REVERSE CHARACTERISTICS

