

# SS14~SS120

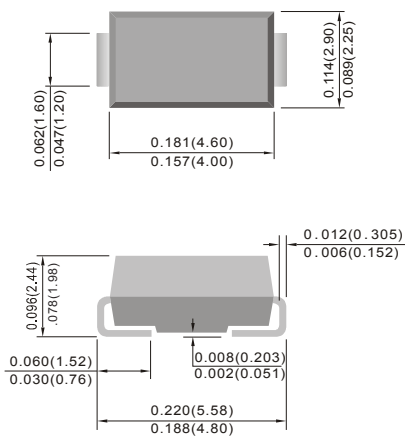
## SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

VOLTAGE 40 to 200 Volts CURRENT 1.0 Ampere



### SMA

Unit: inch (mm)



### FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-O
- For surface mounted applications
- Low profile package
- Built-in strain relief
- Metal to silicon rectifier. majority carrier conduction
- Low power loss, high efficiency
- High surge capacity
- High current capacity, low  $V_F$
- For use in low voltage high frequency inverters, free wheeling, and polarity protection applications.
- Lead free in comply with EU RoHS 2002/95/EC directives

### MECHANICAL DATA

- Case: JEDEC SMA molded plastic
- Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity: Color band denotes cathode end



### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.  
 Resistive or inductive load.

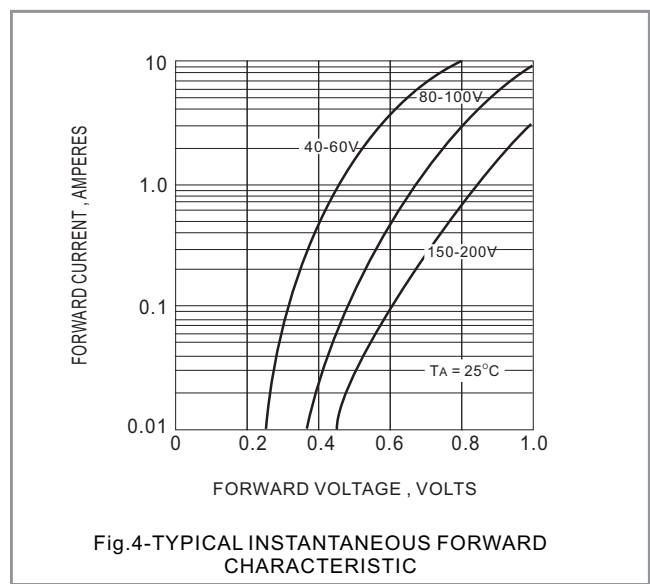
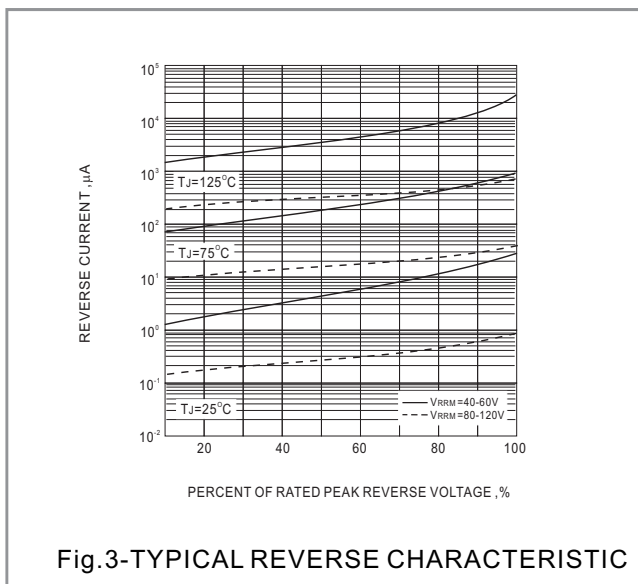
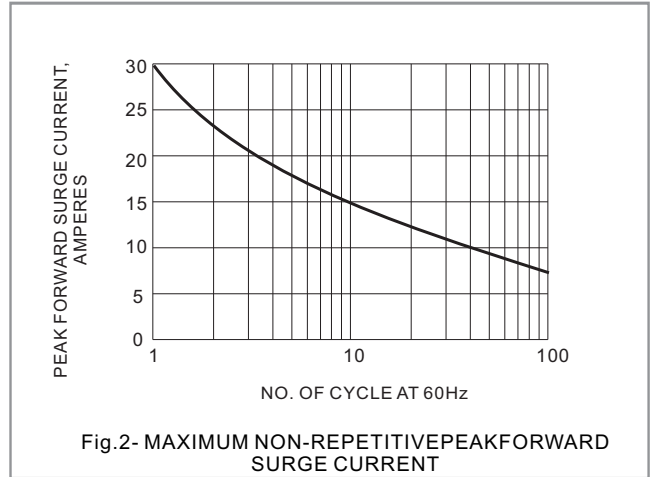
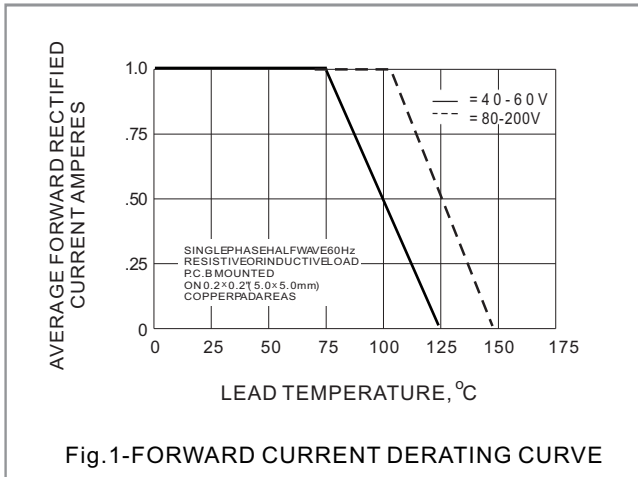
PARAMETER	SYMBOL	SS14	SS15	SS16	SS18	SS19	SS110	SS115	SS120	UNITS
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	40	50	60	80	90	100	150	200	V
Maximum RMS Voltage	$V_{RMS}$	28	35	42	56	63	70	105	140	V
Maximum DC Blocking Voltage	$V_{DC}$	40	50	60	80	90	100	150	200	V
Maximum Average Forward Current at $T_L=75^\circ\text{C}$	$I_{F(AV)}$	1								A
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	$I_{FSM}$	30								A
Maximum Forward Voltage at 1A (Note 1)	$V_F$	0.55		0.7		0.95			V	
Maximum DC Reverse Current at Rated DC Blocking Voltage	$I_R$					0.2				mA
						20				
Typical Thermal Resistance (Note 2)	$R_{\theta JL}$ $R_{\theta JA}$					28				$^\circ\text{C} / \text{W}$
						88				
Operating Junction Temperature Range	$T_J$	-55 to +125			-55 to +150				$^\circ\text{C}$	
Storage Temperature Range	$T_{STG}$	-55 to +125			-55 to +150				$^\circ\text{C}$	

NOTES:

1. Pulse Test with PW =300µsec, 1% Duty Cycle.
2. Mounted on P.C. Board with 5.0mm<sup>2</sup> (.013mm thick) copper pad areas.

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## RATING AND CHARACTERISTIC CURVES



The cruve graph is for reference only, can't be the basis for judgment