

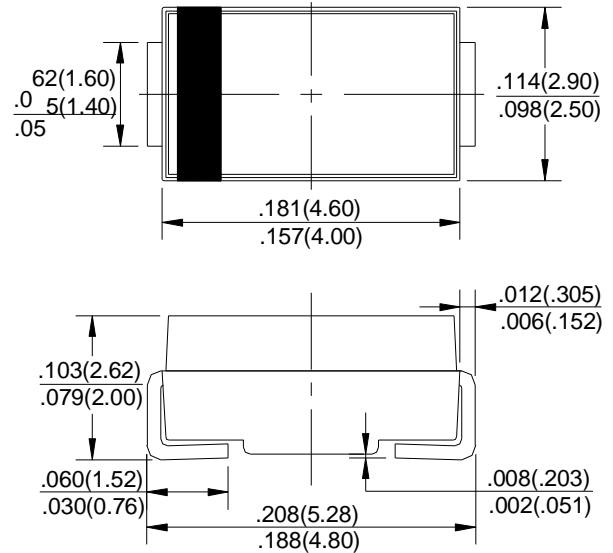
CURRENT 1.0 Ampere  
 VOLTAGE RANG 20 to 200 Volts

## SS12A THRU SS120A

### FEATURES

- ◆ The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- ◆ For surface mounted applications
- ◆ Metal silicon junction, majority carrier conduction
- ◆ Low power loss, high efficiency
- ◆ Built-in strain relief, ideal for automated placement
- ◆ High forward surge current capability
- ◆ High temperature soldering guaranteed: 250°C/10 seconds at terminals

### DO-214AC (SMA)



Dimensions in inches and (millimeters)

### MECHANICAL DATA

Case: JEDEC DO-214AC molded plastic body  
 Terminals: leads solderable per MIL-STD-750, Method 2026  
 Polarity: Color band denotes cathode end  
 Mounting Position: Any  
 Weight: 0.002 ounce, 0.064 grams

### 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 current derate by 20%.

Catalog Number	SYMBOLS	SS12	SS13	SS14	SS15	SS16	SS18	SS110	SS115	SS120	UNITS	
Maximum repetitive 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	70	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									Amps	
Maximum instantaneous forward voltage at 1.0A	$V_F$	0.45	0.55	0.70		0.85		0.95			Volts	
Maximum DC reverse current $T_A=25^\circ\text{C}$ at rated DC blocking voltage $T_A=100^\circ\text{C}$	$I_R$	0.5						0.2			mA	
		10.0				5.0		2.0				
Typical junction capacitance (NOTE 1)	$C_J$	110			90						pF	
Typical thermal resistance (NOTE 2)	$R_{\theta JA}$	88.0									°C/W	
Operating junction temperature range	$T_J$	-50 to +125					-50 to +150					°C
Storage temperature range	$T_{STG}$	-50 to +150									°C	

Note: 1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.  
 2. P.C.B. mounted with 0.2x0.2" (5.0x5.0mm) copper pad areas

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**RATING AND CHARACTERISTIC CURVES SS12 Thru SS120**

