

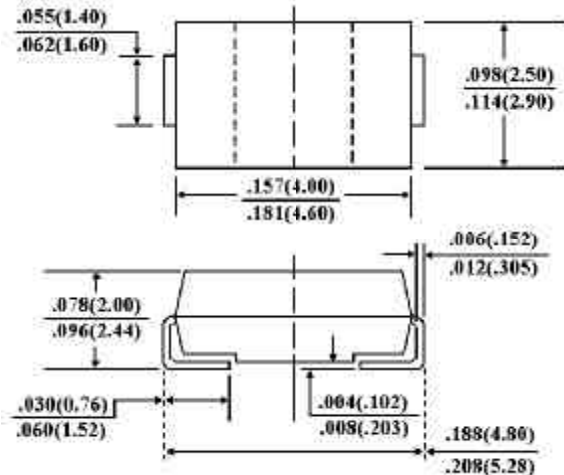
## FEATURES

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 current capability, low  $V_F$   
High surge capacity  
For use in low voltage high frequency inverters,  
free wheeling, and polarity protection applications  
High temperature soldering:  
260  $\phi$ J/10 seconds at terminals

## MECHANICAL DATA

Case: JEDEC DO-214AC molded plastic  
Terminals: Solder plated, solderable per MIL-STD-750,  
Method 2026  
Polarity: Color band denotes cathode  
Standard packaging: 12mm tape (EIA-481)  
Weight: 0.002 ounce, 0.064 gram

## SMA/DO-214AC



Dimensions in inches and (millimeters)

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25  $\phi$ J ambient temperature unless otherwise specified.

Resistive or inductive load.

	SYMBOLS	SS12	SS13	SS14	SS15	SS16	SS18	SS19	S100	UNITS
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	20	30	40	50	60	80	90	100	Volts
Maximum RMS Voltage	$V_{RMS}$	14	21	28	35	42	56	64	71	Volts
Maximum DC Blocking Voltage	$V_{DC}$	20	30	40	50	60	80	90	100	Volts
Maximum Average Forward Rectified Current at $T_J$ (See Figure 1)	$I_{(AV)}$	1.0								Amps
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 (Note 1)	$V_F$	0.5		0.70		0.85			Volts	
Maximum DC Reverse Current $T_A=25 \phi$ J(Note 1)	$I_R$	0.5								mA
At Rated DC Blocking Voltage $T_A=100 \phi$ J		20.0								
Maximum Thermal Resistance (Note 2)	$R_{\theta KJL}$ $R_{\theta KJA}$	28 88								$\phi$ J/W
Operating Junction Temperature Range	$T_J$	-50 to +125								$\phi$ J
Storage Temperature Range	$T_{STG}$	-50 to +150								$\phi$ J

## NOTES:

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

RATING AND CHARACTERISTIC CURVES

SS12 THRU S100

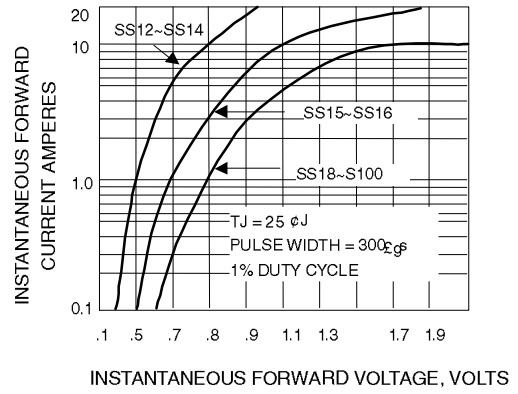
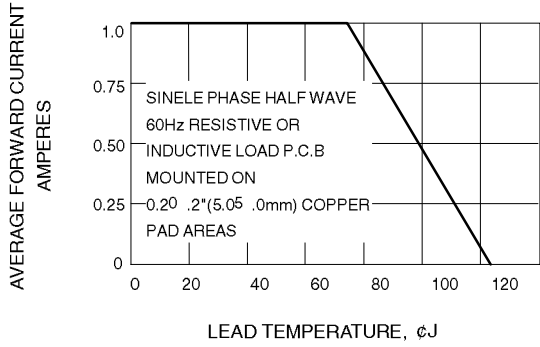


Fig. 1-FORWARD CURRENT DERATING CURVEE

Fig. 2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

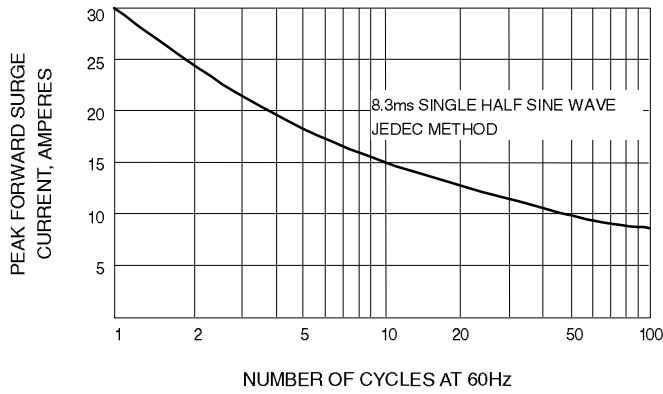


Fig. 3-MAXIMUM NON-REPETITIVE SURGE CURRENT

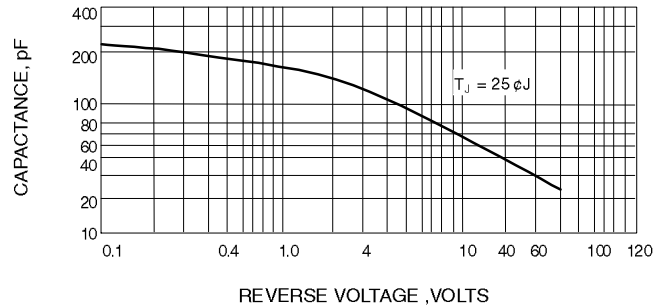


Fig. 4-TYPICAL JUNCTION CAPACITANCE