



## SS52~SS510

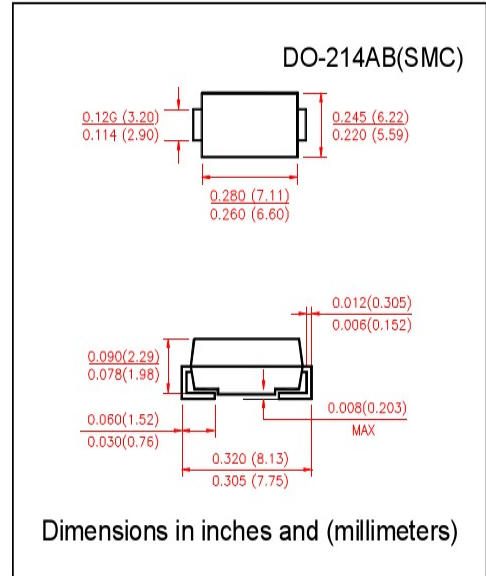
### SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER VOLTAGE- 20 to 100 Volts CURRENT- 5.0 Amperes

#### 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
- For use in low voltage high frequency inverters, free wheeling, and polarity protection applications
- High temperature soldering guaranteed: 260°C /10 seconds at terminals

#### MECHANICAL DATA

Case: JEDEC DO-214AA molded plastic  
Terminals:Solder plated, solderable per MIL-STD-750, Method 2026  
Polarity: Color band denotes positive end (cathode)  
Standard packaging: 16mm tape (EIA-481)  
Weight: 0.007 ounce, 0.21 gram



#### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

	SYMBOLS	SS52	SS53	SS54	SS55	SS56	SS58	SS59	SS510	UNITS	
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	20.0	30.0	40.0	50.0	60.0	80.0	90.0	100.0	V	
Maximum RMS Voltage	$V_{RMS}$	14.0	21.0	28.0	35.0	42.0	56.0	63.0	70.0	V	
Maximum DC Blocking Voltage	$V_{DC}$	20.0	30.0	40.0	50.0	60.0	80.0	90.0	100.0	V	
Maximum Average Forward Rectified Current at $T_L$ (See figure 1)	$I_{(AV)}$	5.0								A	
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	$I_{FSM}$	120.0								A	
Maximum Instantaneous Forward Voltage at 5.0A (Note 1)	$V_F$	0.50		0.75		0.85				V	
Maximum DC Reverse Current (Note 1) $T_a=25^\circ\text{C}$ at Rated DC Blocking Voltage $T_a=100^\circ\text{C}$	$I_R$					0.5		20.0			mA
Maximum Thermal Resistance(Note 2)	$R_{\theta JL}$ $R_{\theta JA}$					17.0		55.0			$^\circ\text{C}/\text{W}$
Operating and Storage Temperature Range $T_J$	$T_J$					-50 to +125				$^\circ\text{C}$	
Storage Temperature Range	$T_{STG}$					-55 to +150				$^\circ\text{C}$	

#### NOTES:

- A. Pulse Test with  $PW=300\mu\text{sec}$ , 2% Duty Cycle.  
B. Mounted on P.C. Board with  $14\text{mm}^2$  (.013mm thick) copper pad areas.



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#### RATING AND CHARACTERISTIC CURVES

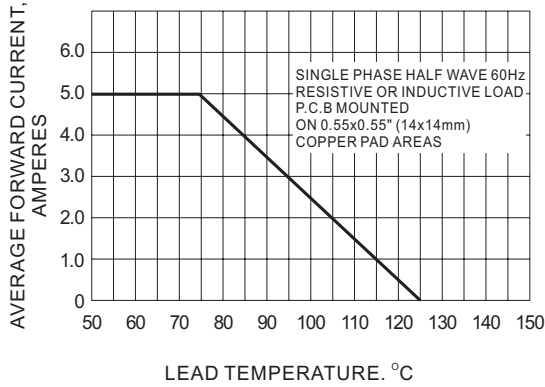


Fig.1- FORWARD CURRENT DERATING CURVE

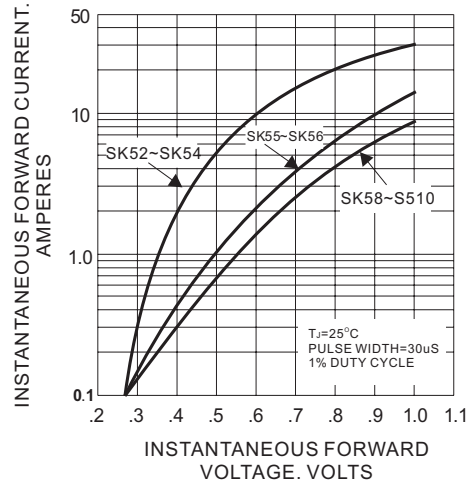


Fig.2- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

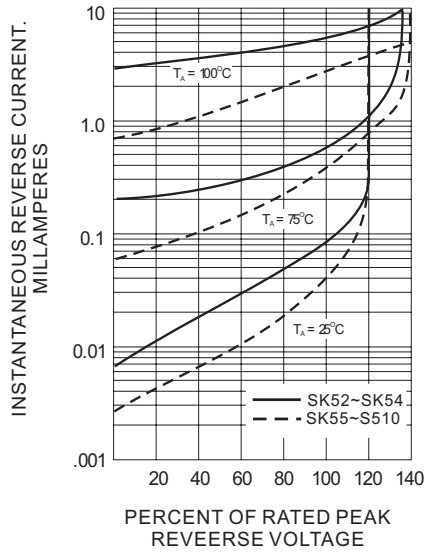


Fig.3- TYPICAL REVERSE CHARACTERISTICS

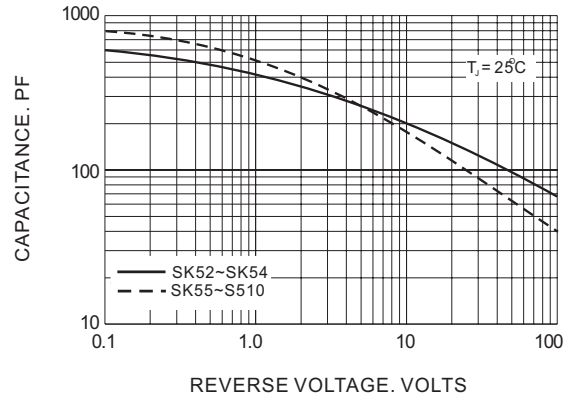


Fig.4- TYPICAL JUNCTION CAPACITANCE

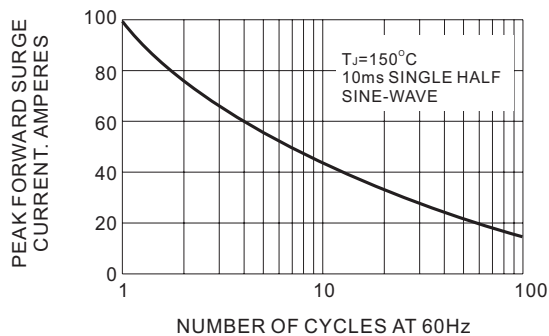


Fig.5- MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT