



YEA SHIN TECHNOLOGY CO., LTD

SK52 THRU SK520

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

VOLTAGE- 20 to 200 Volts CURRENT- 5.0 Amperes



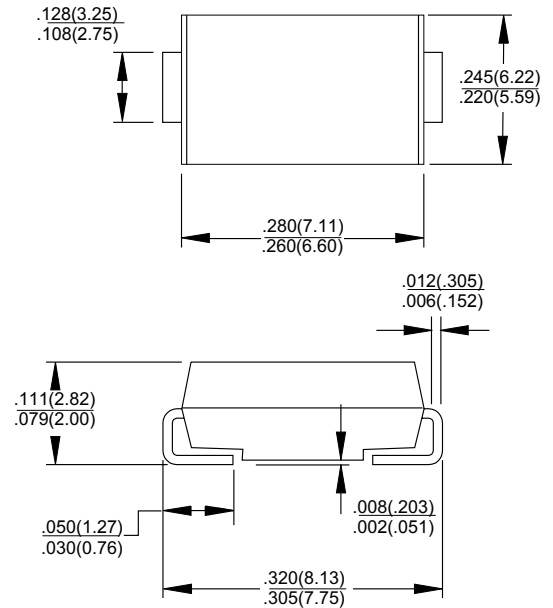
FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- 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-214AB 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

SMC/DO-214AB



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

	SYMBOLS	SK52	SK53	SK54	SK55	SK56	SK58	SK59	SK510	SK515	SK520	UNITS	
Marking Code		SK52	SK53	SK54	SK55	SK56	SK58	SK59	SK510	SK515	SK520		
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	20.0	30.0	40.0	50.0	60.0	80.0	90.0	100.0	150.0	200.0	V	
Maximum RMS Voltage	V _{RMS}	14.0	21.0	28.0	35.0	42.0	56.0	63.0	70.0	105.0	140.0	V	
Maximum DC Blocking Voltage	V _{DC}	20.0	30.0	40.0	50.0	60.0	80.0	90.0	100.0	150.0	200.0	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}	100.0										A	
Maximum Instantaneous Forward Voltage at 3.0A (Note 1)	V _F	0.50		0.70			0.85		0.90	0.92		V	
Maximum DC Reverse Current (Note 1) Ta= 25°C at Rated DC Blocking Voltage Ta=100°C	I _R						0.5		10.0				mA
Maximum Thermal Resistance(Note 2)	RθJL RθJA						17.0		55.0				°C/W
Operating Temperature Range	T _J	-55 to +150										°C	
Storage Temperature Range	T _{STG}	-55 to +150										°C	

NOTES:

- A.Pulse Test with PW =300µsec, 2% Duty Cycle.
- B.Mounted on P.C. Board with 14mm² (.013mm thick) copper pad areas.

DEVICE CHARACTERISTICS

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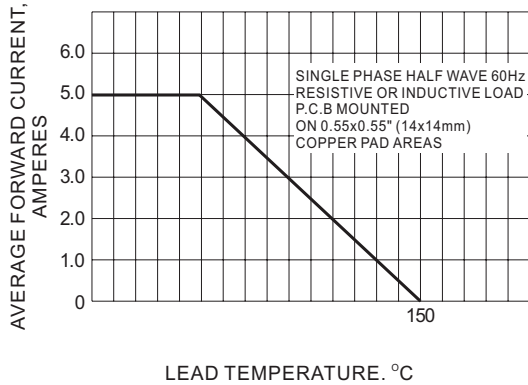


Fig.1- FORWARD CURRENT DERATING CURVE

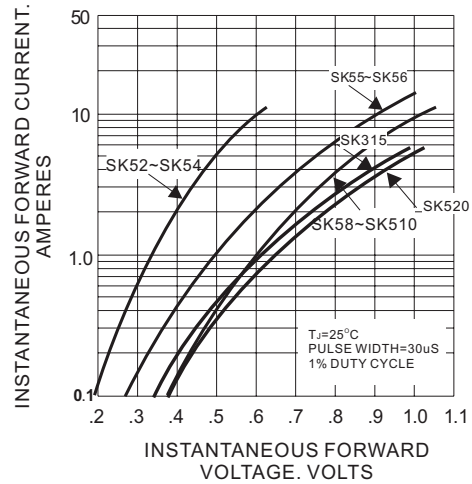


Fig.2- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

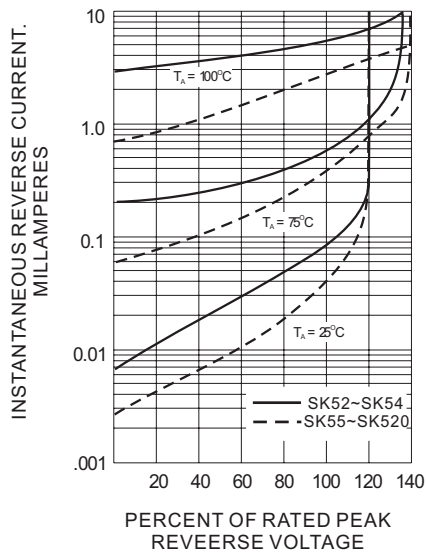


Fig.3- TYPICAL REVERSE CHARACTERISTICS

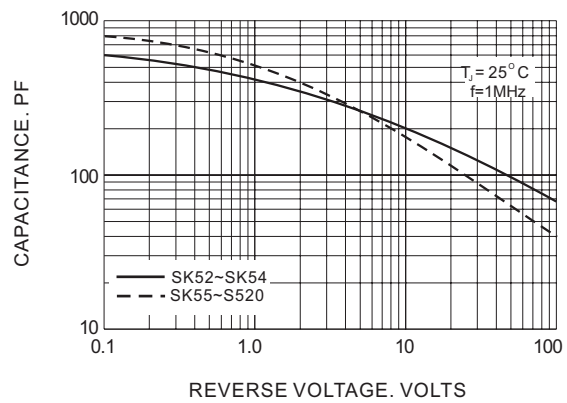


Fig.4- TYPICAL JUNCTION CAPACITANCE

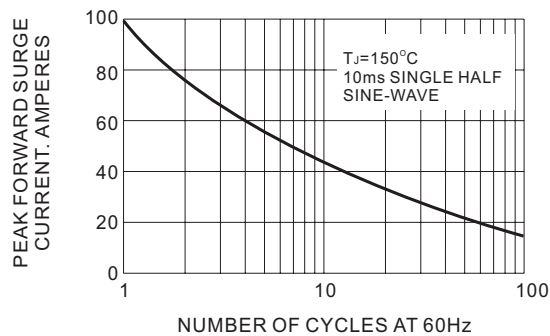


Fig.5- MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT