

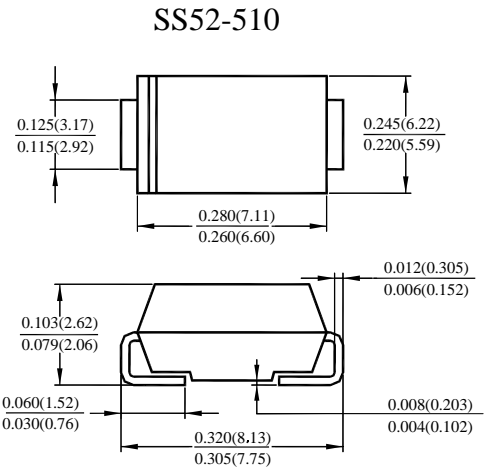
SCHOTTKY DIODES

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-214AC 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)



Dimensions in inches and (millimeters)
 DO-214AC (SMA)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified. Single phase, half wave, 60 Hz, resistive or inductive load. For capacitive load, derate current by 20%.

	SYMBOLS	SS52	SS53	SS54	SS55	SS56	SS58	SS59	S510	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}	100.0								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) $T_a= 25^{\circ}C$ at Rated DC Blocking Voltage $T_a=100^{\circ}C$	I_R	0.5 20.0								mA
Maximum Thermal Resistance(Note 2)	$R_{\theta JL}$ $R_{\theta JA}$	17.0 55.0								$^{\circ}C/W$
Operating and Storage Temperature Range T_J	T_J	-50 to +125								$^{\circ}C$
Storage Temperature Range	T_{STG}	-55 to +150								$^{\circ}C$

SS52-510 Typical Characteristics

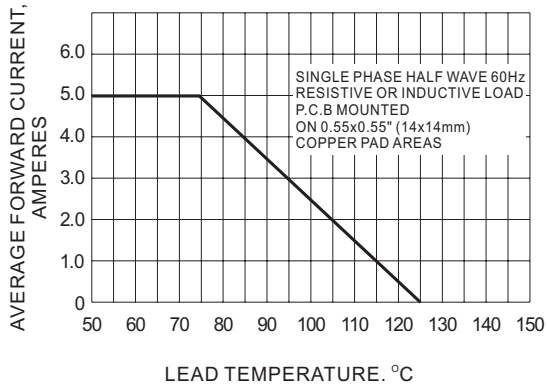


Fig.1- FORWARD CURRENT DERATING CURVE

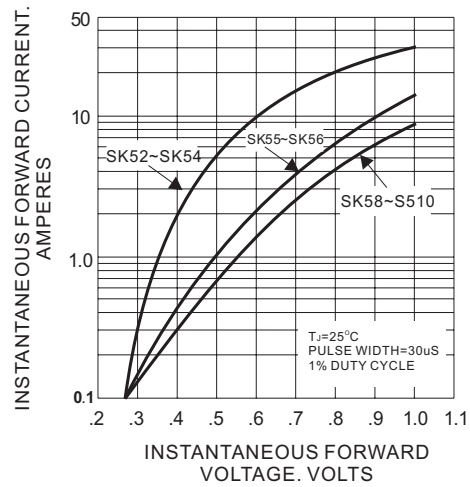


Fig.2- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

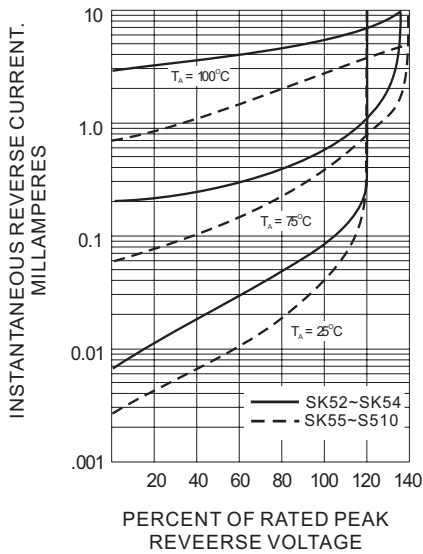


Fig.3- TYPICAL REVERSE CHARACTERISTICS

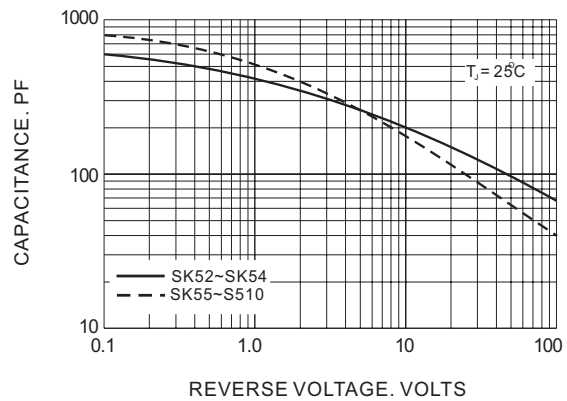


Fig.4- TYPICAL JUNCTION CAPACITANCE

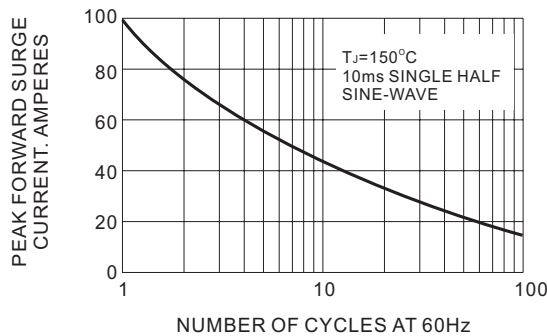


Fig.5- MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT