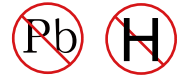




YEA SHIN TECHNOLOGY CO., LTD

SK82 THRU SK810

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER



VOLTAGE- 20 to 100 Volts CURRENT- 8.0 Amperes

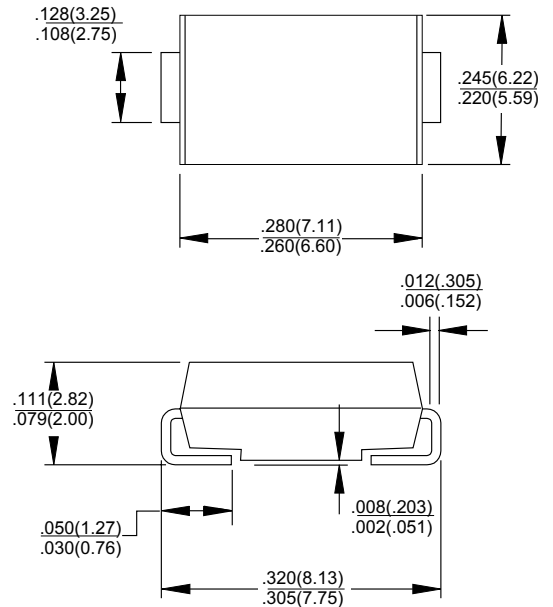
FEATURES

- 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
- High temperature soldering : 260°C / 10 seconds at terminals
- Pb free product at available : 99% Sn above meet RoHS environment substance directive request
- AEC-Q101 qualified

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	SK82	SK83	SK84	SK85	SK86	SK88	SK89	SK810	UNITS
Maximum Recurrent Peak Reverse Voltage	VRRM	20.0	30.0	40.0	50.0	60.0	80.0	90.0	100.0	V
Maximum RMS Voltage	VRMS	14.0	21.0	28.0	35.0	42.0	56.0	63.0	70.0	V
Maximum DC Blocking Voltage	VDC	20.0	30.0	40.0	50.0	60.0	80.0	90.0	100.0	V
Maximum Average Forward Rectified Current at TL (See figure 1)	I(AV)	8								A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	IFSM	200.0								A
Maximum Instantaneous Forward Voltage at 8.0A (Note 1)	VF	0.55		0.75		0.85				V
Maximum DC Reverse Current (Note 1) Ta= 25°C at Rated DC Blocking Voltage Ta=100°C	IR					1.0				mA
Maximum Thermal Resistance(Note 2)	RθJL					17.0				°C/W
	RθJA					55.0				
Operating and Storage Temperature Range TJ	TJ					-50 to +150				°C
Storage Temperature Range	TSTG					-55 to +150				°C

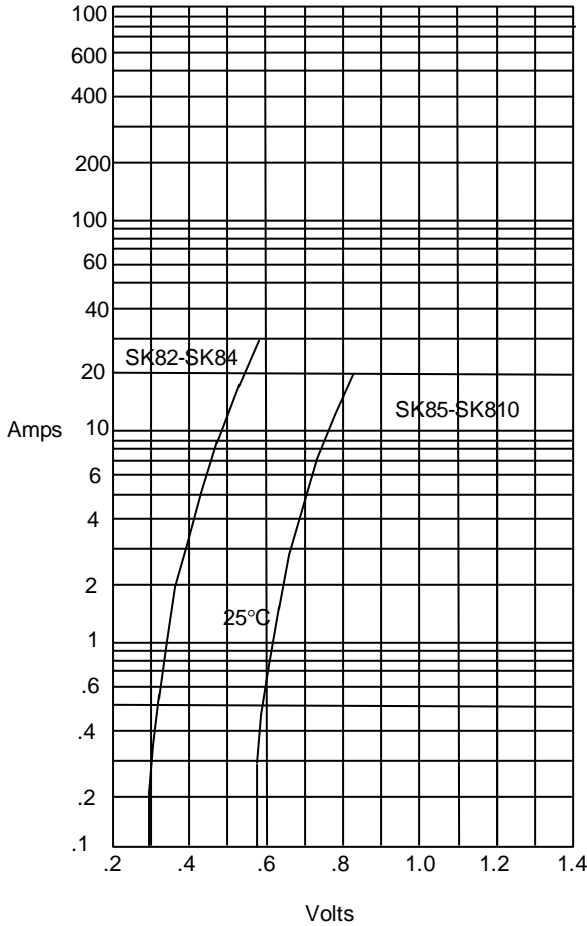
NOTES:

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

DEVICE CHARACTERISTICS

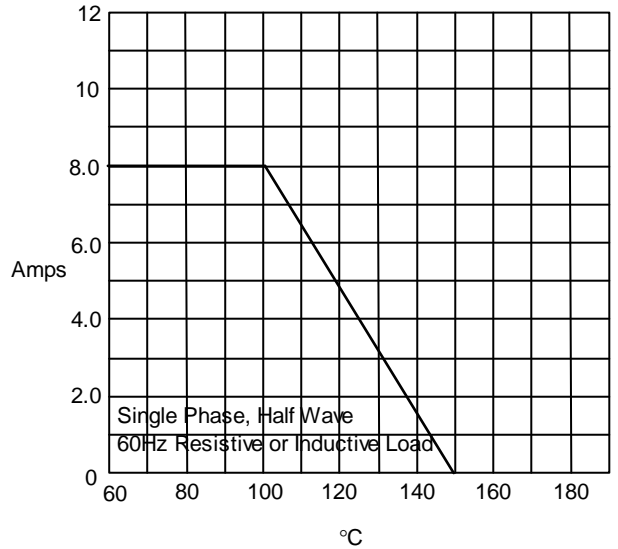
SK82 THRU SK810

Figure 1
Typical Forward Characteristics



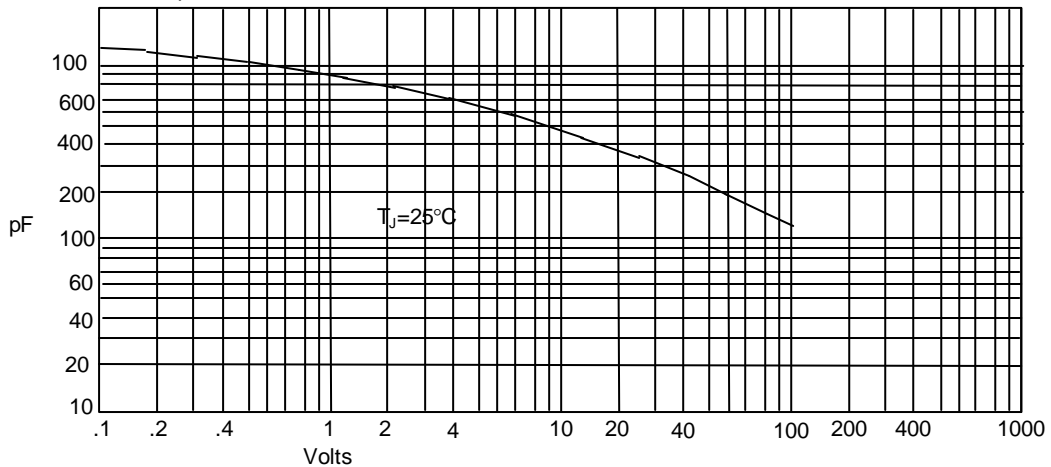
Instantaneous Forward Current - Amperes *versus*
Instantaneous Forward Voltage - Volts

Figure 2
Forward Derating Curve



Average Forward Rectified Current - Amperes
versus

Figure 3
Junction Capacitance

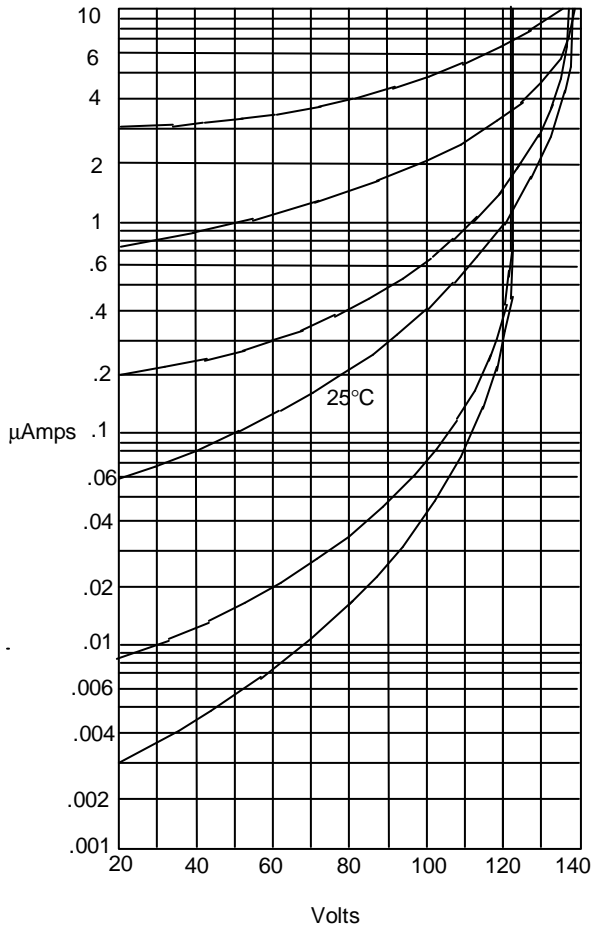


Junction Capacitance - pF *versus*
Reverse Voltage - Volts

RATING AND CHARACTERISTIC CURVES

SK82 THRU SK810

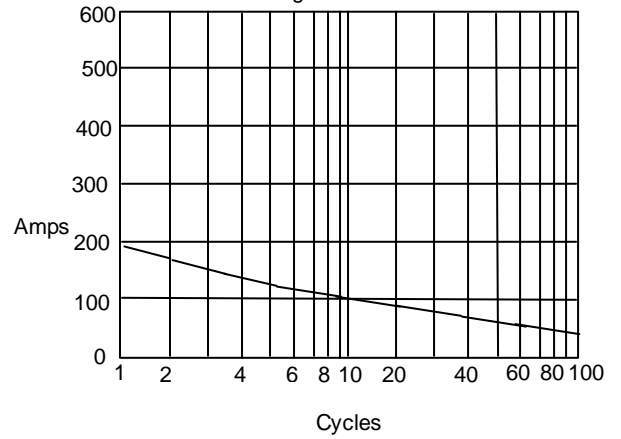
Figure 4
Typical Reverse Characteristics



Instantaneous Reverse Leakage Current - MicroAmperes *versus*
Percent Of Rated Peak Reverse Voltage - Volts

SK82-SK84 ———
SK85-SK810 ———

Figure 5
Peak Forward Surge Current



Peak Forward Surge Current - Amperes *versus*
Number Of Cycles At 60Hz - Cycles