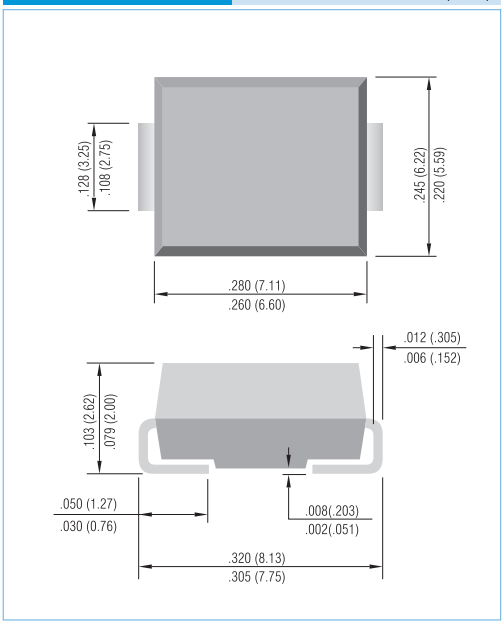
SK52~SK56

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

VOLTAGE 20 to 60 Volts **CURRENT** 5.0 Amperes

SMC / DO-214AB Unit: inch (mm)

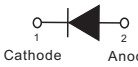


FEATURES

- 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
- Lead free in comply with EU RoHS 2002/95/EC directives

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: 0.0082 ounce, 0.2325 gram



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

PARAMETER	SYMBOL	SK52	SK53	SK54	SK55	SK56	UNITS
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	20	30	40	50	60	V
Maximum RMS Voltage	V_{RMS}	14	21	28	35	42	V
Maximum DC Blocking Voltage	V_{DC}	20	30	40	50	60	V
Maximum Average Forward Rectified Current at T_L =75°C	$I_{F(AV)}$	5.0					A
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load(JEDEC method)	I_{FSM}	100					A
Maximum Forward Voltage at 5.0A (Note 1)	V_F	0.55			0.75		V
Maximum DC Reverse Current T_J=25°C at Rated DC Blocking Voltage T_J=100°C	I_R	0.2 20			0.1 20		mA
Typical Thermal Resistance (Note 2)	$R_{\theta JL}$ $R_{\theta JA}$	17.0 55.0					°C / W
Operating Junction Temperature Range	T_J	-55 to +125		-55 to +150			°C
Storage Temperature Range	T_{STG}	-55 to +150					°C

NOTES:
1. Pulse Test with PW =300μsec, 1% Duty Cycle.
2. Mounted on P.C. Board with 14mm^2 (.013mm thick) copper pad areas.

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RATING AND CHARACTERISTIC CURVES

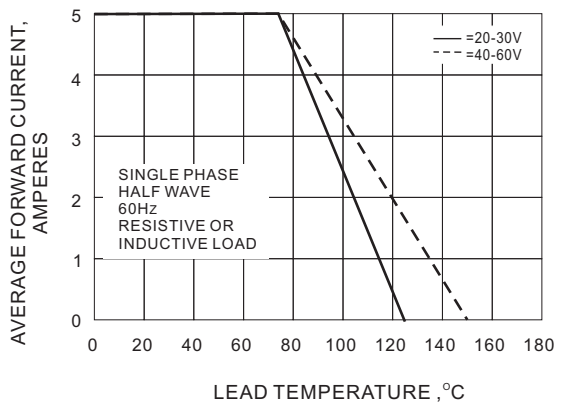

Fig.1- FORWARD CURRENT DERATING CURVE

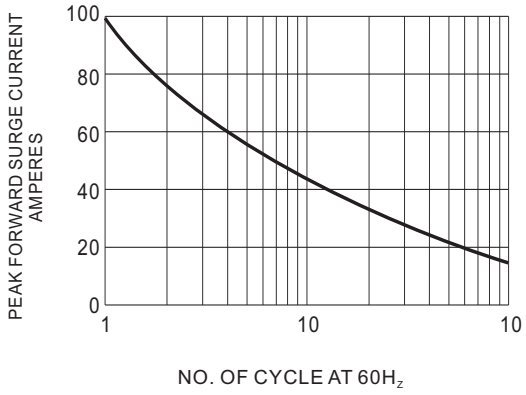

Fig.2 -MAXIMUM NON-REPETITIVE SURGE CURRENT

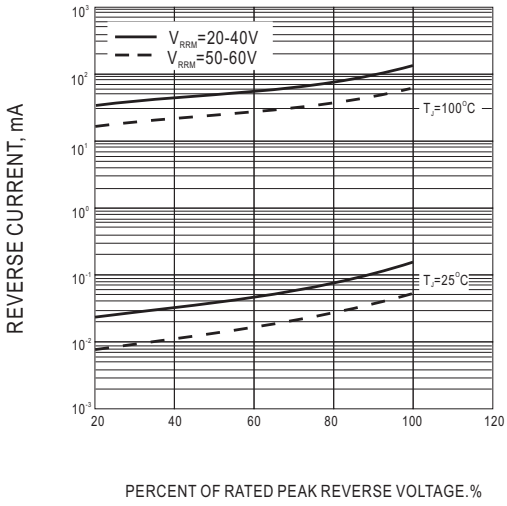

Fig.3-TYPICAL REVERSE CHARACTERISTIC

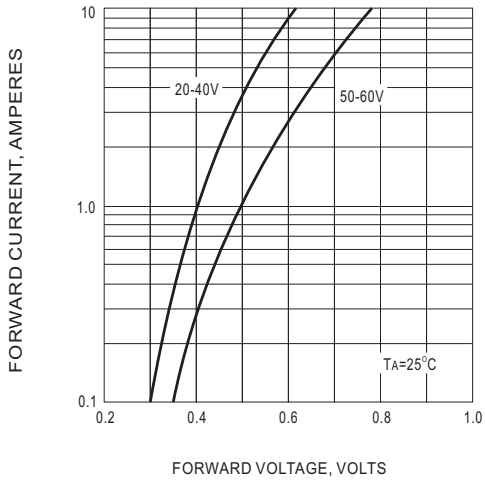

Fig.4- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC

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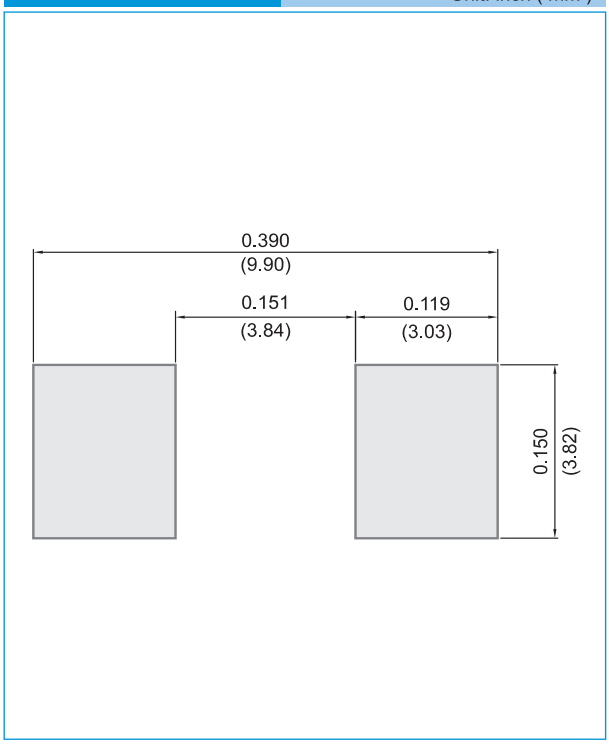
MOUNTING PAD LAYOUT

SMC Unit: inch (mm)



ORDER INFORMATION

- Packing information

  T/R - 3K per 13" plastic Reel

  T/R - 0.5Kper 7" plastic Reel

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