

SK54L~SK56L

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

VOLTAGE 40~60 Volt **CURRENT** 5 Ampere

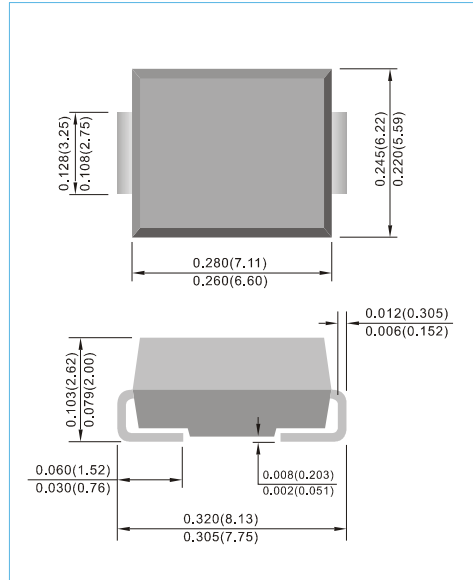
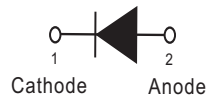
SMC / DO-214AB Unit : inch(mm)

FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-O
- For surface mounted applications in order to optimize board space
- Low power loss, high efficiency
- High surge capacity
- Lead free in compliance with EU RoHS 2.0
- Green molding compound as per IEC 61249 standard

MECHANICAL DATA

- Case: JEDEC DO-214AB molded plastic
- Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity: Color band denotes cathode end
- Standard packaging: 16mm tape (EIA-481)
- Weight: 0.0082 ounces, 0.2325 grams



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

PARAMETER	SYMBOL	SK54L	SK56L	UNITS
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	40	60	V
Maximum RMS Voltage	V_{RMS}	28	42	V
Maximum DC Blocking Voltage	V_{DC}	40	60	V
Maximum Average Forward Rectified Current at $T_c=120^{\circ}\text{C}$	$I_{F(AV)}$	5		A
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	100		A
Maximum Forward Voltage at 5A (Note 1)	V_F	0.44	0.5	V
Maximum DC Reverse Current at Rated DC Blocking Voltage $T_J=25^{\circ}\text{C}$ $T_J=100^{\circ}\text{C}$	I_R	0.5 50		mA
Typical Thermal Resistance (Note 2)	$R_{\theta JL}$	17		$^{\circ}\text{C} / \text{W}$
Operating Junction Temperature Range	T_J	-55 to +150		$^{\circ}\text{C}$
Storage Temperature Range	T_{STG}	-55 to +150		$^{\circ}\text{C}$

NOTES:

1. Pulse Test with $PW=300\mu\text{sec}$, 1% Duty Cycle.
2. Mounted on P.C. Board with 14mm^2 (.013mm thick) copper pad areas.

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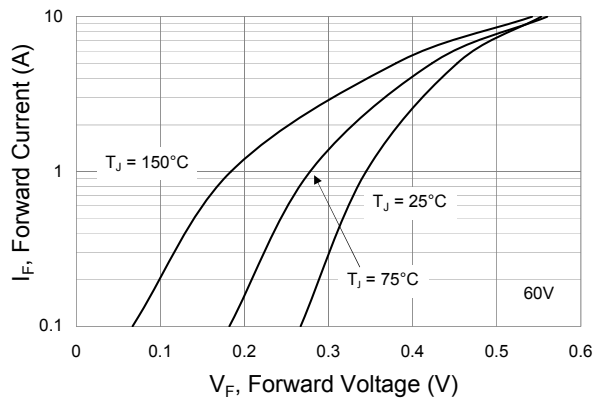


Fig.1 Typical Forward Characteristics

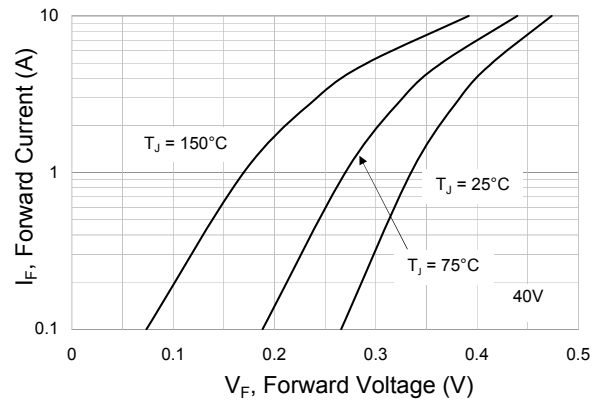


Fig.2 Typical Forward Characteristics

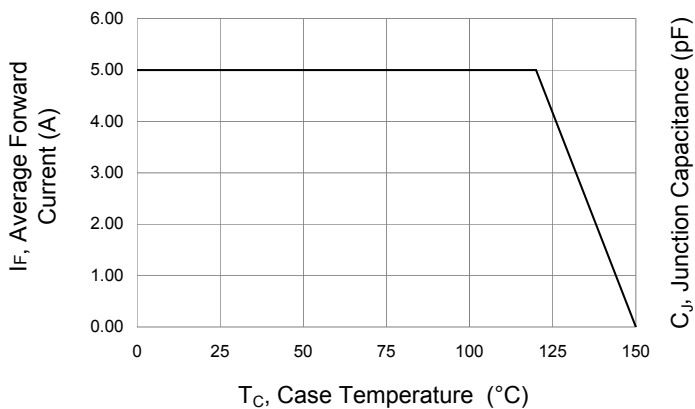


Fig.3 Forward Current Derating Curve

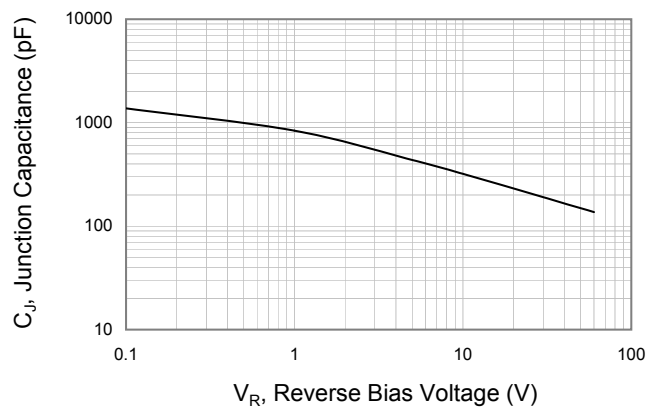


Fig.4 Typical Junction Capacitance under Bias

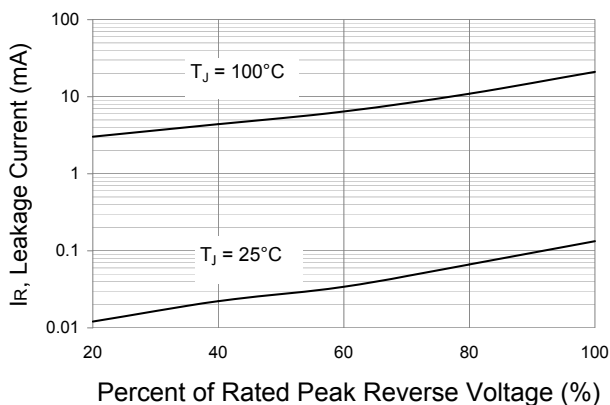


Fig.5 Typical Reverse Characteristics

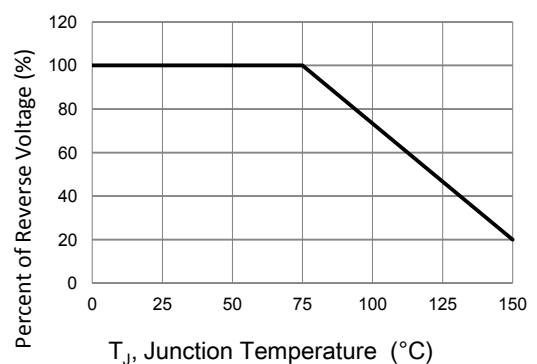


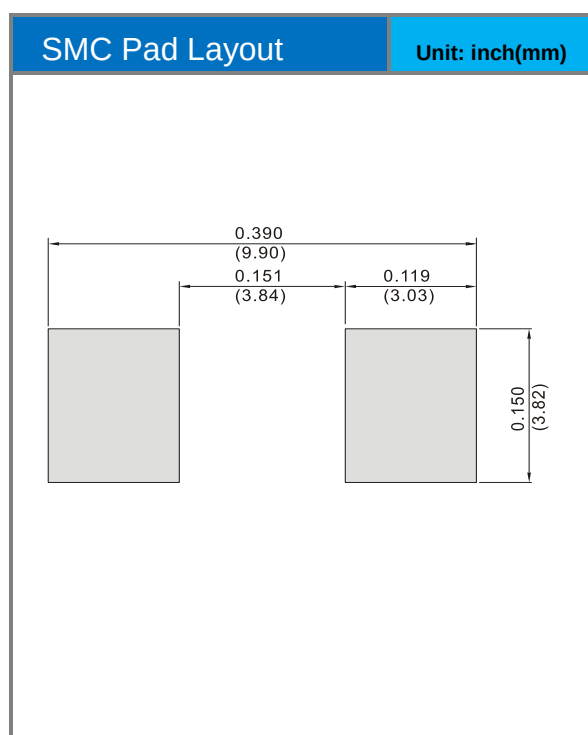
Fig.6 Operating Temperature Derating Curve

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Product and Packing Information

Part No.	Package Type	Packing Type	Marking
SK54L	SMC	0.8K pcs / 7" reel	SK54L
SK54L	SMC	3K pcs / 13" reel	SK54L
SK56L	SMC	0.8K pcs / 7" reel	SK56L
SK56L	SMC	3K pcs / 13" reel	SK56L

Mounting Pad Layout



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