SK54L-EVL ~ SK56L-EVL

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

VENKEL LTD.

PART NUMBER	PACKAGE	VOLTAGE	CURRENT	CIRCUIT CONFIGURATION
SK54L-□VL ~ SK56L-□VL E= 7" Embossed T&R (800) U = 13" Embossed T&R (3,000)	SMC/DO-214AB	40V to 60V	5A	SINGLE

FEATURES:

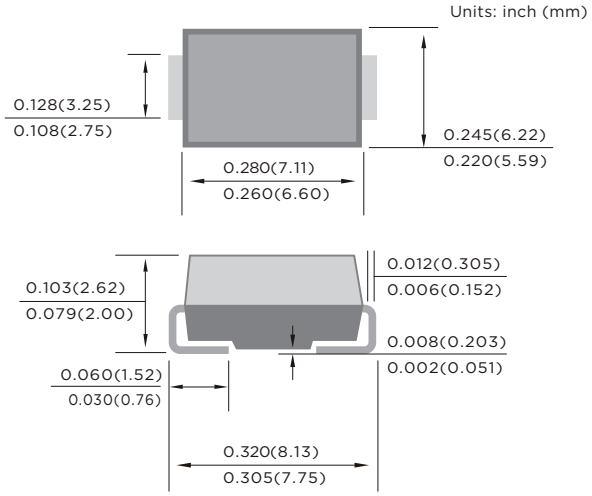
- Plastic package has Underwriters Laboratory Flammability Classification 94V-O
- For surface mounted applications in order to optimize board space
- Low power loss, high efficiency
- High surge capacity

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

Cathode Anode

SMC/DO-214AB



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

T_A=25˚C unless otherwise noted. Resistive or inductive load.

PARAMETER		SYMBOL	SK54L-EVL	SK56L-EVL	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 @ T_C=120°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	0.50	V
Maximum DC Reverse Current at Rated DC Blocking Voltage	T_J=25˚C T_J=100˚C	I_R	0.5 50		mA
Typical Thermal Resistance (Note 2)		$R_{\theta JL}$	17		˚C/W
Operating Junction Temperature Range		T_J	-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 14mm² (0.013mm thick) copper pad areas.

ENVIRONMENTAL INFORMATION

RoHS Status
10 of 10 Compliant

REACH Status
Compliant

Halogen Status
Halogen Free

Conflict Mineral Status
Conflict Mineral Free

Moisture Sensitivity Level (MSL)
1

TYPICAL CHARACTERISTIC CURVES

Fig.1 Typical Forward Characteristics

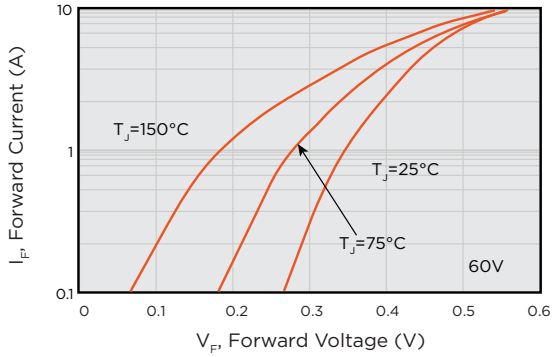


Fig.2 Typical Forward Characteristics

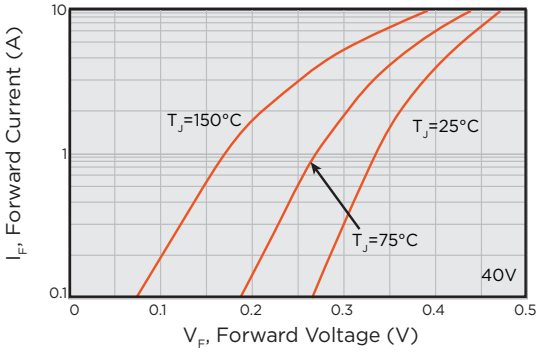


Fig.3 Forward Current Derating Curve

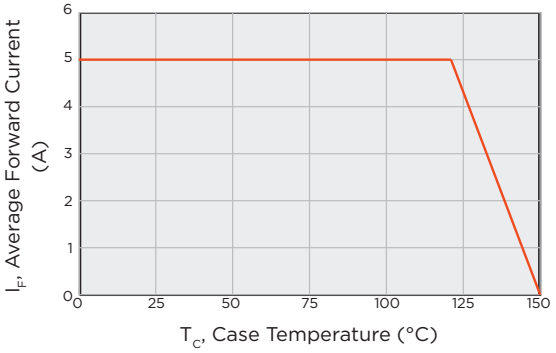


Fig.4 Typical Junction Capacitance under Bias

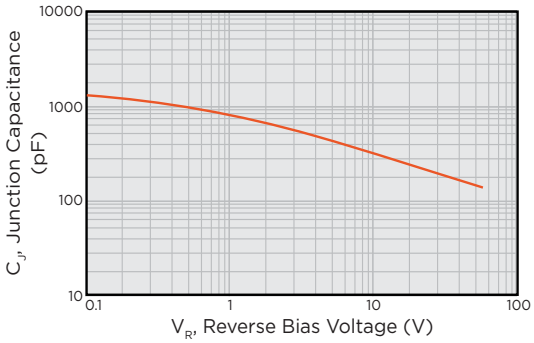


Fig.5 Typical Reverse Characteristics

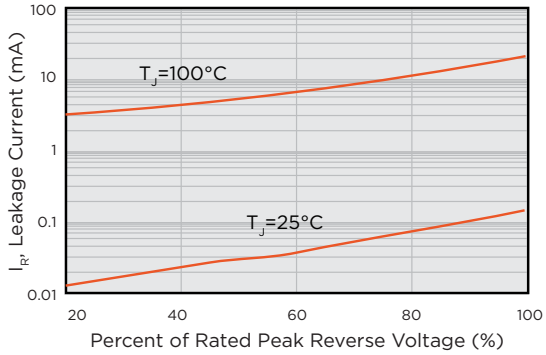
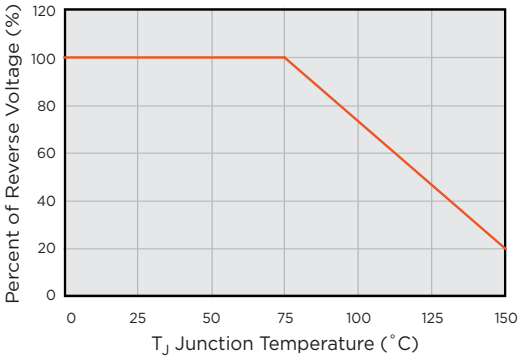
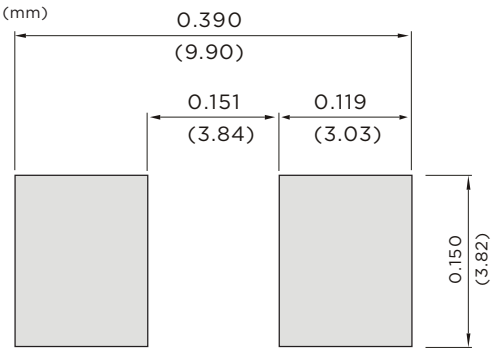


Fig.6 Operating Temperature Derating Curve



MOUNTING PAD LAYOUT

Units: inch (mm)