

SK54BL

LOW VF SCHOTTKY RECTIFIER

VOLTAGE 40 Volts **CURRENT** 5 Amperes

FEATURES

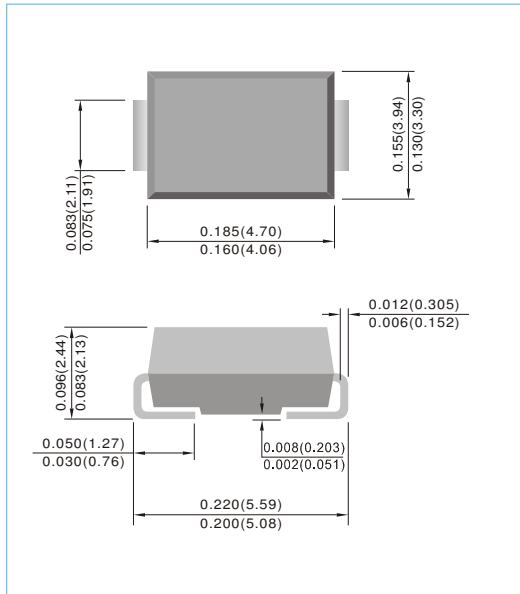
- Plastic package has Underwriters Laboratory Flammability Classification 94V-O utilizing Flame Retardant Epoxy Molding Compound.
- Exceeds environmental standards of MIL-S-19500/228
- For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications.
- Lead free in comply with EU RoHS 2002/95/EC directives.

MECHANICAL DATA

- Case: JEDEC DO-214AA molded plastic
- Terminals: Axial leads, solderable per MIL-STD-750, Method 2026
- Polarity: Color band denotes cathode end
- Mounting Position: Any
- Weight: 0.0032 ounce, 0.092 gram

SMB / DO-214AA

Unit : inch(mm)



MAXIMUM RATINGS($T_A=25^{\circ}\text{C}$ unless otherwise noted)

PARAMETER	SYMBOL	VALUE	UNIT
Maximum repetitive peak reverse voltage	V_{RRM}	40	V
Maximum rms voltage	V_{RMS}	28	V
Maximum dc blocking voltage	V_R	40	V
Maximum average forward rectified current	$I_{F(AV)}$	5	A
Peak forward surge current : 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	100	A
Typical thermal resistance (Note 1)	$R_{\theta JA}$ $R_{\theta JL}$	40 10	$^{\circ}\text{C}/\text{W}$
Operating junction temperature range	T_J	-55 to + 150	$^{\circ}\text{C}$
Storage temperature range	T_{STG}	-55 to + 150	$^{\circ}\text{C}$

ELECTRICAL CHARACTERISTICS($T_A=25^{\circ}\text{C}$ unless otherwise noted)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN.	TYP.	MAX.	UNIT
Breakdown voltage	V_{BR}	$I_R=1\text{mA}$	40	-	-	V
Instantaneous forward voltage	V_F	$I_F=1\text{A}$ $T_J=25^{\circ}\text{C}$	-	0.34	-	V
		$I_F=3\text{A}$	-	0.40	-	V
		$I_F=5\text{A}$	-	0.44	0.46	V
		$I_F=1\text{A}$ $T_J=125^{\circ}\text{C}$	-	0.21	-	V
Reverse current	I_R	$V_R=32\text{V}$ $T_J=25^{\circ}\text{C}$	-	21	-	μA
		$V_R=40\text{V}$ $T_J=125^{\circ}\text{C}$	-	-	100	μA
			-	25	-	mA

Note : 1. Mounted on 48cm² FR-4 PCB.

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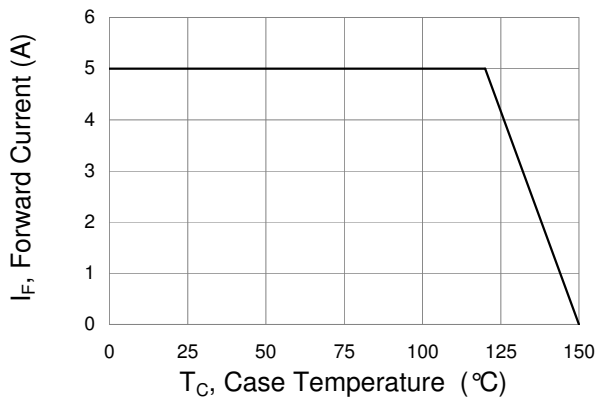


Fig.1 Forward Current Derating Curve

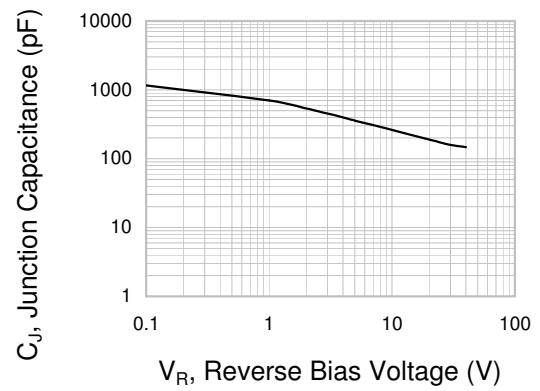


Fig.2 Typical Junction Capacitance

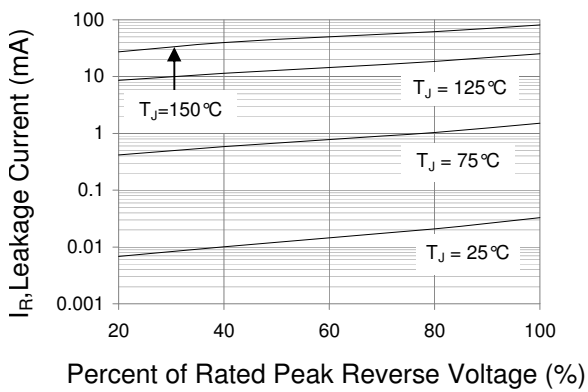


Fig.3 Typical Reverse Characteristics

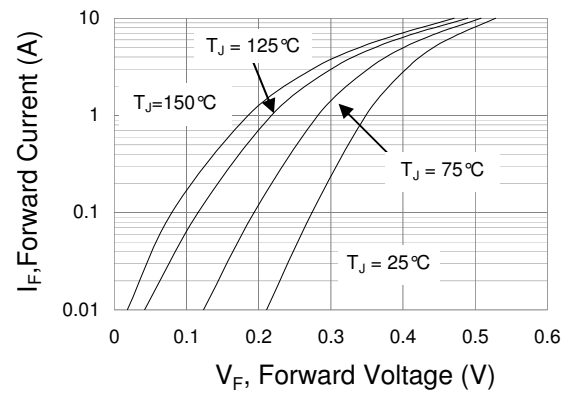
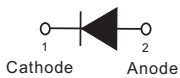
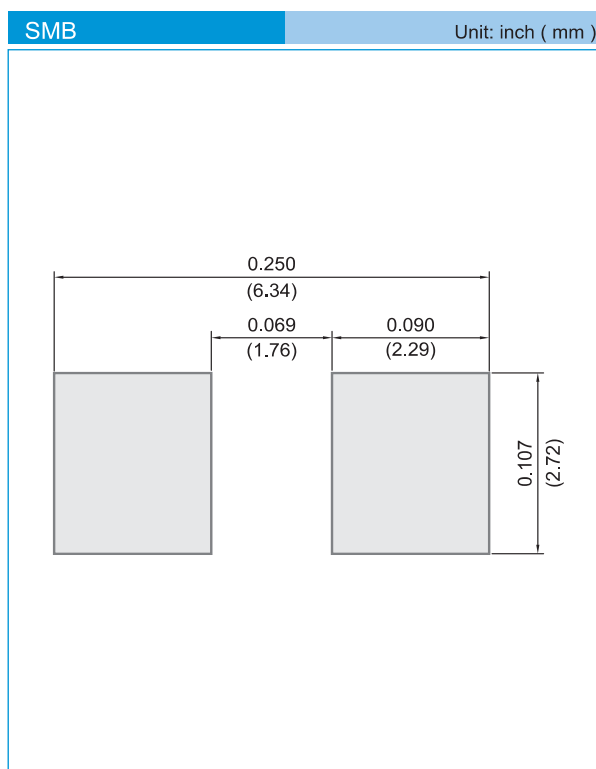


Fig.4 Typical Forward Characteristics



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MOUNTING PAD LAYOUT



ORDER INFORMATION

- Packing information
 - T/R - 3K per 13" plastic Reel
 - T/R - 0.5Kper 7" plastic Reel

LEGAL STATEMENT

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