

SK54BL

LOW VF SCHOTTKY RECTIFIER

VOLTAGE

40 Volt

CURRENT

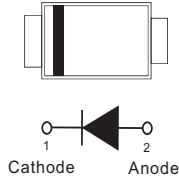
5 Ampere

FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-O utilizing Flame Retardant Epoxy Molding Compound.
- Lead free in compliance with EU RoHS 2.0
- Green molding compound as per IEC 61249 standard

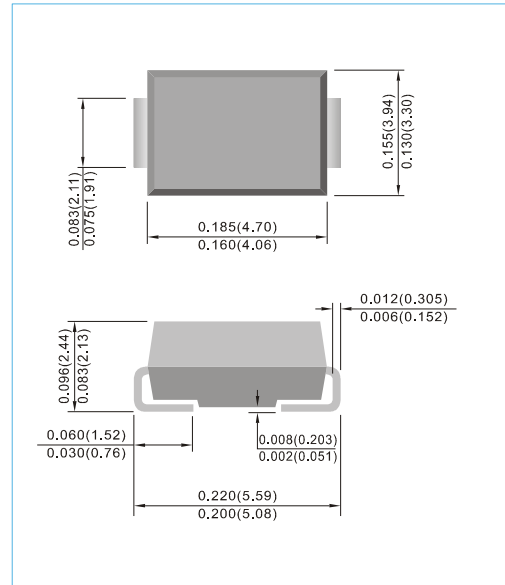
MECHANICAL DATA

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



SMB / DO-214AA

Unit : inch(mm)



MAXIMUM RATINGS(T_A=25°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 _{θJA} R _{θJL}	40 10	°C/W
Operating junction temperature range	T _J	-55 to + 150	°C
Storage temperature range	T _{STG}	-55 to + 150	°C

ELECTRICAL CHARACTERISTICS(T_A=25°C unless otherwise noted)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN.	TYP.	MAX.	UNIT
Breakdown voltage	V _{BR}	I _R =1mA	40	-	-	V
Instantaneous forward voltage	V _F	I _F =1A	-	0.34	-	V
		I _F =3A	-	0.40	-	
		I _F =5A	-	0.44	0.46	
		I _F =1A	-	0.21	-	V
		I _F =3A	-	0.30	-	
		I _F =5A	-	0.36	-	
Reverse current	I _R	V _R =32V	-	21	-	μA
		V _R =40V	-	-	100	μA
		T _J =25°C	-	-	-	mA
		T _J =125°C	-	25	-	mA

Note : 1. Mounted on 48cm² FR-4 PCB.

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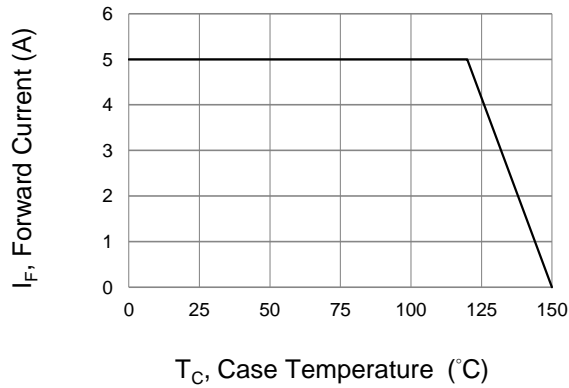


Fig.1 Forward Current Derating Curve

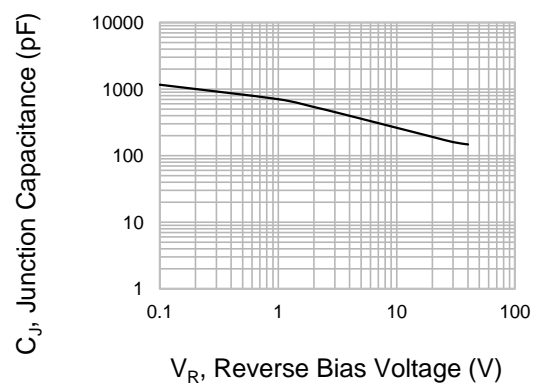


Fig.2 Typical Junction Capacitance

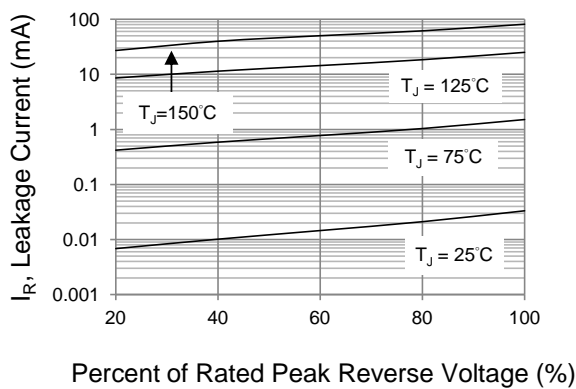


Fig.3 Typical Reverse Characteristics

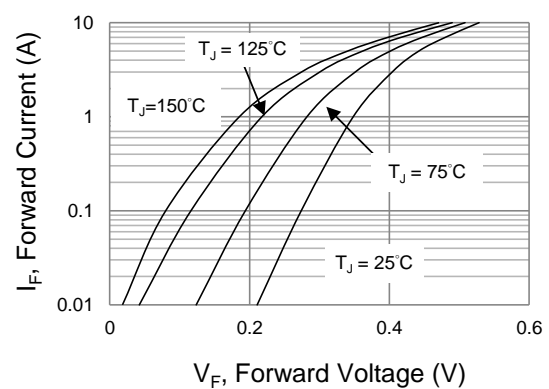


Fig.4 Typical Forward Characteristics

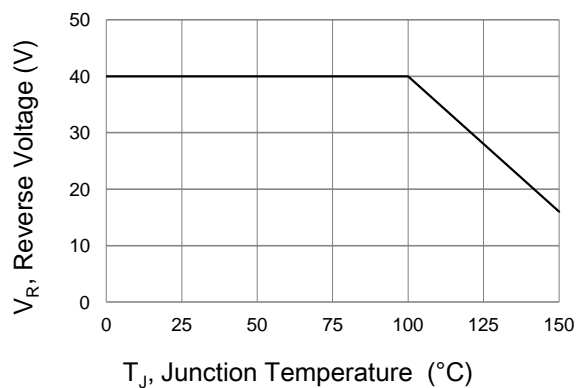


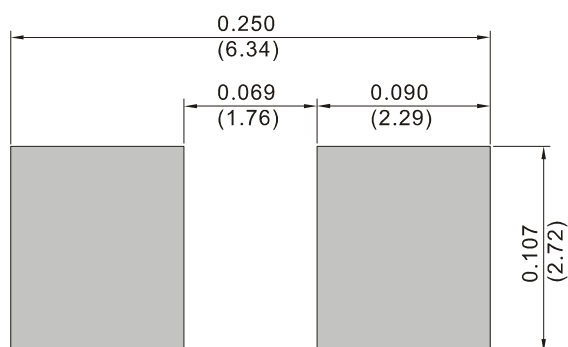
Fig.5 Operating Temperature Derating Curve

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MOUNTING PAD LAYOUT

SMB / DO-214AA

Unit : inch(mm)



ORDER INFORMATION

- Packing information
T/R - 3K per 13" plastic Reel
T/R - 0.8K per 7" plastic Reel

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