

SK54BL

LOW VF SCHOTTKY RECTIFIER

VOLTAGE

40 Volt

CURRENT

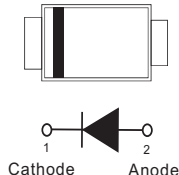
5 Ampere

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

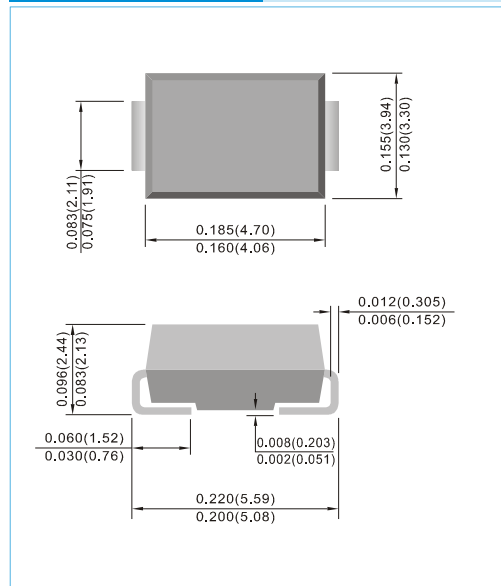
MECHANICAL DATA

- Case : JEDEC DO-214AA molded plastic
- Terminals : Axial leads, solderable per MIL-STD-750, Method 2026
- Polarity : Color band denotes cathode end
- Approx. Weight : 0.1089 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 T _J =25°C	-	0.34	-	V
		I _F =3A	-	0.40	-	V
		I _F =5A	-	0.44	0.46	V
		I _F =1A T _J =125°C	-	0.21	-	V
Reverse current	I _R	I _F =3A T _J =125°C	-	0.30	-	V
		I _F =5A	-	0.36	-	V
		V _R =32V	-	21	-	μA
		V _R =40V T _J =25°C	-	-	100	μA
		T _J =125°C	-	25	-	mA

Note : 1. Mounted on 48cm² FR-4 PCB.

SK54BL

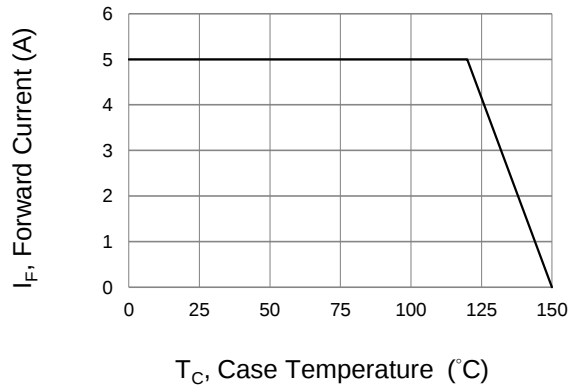


Fig.1 Forward Current Derating Curve

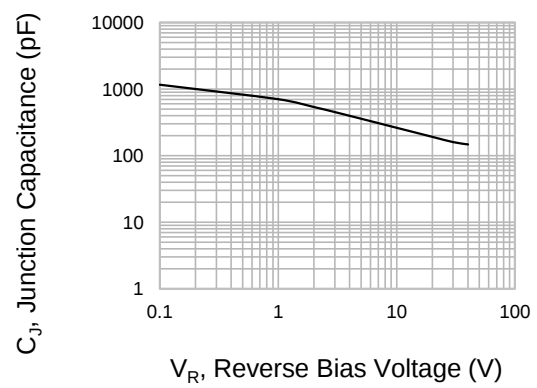


Fig.2 Typical Junction Capacitance

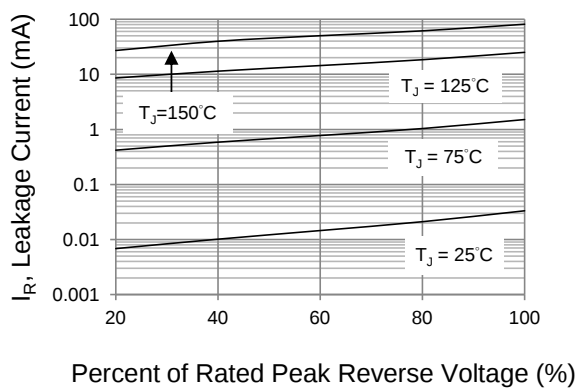


Fig.3 Typical Reverse Characteristics

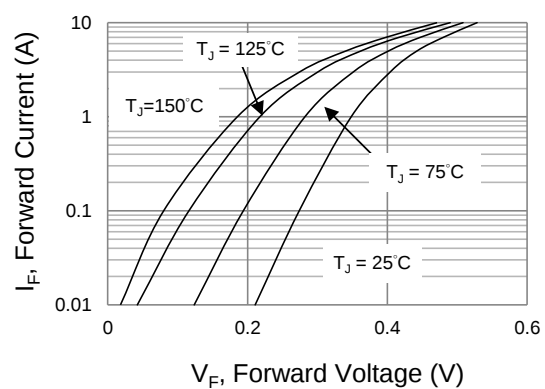


Fig.4 Typical Forward Characteristics

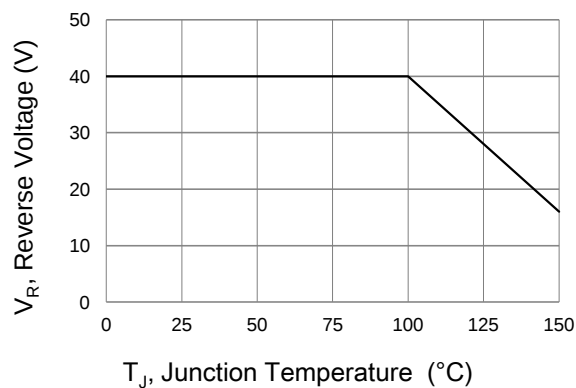


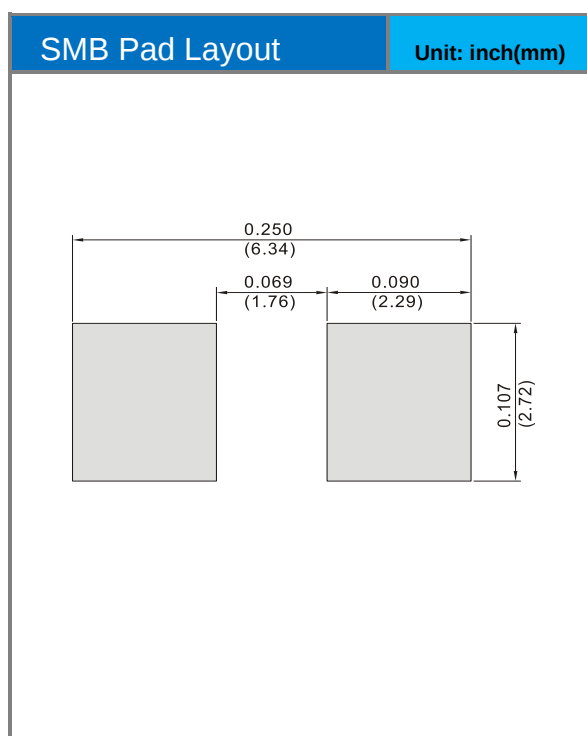
Fig.5 Operating Temperature Derating Curve

SK54BL

Product and Packing Information

Part No.	Package Type	Packing Type	Marking
SK54BL	SMB	0.8K pcs / 7" reel	SK54BL
SK54BL	SMB	3K pcs / 13" reel	SK54BL

Mounting Pad Layout



SK54BL

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