SK54BL

LOW VF SCHOTTKY RECTIFIER

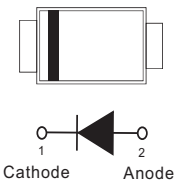
VOLTAGE 40 Volt **CURRENT** 5 Ampere

FEATURES

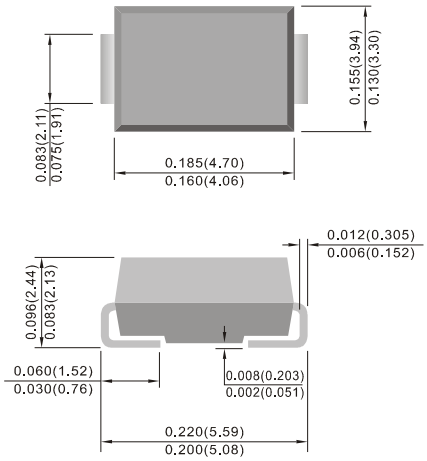
- Plastic package has Underwriters Laboratory Flammability Classification 94V-O utilizing Flame Retardant Epoxy Molding Compound.
- Lead free in compliance with EU RoHS 2.0
- Green molding compound as per IEC 61249 standard

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)	$R_{\Theta JA}$ $R_{\Theta JL}$	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, T_J=25°C	-	0.40	-	
		I_F=5A, T_J=25°C	-	0.44	0.46	
		I_F=1A, T_J=125°C	-	0.21	-	V
		I_F=3A, T_J=125°C	-	0.30	-	
		I_F=5A, T_J=125°C	-	0.36	-	
Reverse current	I_R	V_R=32V	-	21	-	µA
		V_R=40V, T_J=25°C	-	-	100	µA
		V_R=40V, T_J=125°C	-	25	-	mA

Note : 1. Mounted on 48cm^2 FR-4 PCB.

SK54BL

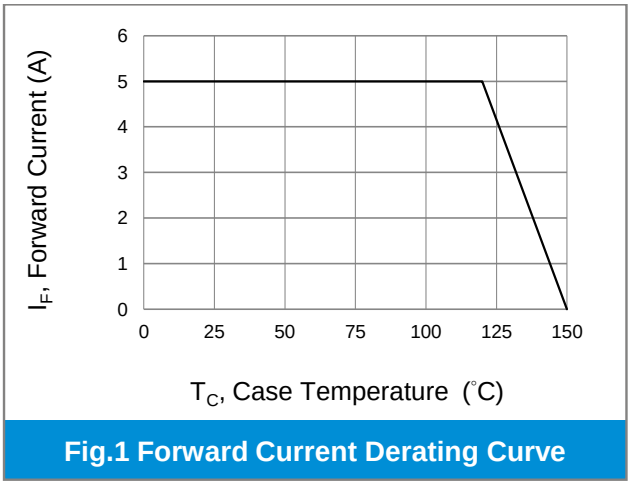


Fig.1 Forward Current Derating Curve

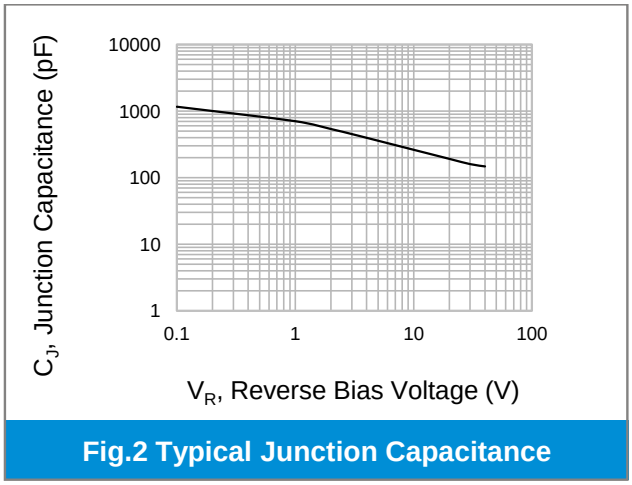


Fig.2 Typical Junction Capacitance

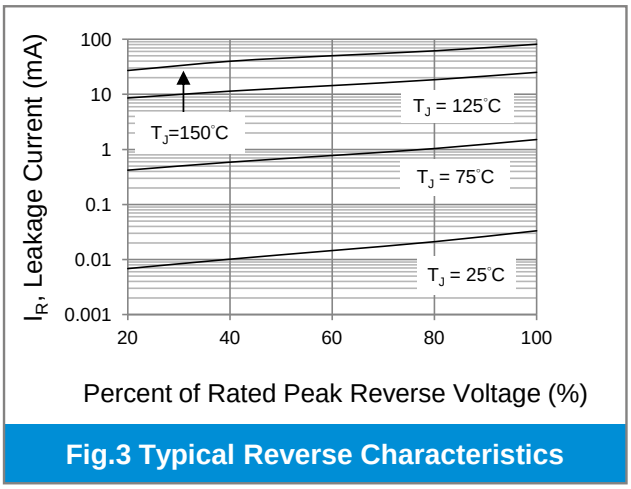


Fig.3 Typical Reverse Characteristics

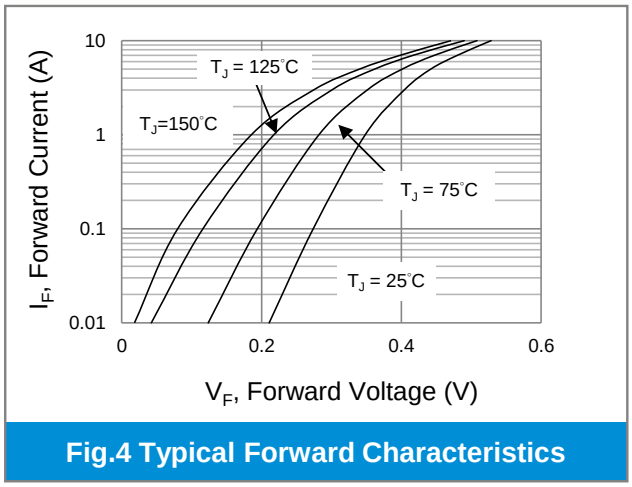


Fig.4 Typical Forward Characteristics

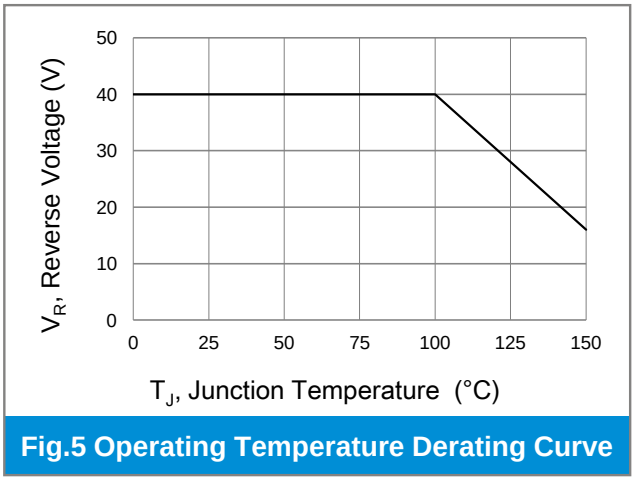
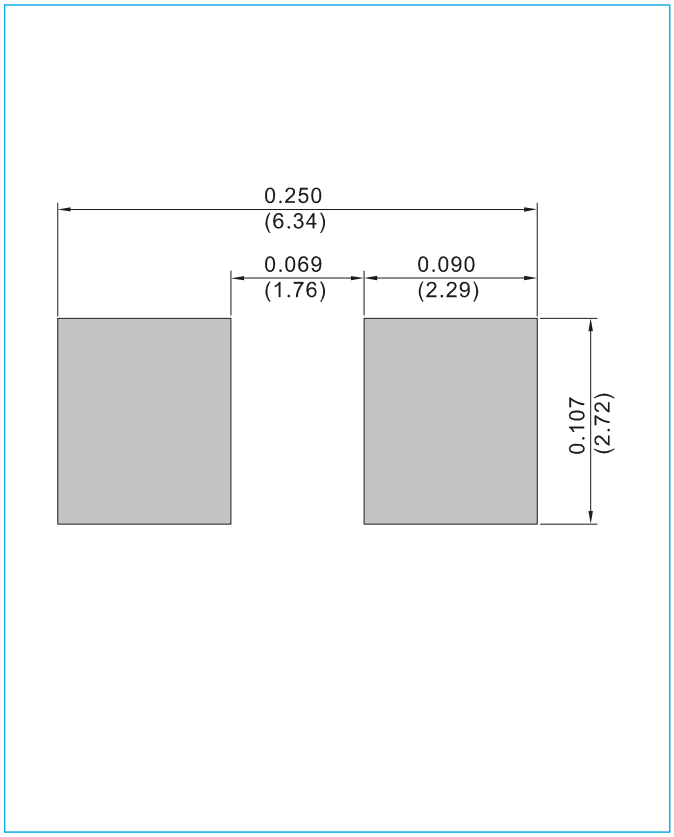


Fig.5 Operating Temperature Derating Curve

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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

SK54BL

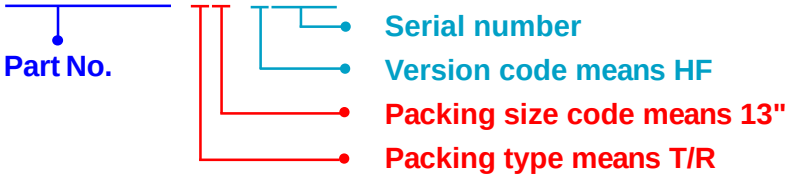
Part No_packing code_Version

SK54BL_R1_00001

SK54BL_R2_00001

For example :

RB500V-40_R2_00001



Packing Code XX				Version Code XXXXX		
Packing type	1st Code	Packing size code	2nd Code	HF or RoHS	1st Code	2nd~5th Code
Tape and Ammunition Box (T/B)	A	N/A	0	HF	0	serial number
Tape and Reel (T/R)	R	7"	1	RoHS	1	serial number
Bulk Packing (B/P)	B	13"	2			
Tube Packing (T/P)	T	26mm	X			
Tape and Reel (Right Oriented) (TRR)	S	52mm	Y			
Tape and Reel (Left Oriented) (TRL)	L	PANASERT T/B CATHODE UP (PBCU)	U			
FORMING	F	PANASERT T/B CATHODE DOWN (PBCD)	D			

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