



SK54BLF

LOW VF SCHOTTKY RECTIFIER

VOLTAGE 40 Volt **CURRENT** 5 Ampere

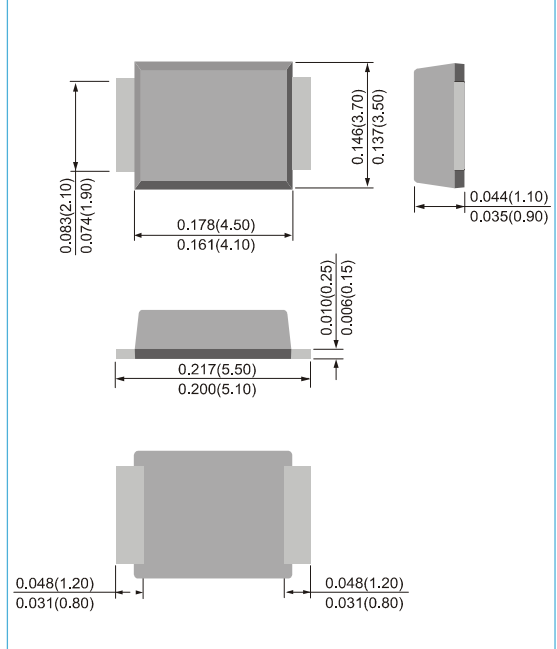
SMBF Unit : inch(mm)

FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-O utilizing Flame Retardant Epoxy Molding Compound
- Ultra Thin Profile Package for Space Constrained Utilization
- Package suitable for Automated Handling
- Lead free in compliance with EU RoHS 2011/65/EU directive
- Green molding compound as per IEC61249 Std. . (Halogen Free)

MECHANICAL DATA

- Case : SMBF, Plastic
- Terminals : Solderable per MIL-STD-750, Method 2026
- Polarity: Color band denotes cathode end
- Weight: 0.0018 ounces, 0.05 grams



MAXIMUM RATINGS (TA=25°C unless otherwise noted)

PARAMETER	SYMBOL	VALUE	UNITS
Recurrent Peak Reverse Voltage	V_{RRM}	40	V
RMS Voltage	V_{RMS}	28	V
DC Blocking Voltage	V_R	40	V
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 , Junction to Ambient (Note 2) Junction to Lead (Note 1)	$R_{\theta JA}$ $R_{\theta JL}$	135 19	°C/W
Typical Junction Capacitance at VR=4V, f=1MHz	C_J	430	pF
Operating Junction Temperature and Storage Temperature Range	T_J, T_{STG}	-55 to +150	°C

NOTES:

1. Mounted on FR-4 PCB, single-sided copper, with 100cm² copper pad area.
2. Mounted on FR-4 PCB single-sided copper, mini pad.



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

PARAMETER	SYMBOL	TEST CONDITIONS	MIN.	TYP.	MAX.	UNIT
Break down voltage	V _{BR}	I _R =1mA T _A =25°C	40	-	-	V
Instantaneous forward voltage	V _F	I _F =1A I _F =2.5A I _F =5A T _A =25°C	-	0.35 0.39 0.44	- - 0.46	V
		I _F =1A I _F =2.5A I _F =5A T _A =125°C	- -	0.22 0.28 0.36	- - -	V
Reverse current	I _R	V _R =32V T _A =25°C	-	32	-	A
		V _R =40V T _A =25°C T _A =125°C	- -	- 60	100 -	uA mA



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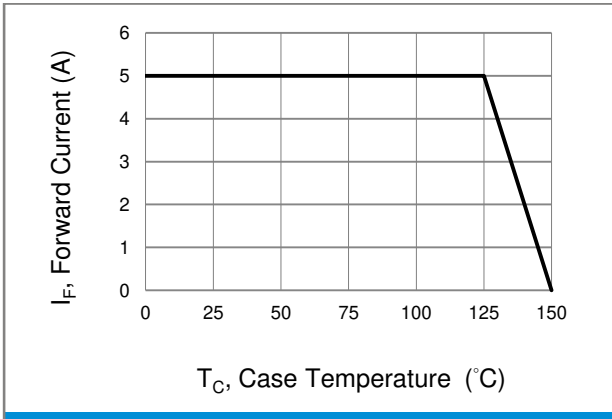


Fig.1 Forward Current Derating Curve

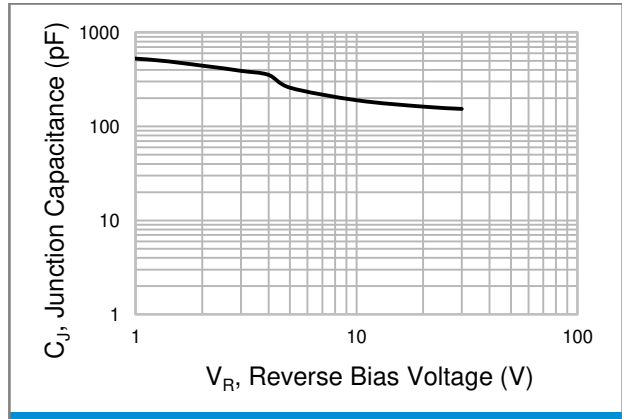


Fig.2 Typical Junction Capacitance

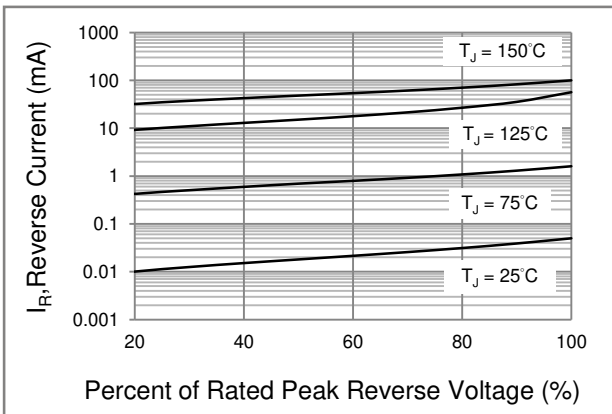


Fig.3 Typical Reverse Characteristics

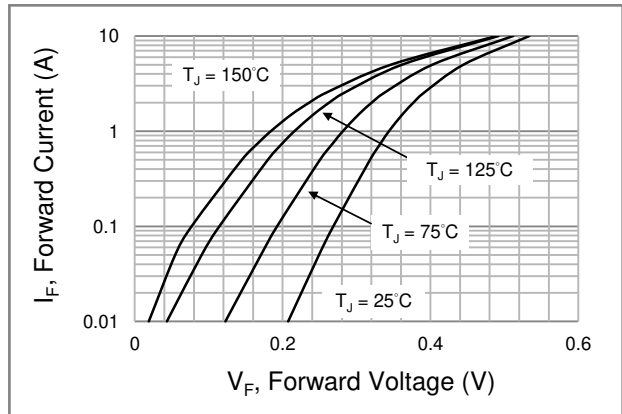


Fig.4 Typical Forward Characteristics

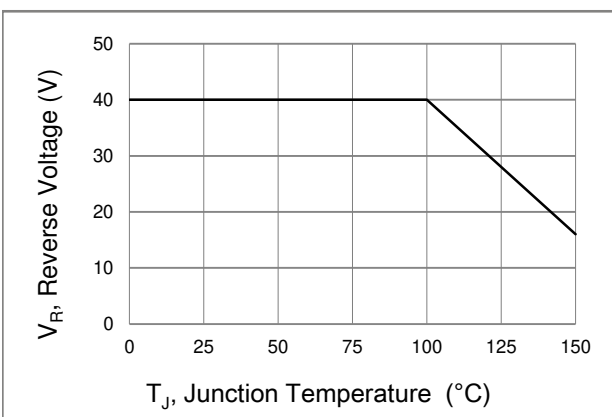
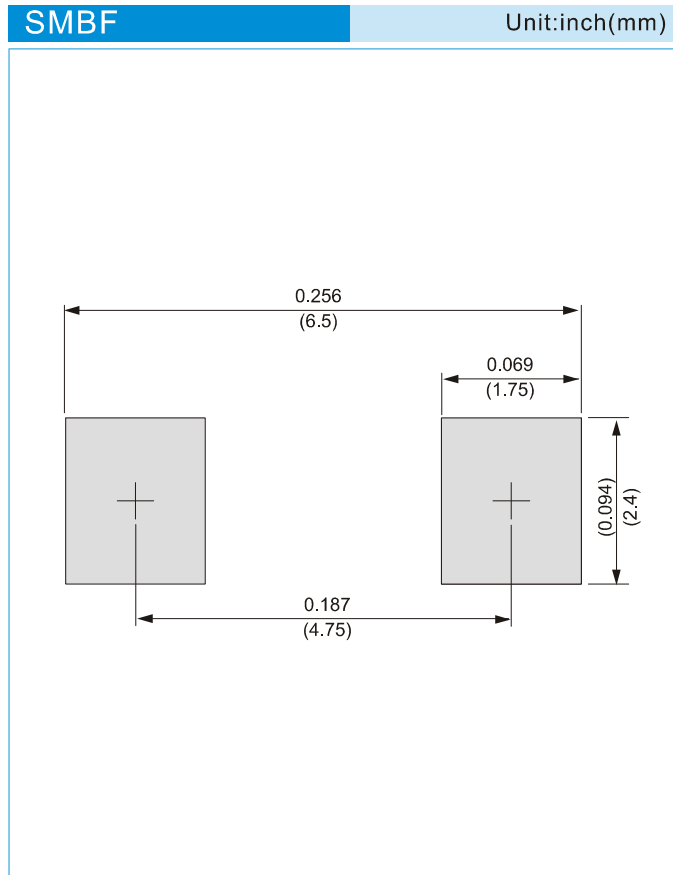


Fig.5 Operating Temperature Derating Curve



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MOUNTING PAD LAYOUT



ORDER INFORMATION

- Packing information
T/R - 5K per 13" plastic Reel



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Part No_packing code_Version

SK54BLF_R2_00001

For example :

RB500V-40_R2_00001



Packing Code XX				Version Code XXXXX		
Packing type	1 st Code	Packing size code	2 nd Code	HF or RoHS	1 st Code	2 nd ~5 th 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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