SK54BLF

LOW VF SCHOTTKY RECTIFIER

VOLTAGE 40 Volt **CURRENT** 5 Ampere

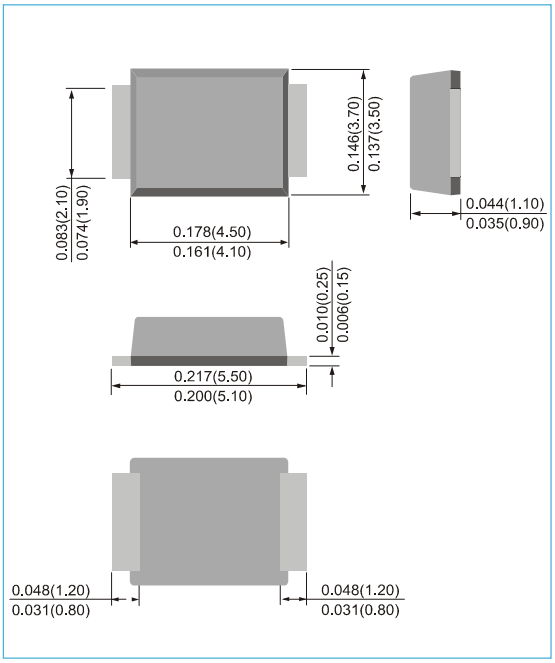
FEATURES

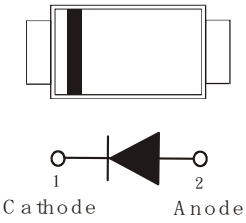
- Plastic package has Underwriters Laboratory Flammability Classification 94V-O utilizing
  Flame Retardant Expoxy Molding Compound
- Ultra Thin Profile Package for Space Constrained Utilization
- Package suitable for Automated Handling
- Lead free in compliance with EU RoHS 2011/65/EU directive
- Green 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

SMBF Unit : inch(mm)





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	-	µA
		V_R=40V	T_A=25°C T_A=125°C	- -	- 60	100 -	uA mA

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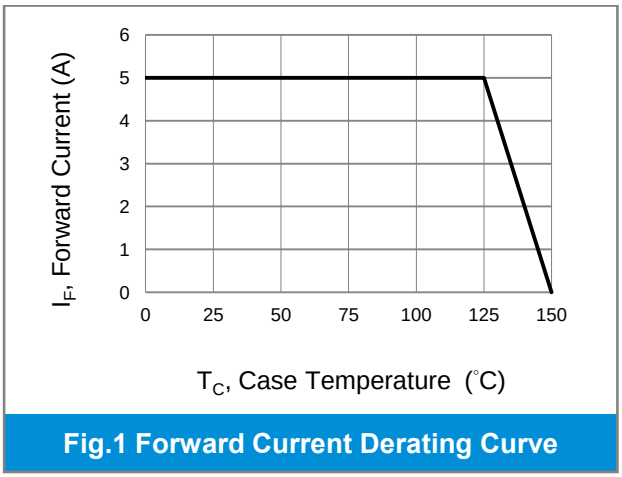

Fig.1 Forward Current Derating Curve

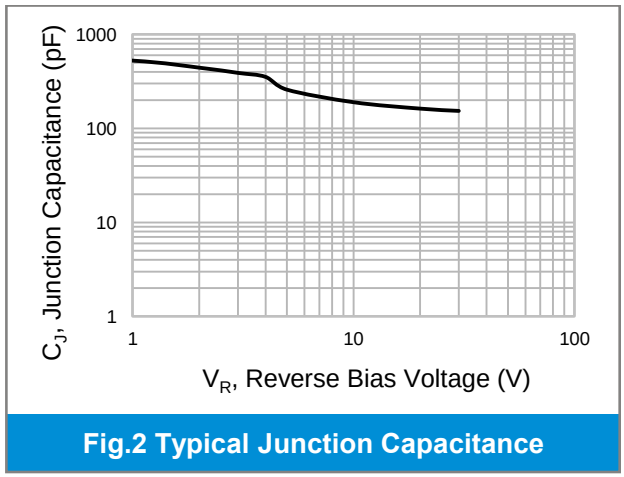

Fig.2 Typical Junction Capacitance

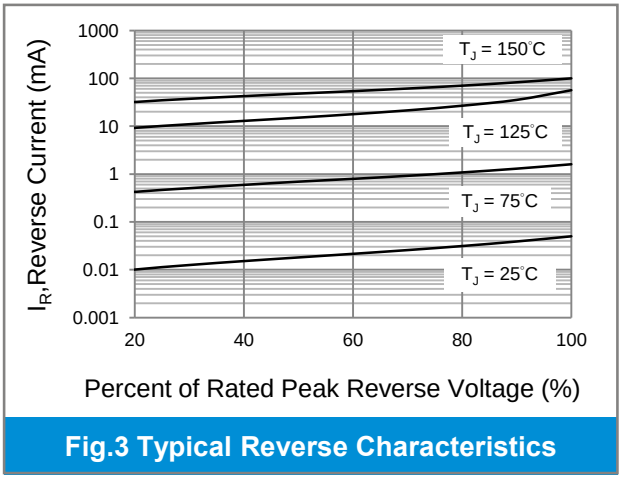

Fig.3 Typical Reverse Characteristics

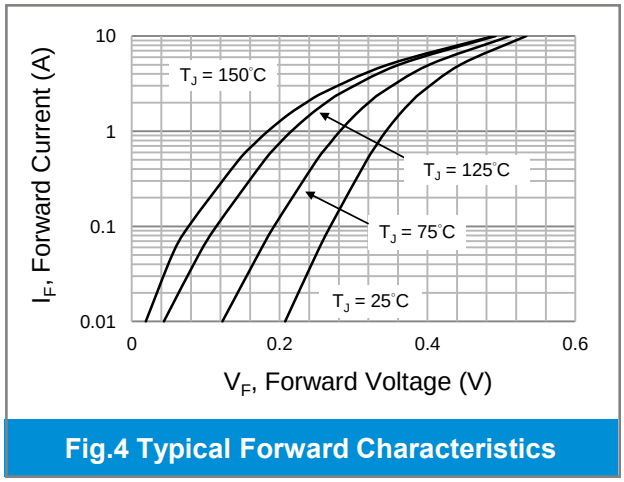

Fig.4 Typical Forward Characteristics

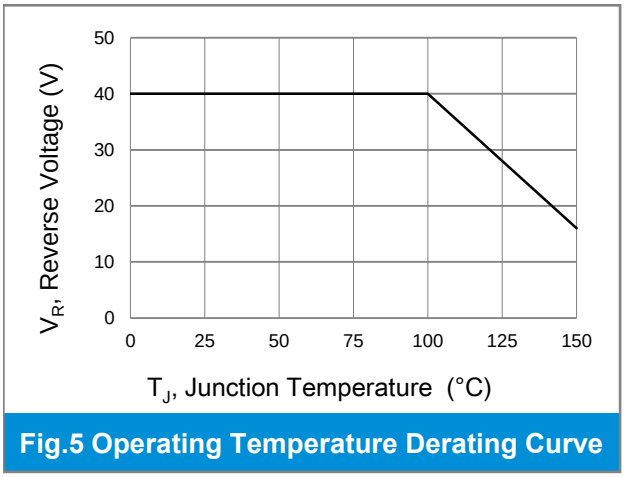

Fig.5 Operating Temperature Derating Curve

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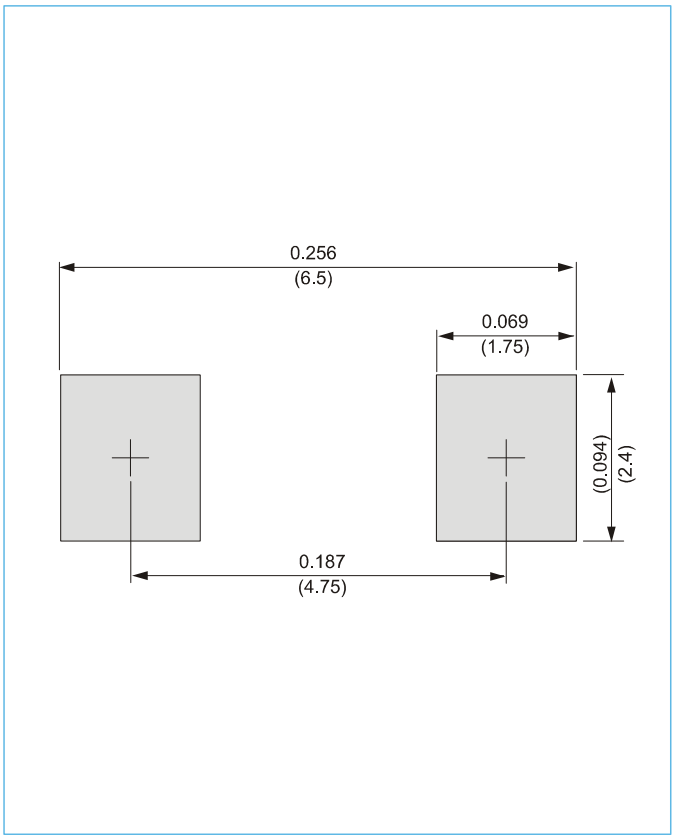
MOUNTING PAD LAYOUT

SMBF Unit:inch(mm)



ORDER INFORMATION

- Packing information

  T/R - 5K per 13" plastic Reel

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