

SR54L

LOW VF SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

VOLTAGE 40 Volts **CURRENT** 5.0 Amperes

SMB / DO-214AA

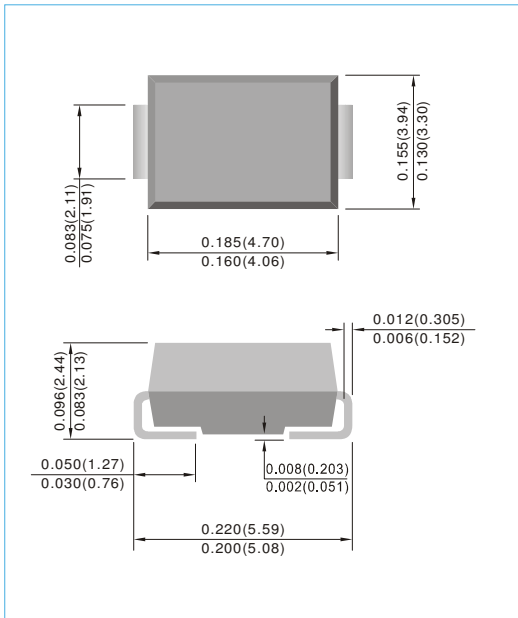
Unit : inch(mm)

FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-O
- For surface mounted applications
- Low profile package
- Built-in strain relief
- Metal to silicon rectifier. majority carrier conduction
- Low power loss,high efficiency
- High surge capacity
- For use in low voltage high frequency inverters, free wheeling, and polarity protection applications
- In compliance with EU RoHS 2002/95/EC directives

MECHANICAL DATA

- Case: JEDEC SMB molded plastic
- Terminals:Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity: Color band denotes cathode end
- Standard packaging: 16mm tape (EIA-481)
- Weight: 0.003 ounce, 0.092 gram



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

PARAMETER	SYMBOL	VALUE	UNIT
Maximum repetitive peak reverse voltage	V _{RRM}	40	V
Maximum average forward rectified current at T _C =120°C	I _{F(AV)}	5.0	A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load	I _{FSM}	120	A
Typical thermal resistance ⁽¹⁾	R _{θJL}	17	°C/W
Operating junction temperature range	T _J	-55 to +125	°C
Storage temperature range	T _{STG}	-55 to +125	°C

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

PARAMETER	SYMBOL	TEST CONDITIONS	MIN.	TYP.	MAX.	UNIT
Instantaneous forward voltage ⁽²⁾	V _F	I _F =1A I _F =3A I _F =5A	- - -	0.30 0.37 0.43	- - 0.45	V
Reverse current	I _R	V _R =40V T _J =25°C T _J =100°C	- -	- -	1 50	mA

Notes:

1. Mounted on P.C. Board with 14mm² (.013mm thick) copper pad areas.
2. Pulse Test with PW =300μsec, 1% Duty Cycle.

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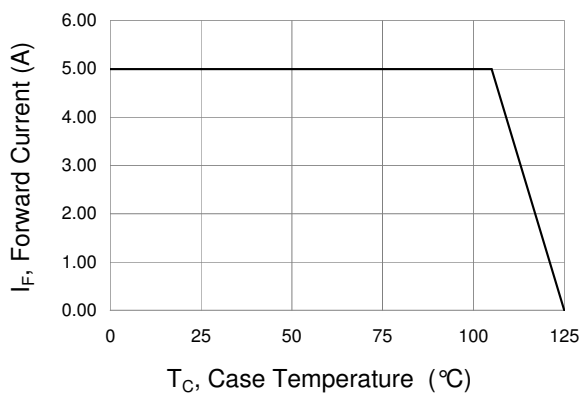


Fig.1 Forward Current Derating Curve

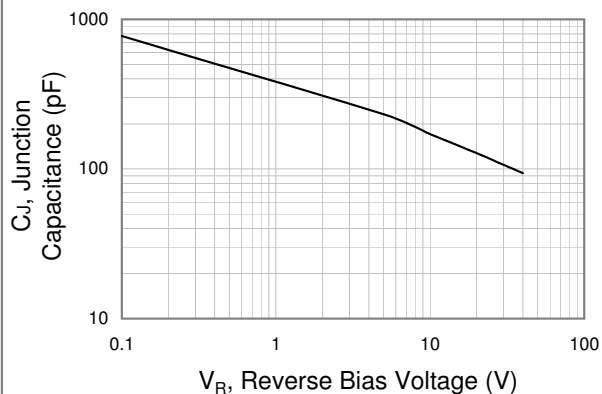


Fig.2 Typical Junction Capacitance

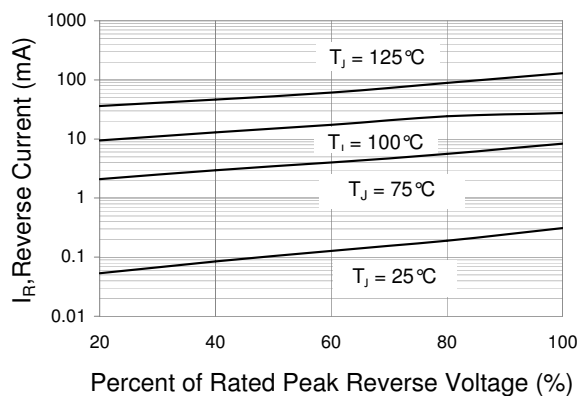


Fig.3 Typical Reverse Characteristics

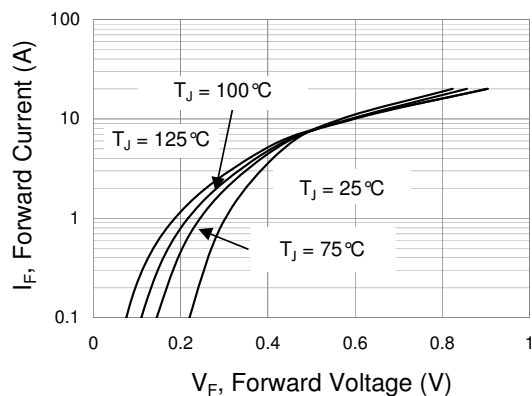
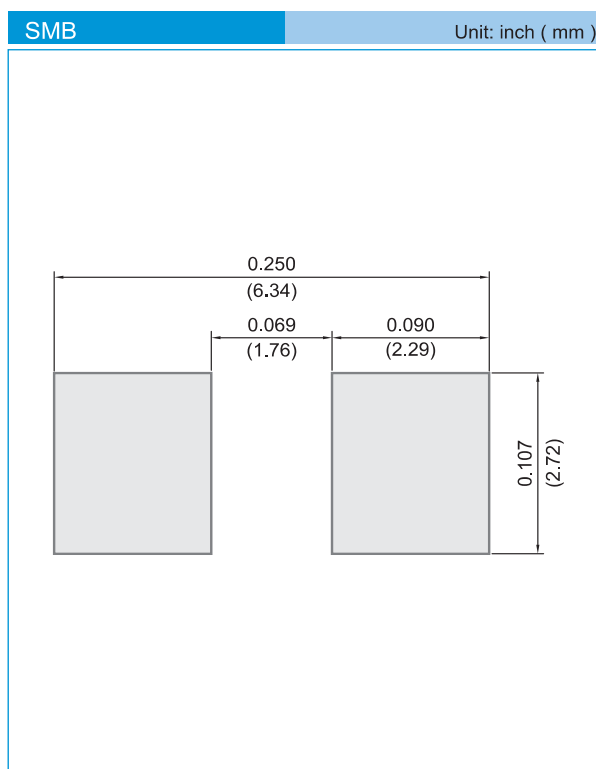


Fig.4 Typical Forward Characteristics

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MOUNTING PAD LAYOUT



ORDER INFORMATION

- Packing information
 - T/R - 3K per 13" plastic Reel
 - T/R - 0.5Kper 7" plastic Reel

LEGAL STATEMENT

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