



S510B

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

VOLTAGE 100 Volts **CURRENT** 5.0 Amperes

SMB / DO-214AA

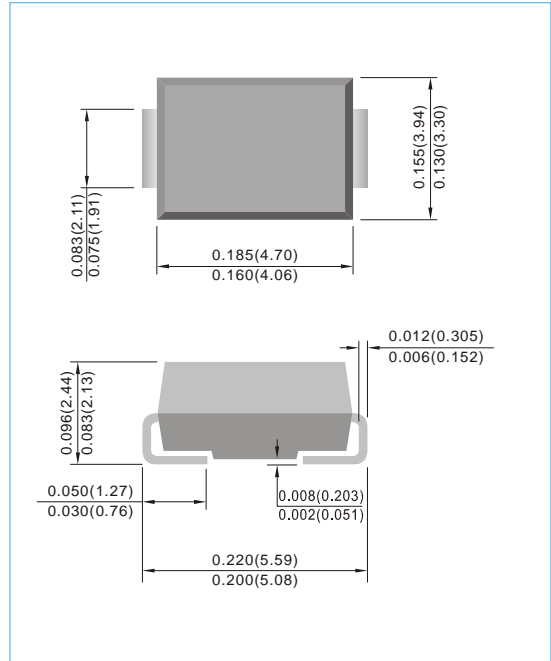
Unit : inch(mm)

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 DO-214AA molded plastic
- Terminals:Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity : Color band denotes cathode end
- Standard packaging: 12mm tape (EIA-481)
- Weight: 0.0032 ounce, 0.092 gram



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.
Resistive or inductive load.

PARAMETER	SYMBOL	VALUE	UNITS
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	100	V
Maximum RMS Voltage	V_{RMS}	70	V
Maximum DC Blocking Voltage	V_{DC}	100	V
Maximum Average Forward Rectified Current	$I_{F(AV)}$	5.0	A
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	120	A
Maximum Forward Voltage at 5.0A (Notes 1)	V_F	0.85	V
Maximum DC Reverse Current at Rated DC Blocking Voltage	I_R	0.05 2	mA
Typical Thermal Resistance	$R_{\theta JA}$ $R_{\theta JL}$	100 20	°C / W
Operating Junction Temperature Range	T_J	-55 to +150	°C
Storage Temperature Range	T_{STG}	-55 to +150	°C

NOTES:

1. Pulse Test with PW =300µsec, 1% Duty Cycle.
2. Mounted on PCB with minmum pad layout.



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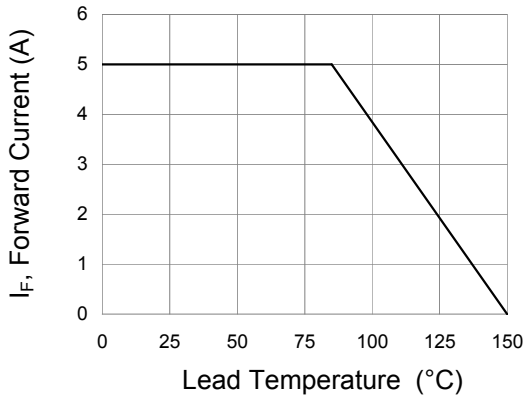


Fig.1 Forward Current Derating Curve

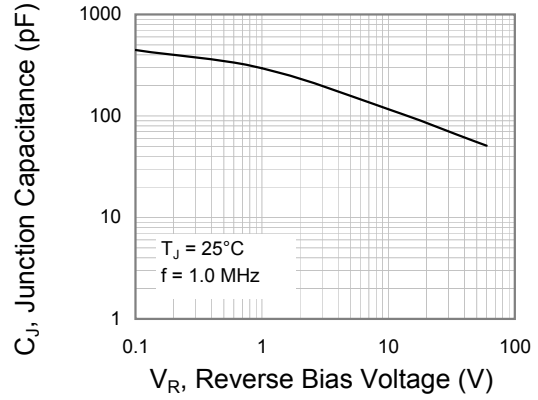


Fig.2 Typical Junction Capacitance

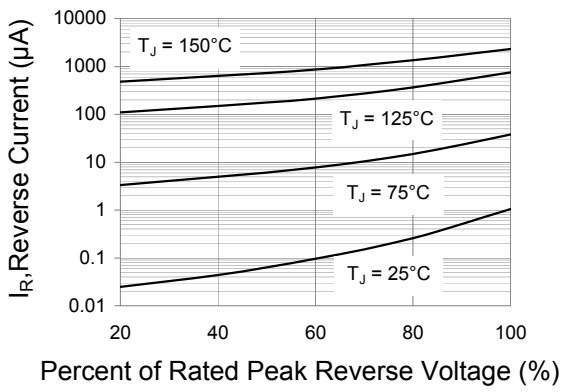


Fig.3 Typical Reverse Characteristics

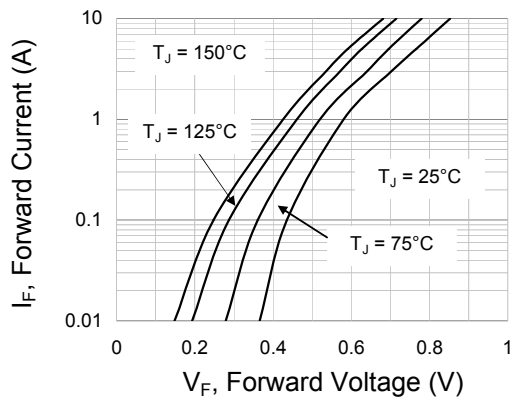


Fig.4 Typical Forward Characteristics