

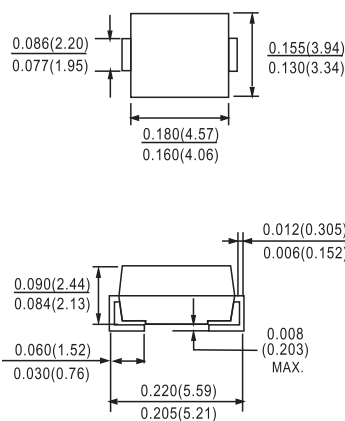
**FEATURES**

- 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

DO-214AA(SMB)



Dimensions in inches and (millimeters)

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 minimum pad layout.



RATINGS AND CHARACTERISTIC CURVES S510B

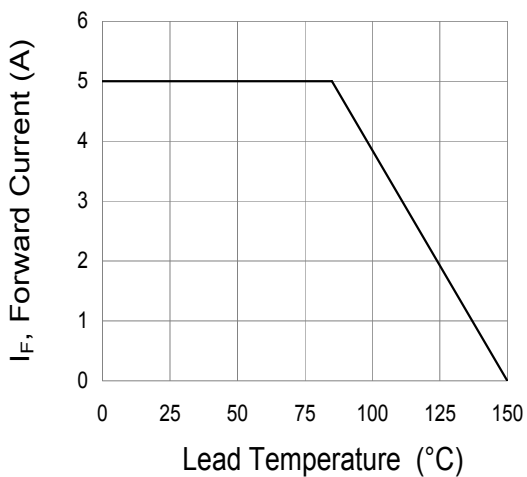


Fig.1 Forward Current Derating Curve

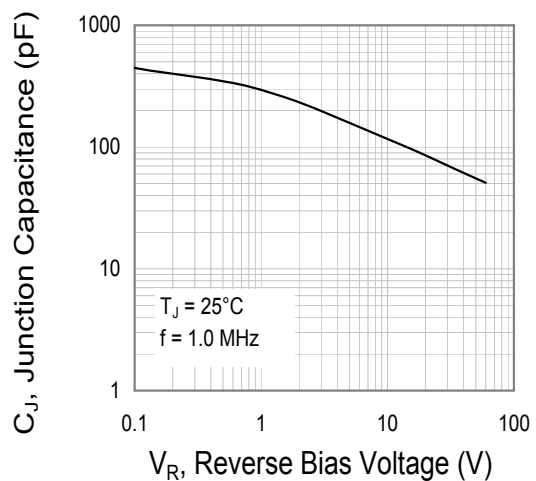


Fig.2 Typical Junction Capacitance

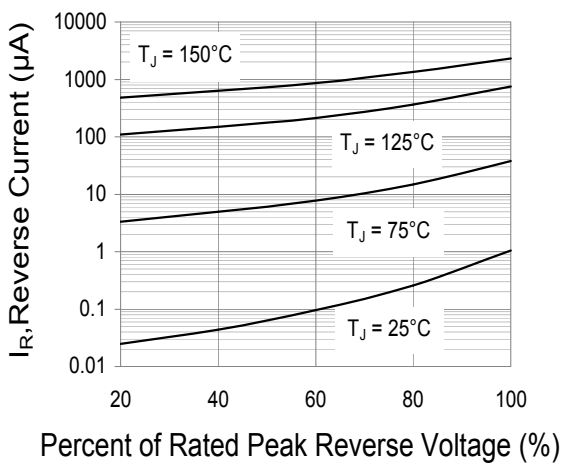


Fig.3 Typical Reverse Characteristics

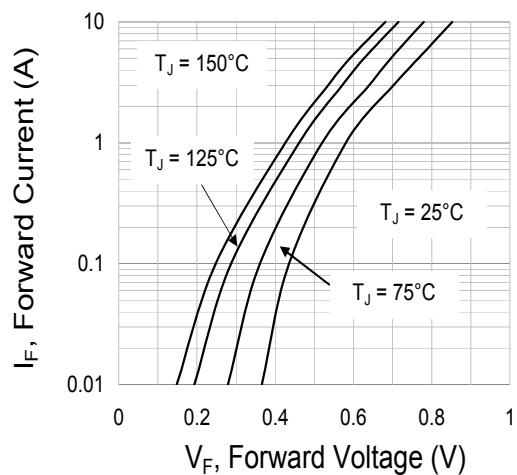


Fig.4 Typical Forward Characteristics