

Schottky Barrier Diode

Reverse Voltage 40 - 100 Volts
Forward Current - 3.0 Amperes

Features

- High current capability.
- Ideal for automated placement.
- Low reverse current.
- Comply with AEC-Q101.

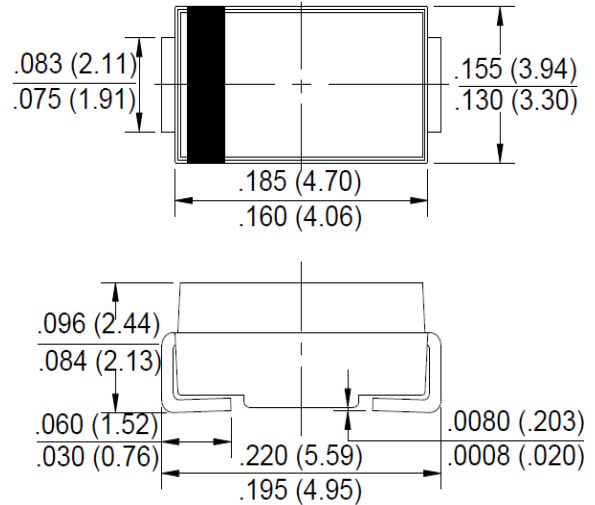
Mechanical Data

- Case: SMB, molded plastic.
- Epoxy: UL flammability classification rate 94V-0 .
- Terminals: Lead free plating (Tin finish).
per MIL-STD-202, method 208.
- Polarity: Indicated by cathode band.

Circuit diagram



SMB



Package Outline Dimensions in Inches (Millimeters)

Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

Characteristics	Symbol	SS34B	SS36B	SS310B	Unit
	Marking	340	360	3100	
Maximum Repetitive peak reverse voltage	V _{RRM}	40	60	100	V
Maximum RMS voltage	V _{RMS}	28	42	70	V
Maximum DC blocking voltage	V _{DC}	40	60	100	V
Maximum Average forward rectified current	I _F	3			A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load	I _{FSM}	80			A
Maximum Instantaneous forward voltage I _F =3A @ 25°C	V _F	0.5	0.7	0.85	V
Maximum DC reverse current @T _j =25°C	I _R	0.5			μA
at rated DC blocking voltage @T _j =100°C		10			
Typical junction capacitance (Note 1)	C _J	150			pF
Thermal Resistance Junction (Note2)	R _{θJC}	35			°C/W
Operating temperature range	T _J	-55 to + 125			°C
Storage temperature range	T _{STG}	-55 to + 150			°C

Notes: 1. Measured at 1.0MHz and applied reverse voltage of 4.0V DC

2. Device mounted on FR4 substrate, 0.4" x 0.5" , 2oz, single-sided, PC boards with 0.2" x 0.25" copper pad.

Fig.1 - Typical Forward Current Derating Curve

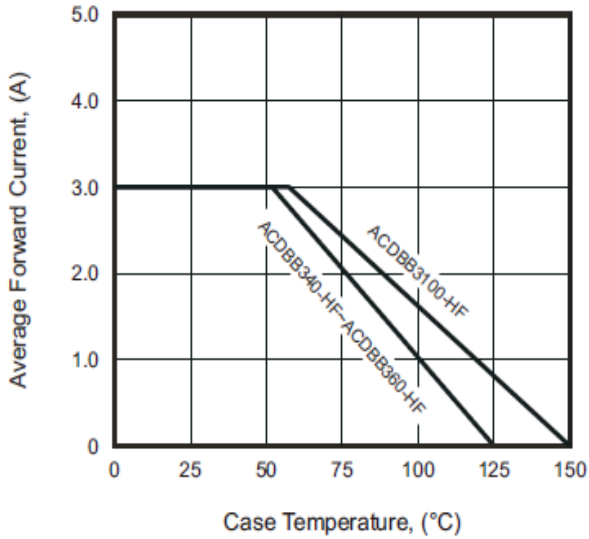


Fig.2 - Typical Forward Characteristics

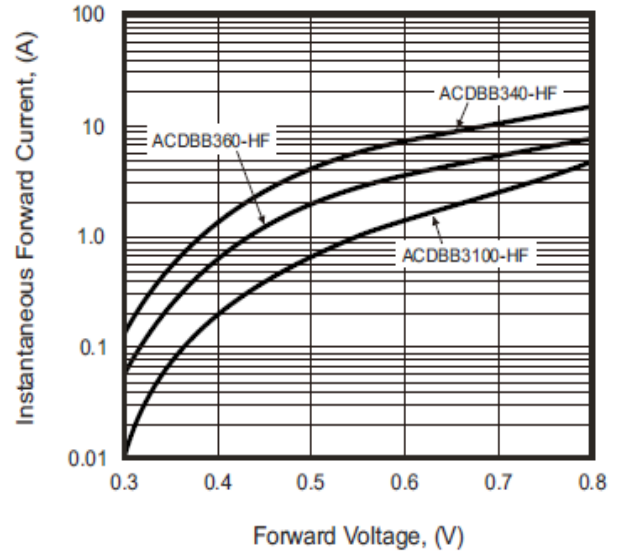


Fig.3 - Maximum Non-Repetitive Forward Surge Current

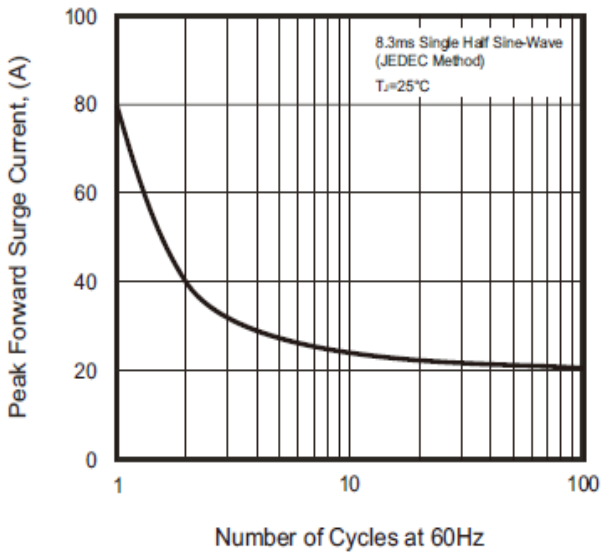


Fig.4 - Typical Reverse Characteristics

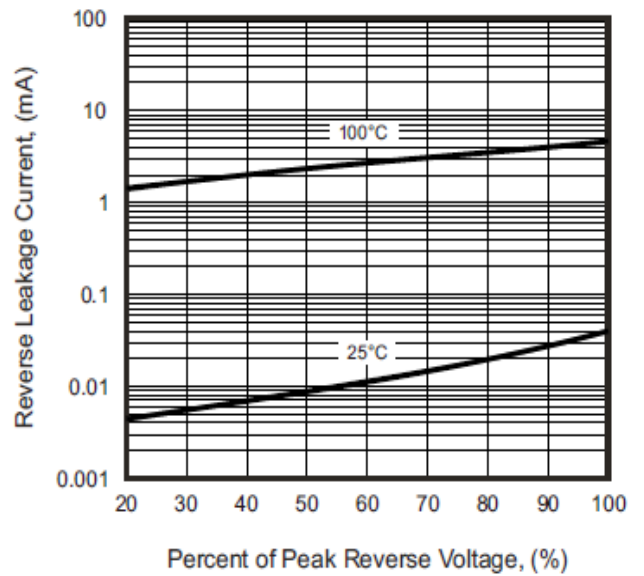
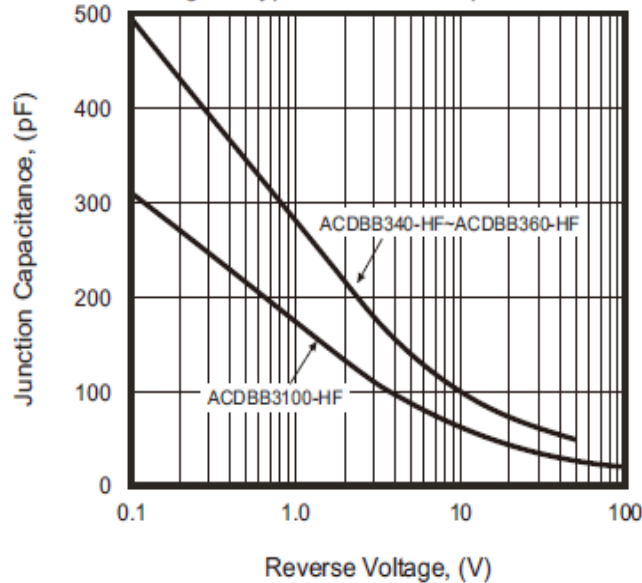


Fig.5 - Typical Junction Capacitance



The curve above is for reference only.

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