

Technical Data
Data Sheet N1688, Rev. -

SK32BF THRU SK320BF Surface Mount Schottky Barrier Rectifier

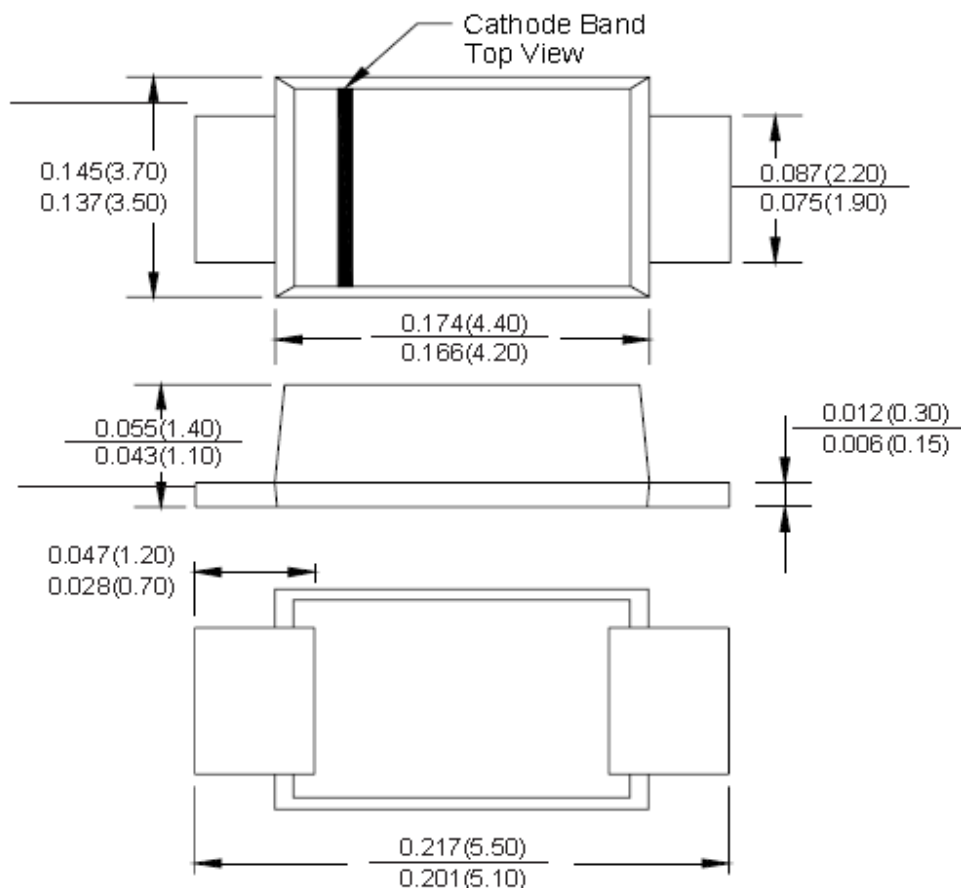
Features:

- Metal silicon junction, majority carrier conduction
- For surface mounted applications
- Low power loss, high efficiency
- High forward surge current capability
- For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications

Mechanical Data:

- Case: SMBF
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 57mg / 0.002oz

Mechanical Dimensions: In Inches/mm



SMBF



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Absolute Maximum Ratings and Electrical characteristics

Ratings at 25°C ambient temperature unless otherwise specified. Single phase, half wave, 60Hz resistive or inductive load, for capacitive load, derate by 20 %

Characteristic	Symbol	SK32 BF	SK34 BF	SK36 BF	SK38 BF	SK310 BF	SK312 BF	SK315 BF	SK320 BF	Unit
Peak Repetitive Reverse Voltage DC Blocking Voltage	V_{RRM} V_{DC}	20	40	60	80	100	120	150	200	V
Maximum RMS voltage	V_{RMS}	14	28	42	56	70	84	105	140	V
Maximum Average Forward Rectified Current	$I_{F(AV)}$	3.0								A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	80				70				A
Max Instantaneous Forward Voltage at 2 A	V_F	0.55		0.70		0.85		0.95		V
Peak Reverse Current At Rated DC Blocking Voltage	I_{RM}	0.5 5 /				0.3 / 5				mA
Typical Thermal Resistance Junction to Ambient (Note 1)	$R_{\theta JA}$	50								°C/W
Operating and Storage Temperature Range	T_J, T_{STG}	-55 to +150								°C
Case Style		SMBF								

Note: 1. P.C.B. mounted with 0.5 X 0.5" (12.7 X 12.7 mm) copper pad areas.

Fig.1 Forward Current Derating Curve

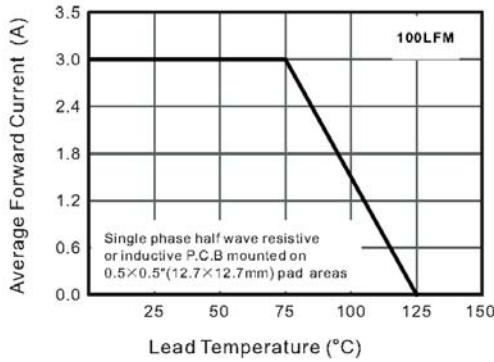


Fig.2 Typical Reverse Characteristics

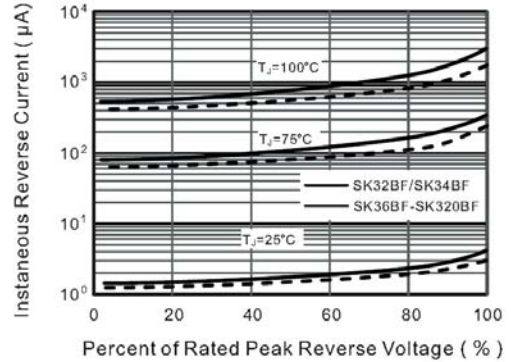


Fig.3 Typical Forward Characteristic

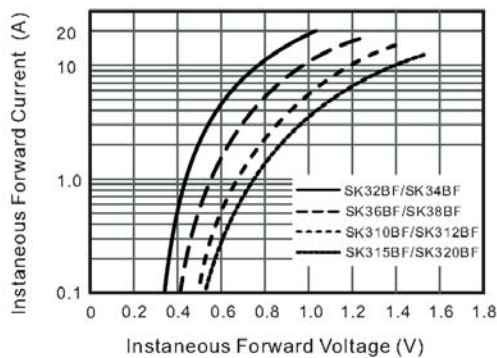


Fig.4 Maximum Non-Repetitive Peak Forward Surge Current

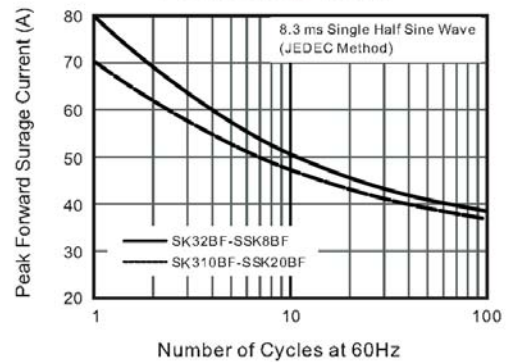
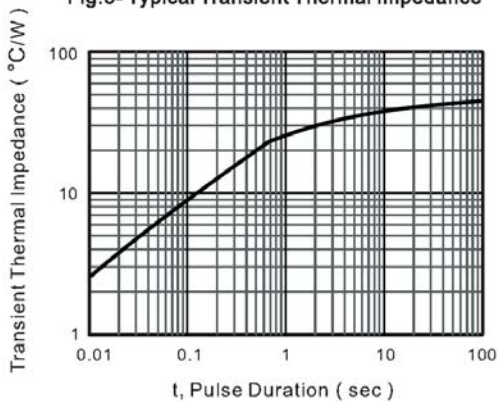


Fig.5- Typical Transient Thermal Impedance





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