

GSK22BF thru GSK220BF

Surface Mount Schottky Rectifiers
 Reverse Voltage 20V-200V Forward Current 2A

Features

- Metal silicon junction, majority carrier conduction
- For surface mounted applications
- Low power loss, high efficiency
- High forward surge current capability



Applications

For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications



Mechanical Data

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

Absolute Maximum Ratings and Electrical Characteristics

(T_A=25°C unless otherwise noted)

Parameter	Symbol	GSK 22BF	GSK 24BF	GSK 26BF	GSK 28BF	GSK 210BF	GSK 212BF	GSK 215BF	GSK 220BF	Unit
Maximum Repetitive Peak Reverse Voltage	V _{RRM}	20	40	60	80	100	120	150	200	V
Maximum RMS Voltage	V _{RMS}	14	28	42	56	70	84	105	140	V
Maximum DC Blocking Voltage	V _{DC}	20	40	60	80	100	120	150	200	V
Maximum Average Forward Rectified Current	I _{F(AV)}	2								A
Peak Forward Surge Current, 8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I _{FSM}	50								A
Max Instantaneous Forward Voltage at 2A	V _F	0.55	0.7	0.85				0.95	V	
Maximum DC Reverse Current at Rated DC Reverse Voltage, T _A =25°C	I _R	0.5			0.3					mA
Maximum DC Reverse Current at Rated DC Reverse Voltage, T _A =100°C		5			3					
Typical Junction Capacitance ¹	C _J	220			110					pF
Typical Thermal Resistance ²	R _{θJA}	75								°C/W
Operating Junction Temperature Range	T _J	-55 +125								°C
Storage Temperature Range	T _{STG}	-55 +150								°C

Notes:

1. Measured at 1 MHz and applied reverse voltage of 4 V_{DC}.
2. P.C.B. mounted with 2.0" X 2.0" (5 X 5 cm) copper pad areas.

Ratings and Characteristics Curves

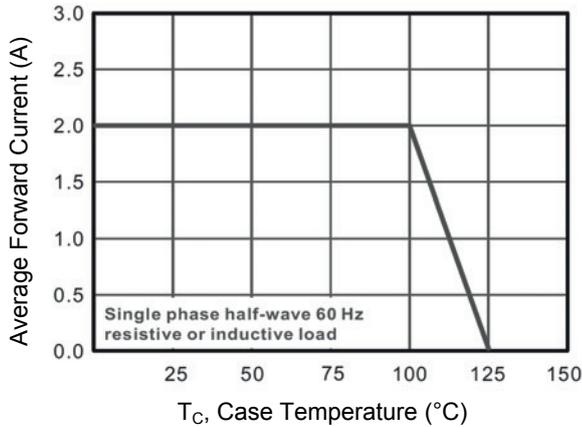


Figure 1. Forward Current Derating Curve

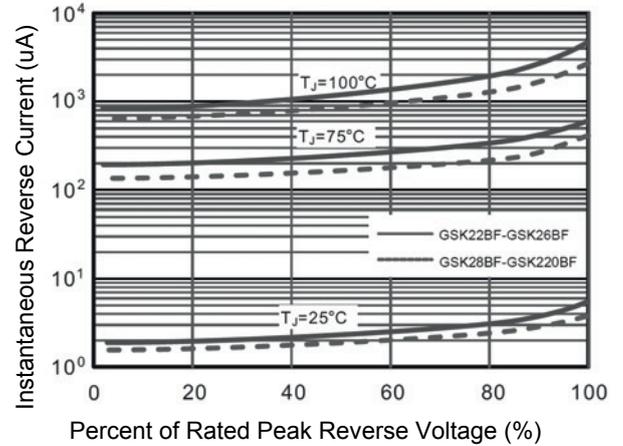


Figure 2. Typical Reverse Characteristics

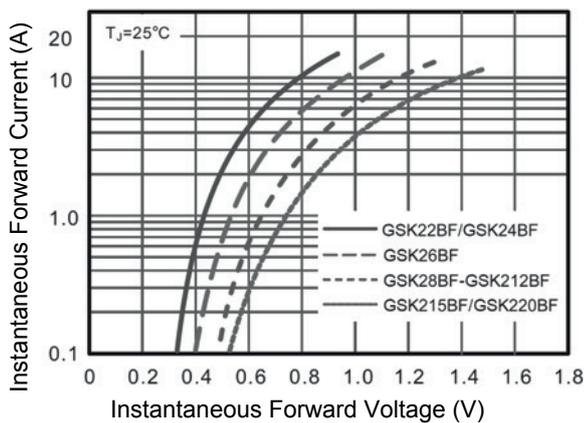


Figure 3. Typical Forward Characteristic

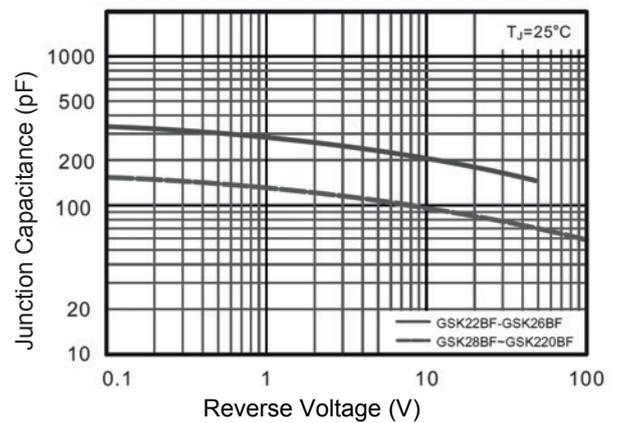


Figure 4. Typical Junction Capacitance

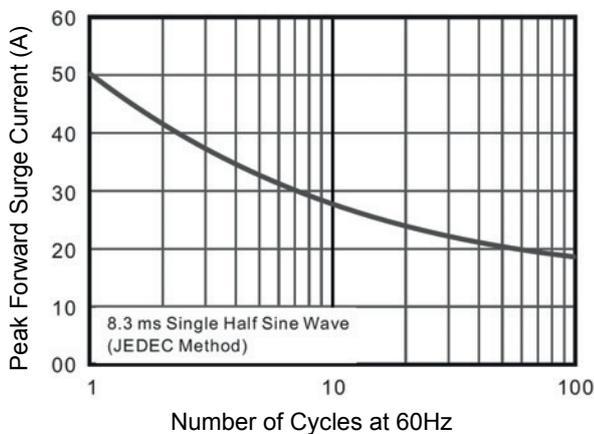


Figure 5. Maximum Non-Repetitive Peak Forward Surge Current

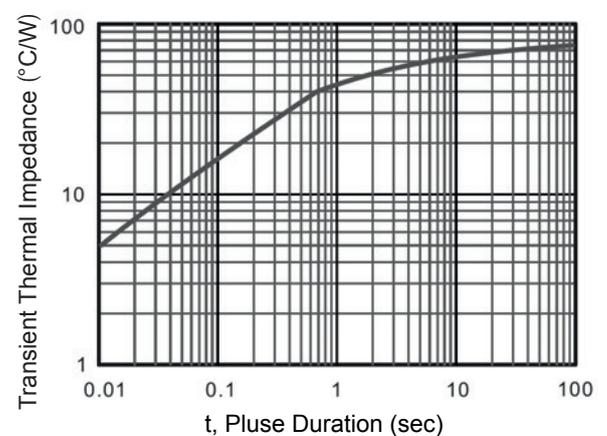
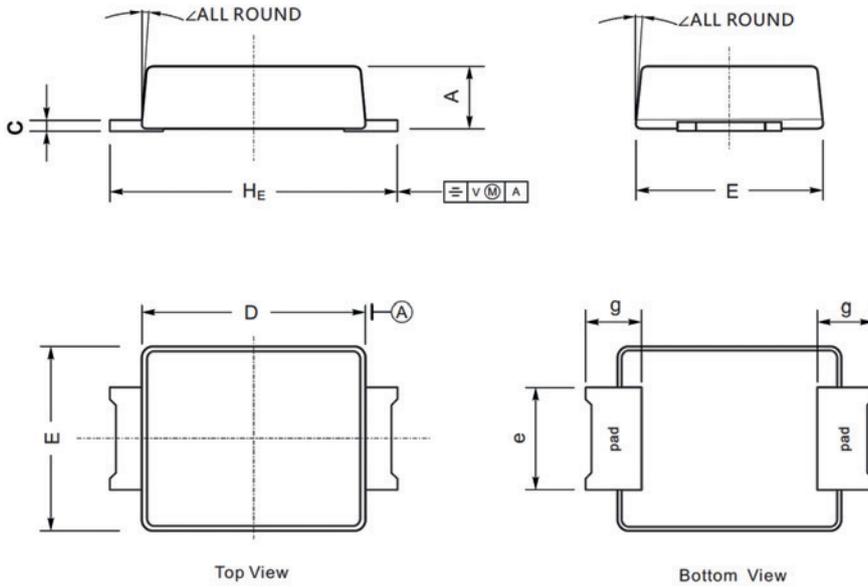


Figure 6. Typical Transient Thermal Impedance

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Package Outline Dimensions (SMBF)



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	1.100	1.300	0.043	0.051
C	0.180	0.260	0.007	0.010
D	4.200	4.400	0.165	0.173
E	3.500	3.700	0.138	0.146
HE	5.100	5.500	0.201	0.217
e	1.900	2.200	0.075	0.087
g	1.000		0.039	
<	9°		9°	

Recommended Pad Layout

