

GSDSK22B Series

Surface Mount Schottky Barrier Rectifiers

Product Description

Reverse Voltage 20V to 200V
Forward Current 2.0A

Features

- Plastic package has Underwriters Laboratory Flammability Classification 94V-O
- For surface mounted applications
- High current capacity
- Built-in strain relief
- Low profile package
- Metal to silicon rectifier. majority carrier conduction
- High surge capacity
- Low power loss, high efficiency
- For use in low voltage high frequency inverters, free wheeling, and polarity protection application
- Halogen-free parts.

Mechanical Data

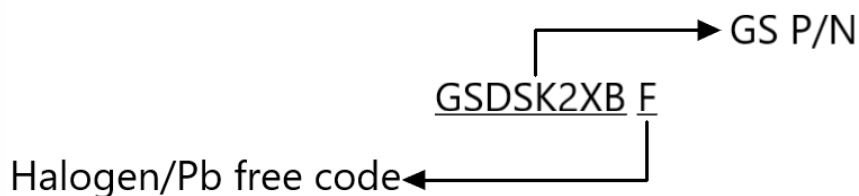
- Case : Molded plastic, DO-214AA(SMB)
- Terminals : Solder plated, solderable per MIL-STD-750, method 2026 guaranteed
- Polarity : Color band denotes cathode end

Packages



SMB

Ordering Information



Part Number	Package	Quantity Reel
GSDSK2XBF	SMB	3000 PCS

Marking Information

P/N	Part Marking	Package
GSDSK22BF	SK22	SMB (DO-214AA)
GSDSK23BF	SK23	SMB (DO-214AA)
GSDSK24BF	SK24	SMB (DO-214AA)
GSDSK25BF	SK25	SMB (DO-214AA)
GSDSK26BF	SK26	SMB (DO-214AA)
GSDSK28BF	SK28	SMB (DO-214AA)
GSDSK210BF	SK210	SMB (DO-214AA)
GSDSK215BF	SK215	SMB (DO-214AA)
GSDSK220BF	SK220	SMB (DO-214AA)

Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

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

For capacitive load, derate current by 20%.

Symbol	Conditions	GSDSK22BF	GSDSK23BF	GSDSK24BF	Unit
V _{RRM}	Maximum Repetitive Peak Reverse Voltage	20	30	40	V
V _{RMS}	Maximum RMS Voltage	14	21	28	V
V _{DC}	Maximum DC Blocking Voltage	20	30	40	V
V _F	Maximum Instantaneous I _F =2.0A (Note 1)	0.50	0.55		V
I _F	Maximum Average Forward Rectified Current	2.0			A
I _{FSM}	Peak Forward Surge Current, 8.3ms Single Half Sine-Wave Superimposed on Rated Load	50			A
I _R	Maximum DC Reverse Current At Rated DC Blocking Voltage	T _A = 25°C	0.5		mA
		T _A = 100°C	20		
R _{θJA}	Typical Thermal Resistance (Note 2)	75			°C/W
R _{θJL}		17			°C/W
T _J	Operating Junction Temperature Range	-65 to +125			°C
T _{STG}	Storage Temperature Range	-65 to +150			°C

Notes 1 : Pulse test: 300µs pulse width, 1% duty cycle.

Notes 2 : P.C.B. mounted with 0.3 x 0.3" (8.0 x 8.0mm) copper pad areas.

Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

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

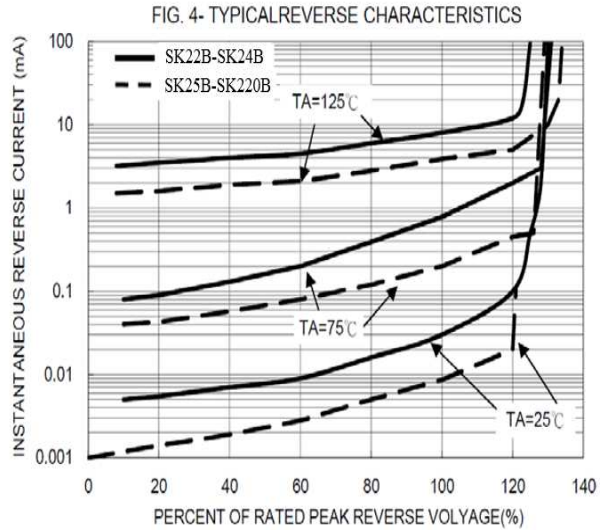
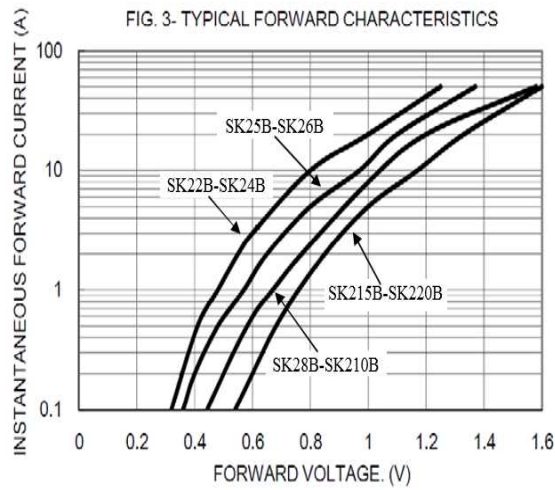
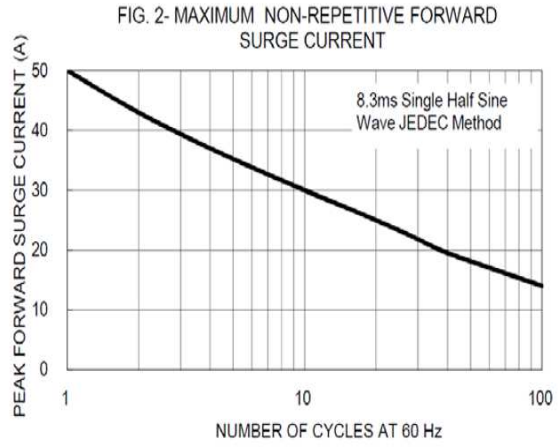
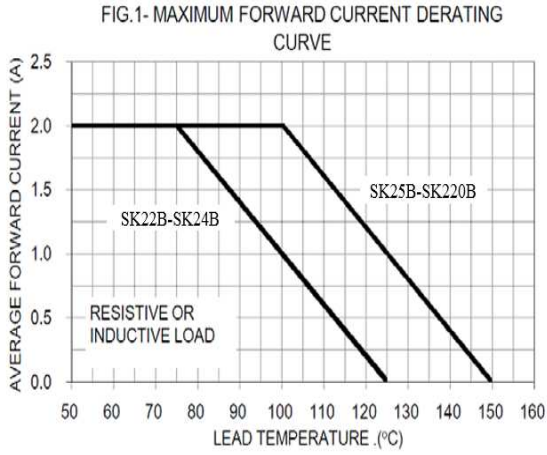
For capacitive load, derate current by 20%.

Symbol	Conditions	GSDSK25BF	GSDSK26BF	GSDSK28BF	Unit
V _{RRM}	Maximum Repetitive Peak Reverse Voltage	50	60	80	V
V _{RMS}	Maximum RMS Voltage	35	42	56	V
V _{DC}	Maximum DC Blocking Voltage	50	60	80	V
V _F	Maximum Instantaneous I _F =2.0A (Note 1)	0.75		0.85	V
Symbol	Conditions	GSDSK210BF	GSDSK215BF	GSDSK220BF	Unit
V _{RRM}	Maximum Repetitive Peak Reverse Voltage	100	150	200	V
V _{RMS}	Maximum RMS Voltage	71	105	140	V
V _{DC}	Maximum DC Blocking Voltage	100	150	200	V
V _F	Maximum Instantaneous I _F =2.0A (Note 1)	0.85	0.95		V
I _F	Maximum Average Forward Rectified Current	2.0			A
I _{FSM}	Peak Forward Surge Current, 8.3ms Single Half Sine-Wave Superimposed on Rated Load	50			A
I _R	Maximum DC Reverse Current At Rated DC Blocking Voltage	T _A = 25°C	0.5		mA
		T _A = 100°C	20		
R _{θJA}	Typical Thermal Resistance (Note 2)	75			°C/W
R _{θJL}		17			°C/W
T _J	Operating Junction Temperature Range	-65 to +150			°C
T _{STG}	Storage Temperature Range	-65 to +150			°C

Notes 1 : Pulse test: 300µs pulse width, 1% duty cycle.

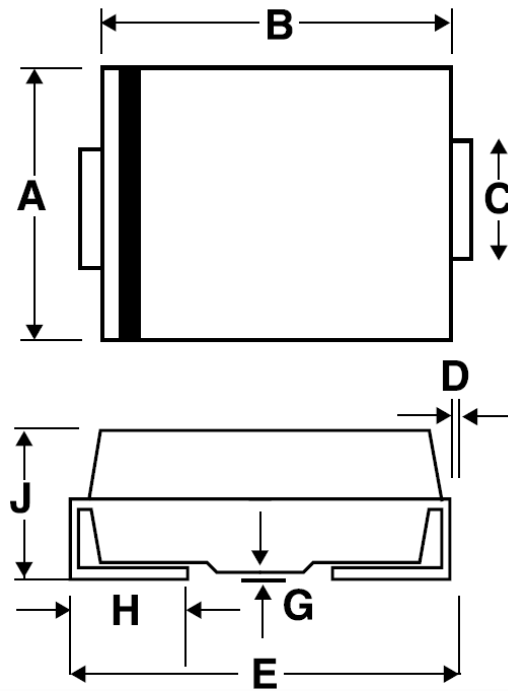
Notes 2 : P.C.B. mounted with 0.3 x 0.3" (8.0 x 8.0mm) copper pad areas.

Typical Characteristics



Package Dimension

SMB (DO-214AA)







Dimensions



Symbol	Millimeters		Inches	
	Min	Max	Min	Max
A	3.26	3.94	0.128	0.155
B	4.02	4.85	0.158	0.191
C	1.91	2.20	0.075	0.087
D	0.152	0.305	0.006	0.012
E	5.08	5.59	0.200	0.220
G	0.000	0.203	0.000	0.008
H	0.76	1.52	0.030	0.060
J	2.11	2.44	0.083	0.096

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