GSDB320B Series

Surface Mount Schottky Barrier Rectifiers

Product Description

Reverse Voltage 20V To 200V Forward Current 3.0A

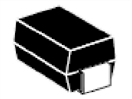
Features

- Low profile package
- Ideal for automated placement
- Guard ring for over voltage protection
- Low forward voltage drop
- Lead(Pb)-Free

Mechanical Data

- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0
- Terminals: Lead Free Plating (Tin Finish). Solder able per MIL-STD-202, Method 208
- Polarity: Cathode Band
- Weight: 0.095grams (approximate)

Packages



SMB (DO-214AA)

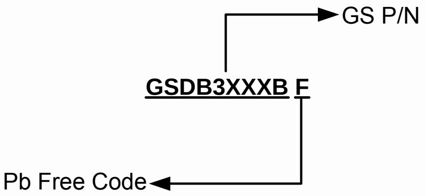
Marking Information

P/N	Package	Part Marking	Quantity
GSDB320BF	SMB (DO-214AA)	WTYYWW B320B.	3000 PCS
GSDB330BF	SMB (DO-214AA)	WTYYWW B330B.	
GSDB340BF	SMB (DO-214AA)	WTYYWW B340B.	
GSDB350BF	SMB (DO-214AA)	WTYYWW B350B.	
GSDB360BF	SMB (DO-214AA)	WTYYWW B360B.	
GSDB380BF	SMB (DO-214AA)	WTYYWW B380B.	
GSDB3100BF	SMB (DO-214AA)	WTYYWW B3100B.	
GSDB3150BF	SMB (DO-214AA)	WTYYWW B3150B.	
GSDB3200BF	SMB (DO-214AA)	WTYYWW B3200B.	

※ "WT" GS Code & "YYWW" Date Code

※ "B3XXXB" GS P/N & "." Halogen Free

Ordering Information



Electrical Characteristics

(T$_A$= 25°C unless otherwise noted)

Symbol	Conditions		B320B	B330B	B340B	B350B	B360B	Unit
V_{RRM}	Maximum Repetitive Peak Reverse Voltage		20	30	40	50	60	V
V_{RMS}	Maximum RMS Voltage		14	21	28	35	42	V
V_{DC}	Maximum DC Blocking Voltage		20	30	40	50	60	V
V_F	Maximum Instantaneous I_F=3A		0.5			0.62		V
I_R	Maximum DC Reverse Current At Rated DC Blocking Voltage	T_J = 25°C	0.5					mA
		T_J = 100°C	10					
C_J	Typical Junction Capacitance (Note 1)		180			150		pF

Symbol	Conditions		B380B	B3100B	B3150B	B3200B	Unit
V_{RRM}	Maximum Repetitive Peak Reverse Voltage		80	100	150	200	V
V_{RMS}	Maximum RMS Voltage		56	70	105	140	V
V_{DC}	Maximum DC Blocking Voltage		80	100	150	200	V
V_F	Maximum Instantaneous I_F=3A		0.8		0.83	0.85	V
I_R	Maximum DC Reverse Current At Rated DC Blocking Voltage	T_J = 25°C	0.2				mA
		T_J = 100°C	5				
C_J	Typical Junction Capacitance (Note 1)		110		100	80	pF
I_F	Maximum Average Forward Rectified Current		3				A
I_{FSM}	Peak Forward Surge Current, 8.3ms Single Half Sine-Wave Superimposed on Rated Load		80				A
$R_{\Theta JA}$	Thermal Resistance Junction to Ambient		70				°C/W
$R_{\Theta JC}$	Thermal Resistance Junction to Case		30				°C/W
T_J	Operating Temperature Range		-55 to +125				°C
T_{STG}	Storage Temperature Range		-55 to +150				°C

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

Typical Characteristics

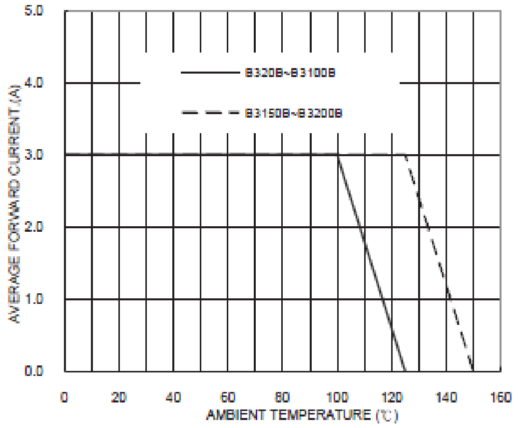


FIG. 1-TYPICAL FORWARD CURRENT DERATING CURVE

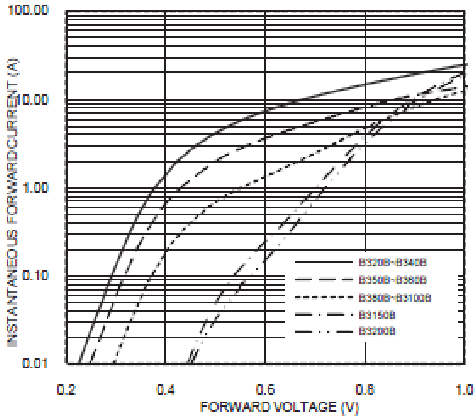


FIG. 2-TYPICAL FORWARD CHARACTERISTICS

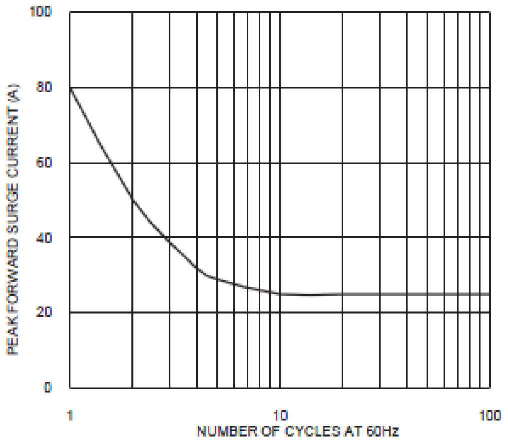


FIG. 3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

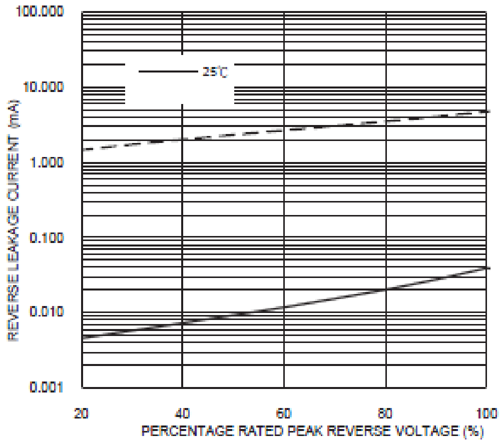


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

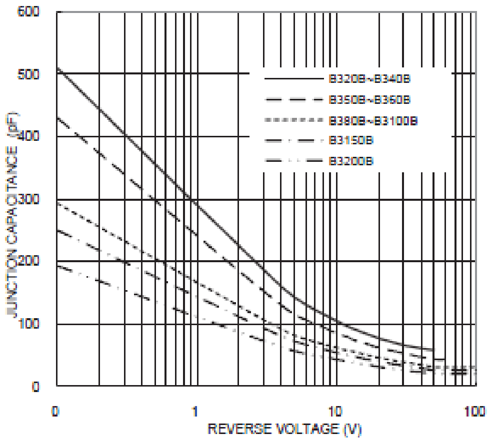
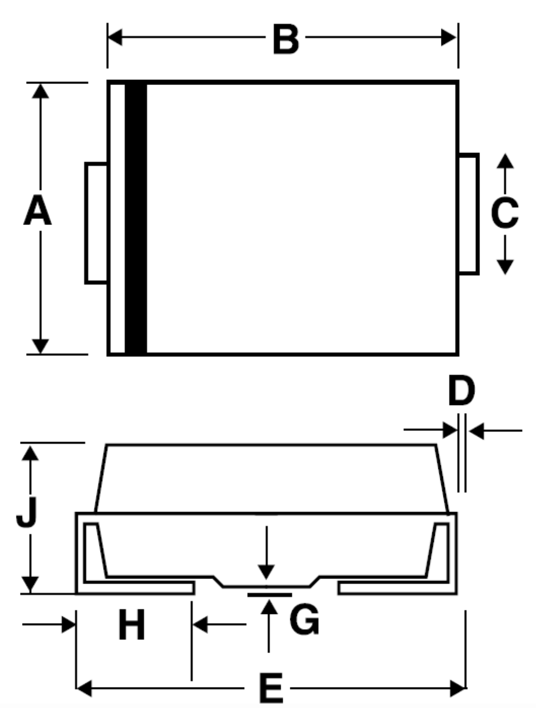


FIG. 5-TYPICAL JUNCTION CAPACITANCE

Package Dimension

SMB (DO-214AA)



Dimensions				
Symbol	Millimeters		Inches	
	Min	Max	Min	Max
A	3.30	3.94	0.129	0.155
B	4.06	4.57	0.159	0.179
C	1.95	2.20	0.076	0.086
D	0.15	0.31	0.005	0.012
E	5.21	5.59	0.205	0.220
G	0.10	0.20	0.003	0.007
H	0.76	1.52	0.029	0.059
J	2.13	2.44	0.083	0.096

NOTICE

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