

GSDE3xBF Series

Fast Recovery Diode

Product Description

Reverse Voltage 200V to 600V.
Forward Current 3.0A



Features

- Low Leakage Current

Mechanical Data

- SMB (DO-214AA) Package
- The Color Band denotes Cathode End
- RoHS Compliant and Halogen Free

Package and Pin Assignment

SMB (DO-214AA)		Equivalent Circuit	
			
Pin	Description	Pin	Description
1	Anode	2	Cathode

Ordering and Marking Information

Ordering Information				
Part Number	Marking Code	V _{RRM}	Package	Quantity/Reel
GSDE3DBF	ER3D	200V	SMB (DO-214AA)	3,000 PCS
GSDE3GBF	ER3G	400V		
GSDE3JBF	ER3J	600V		

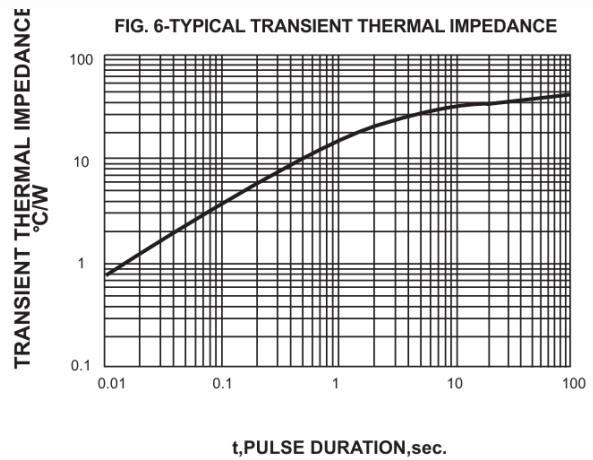
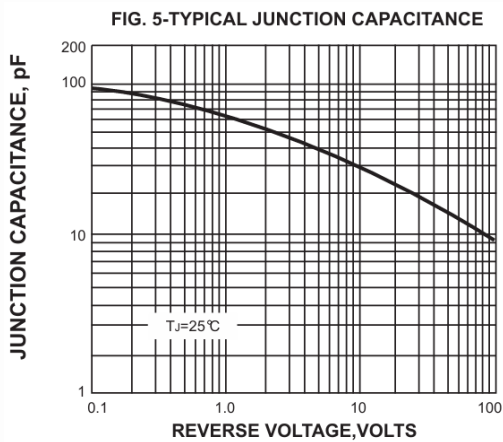
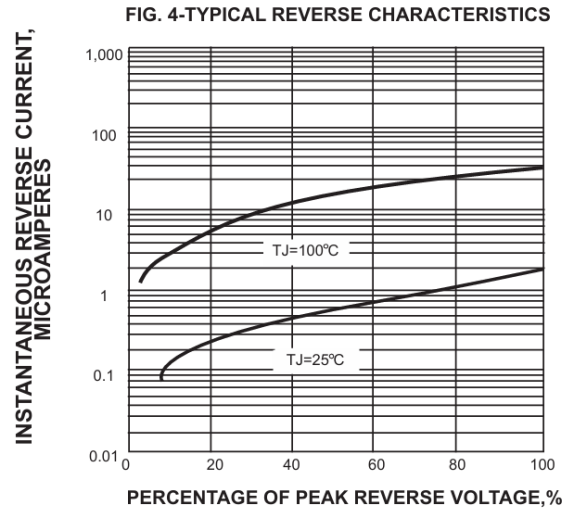
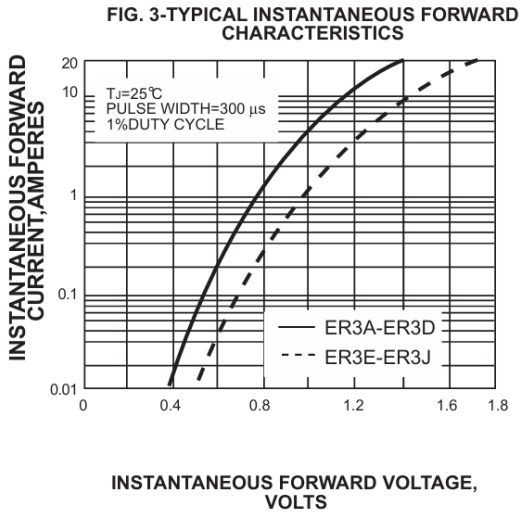
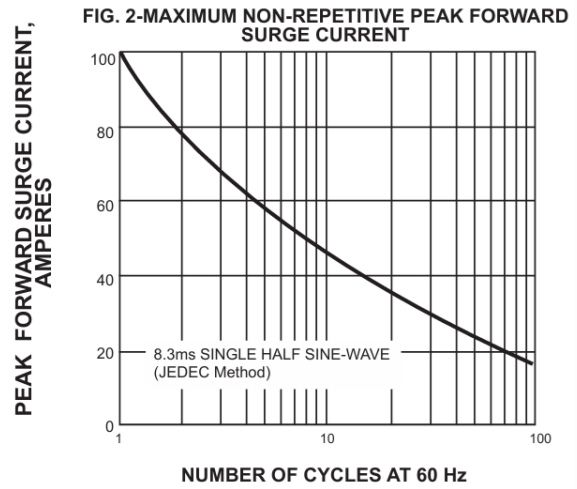
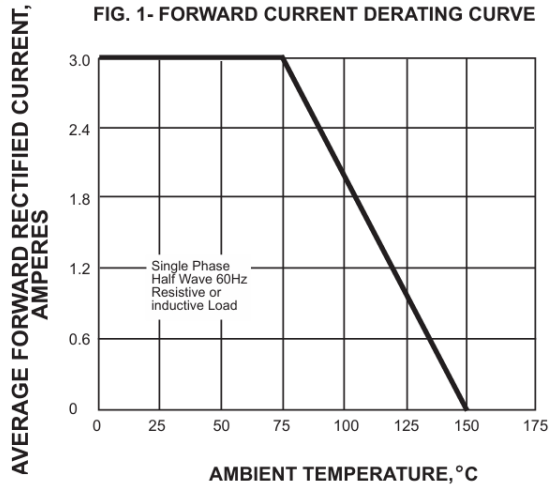
Electrical Characteristics (T_A=25°C unless otherwise specified)

Symbol	Description	E3D	E3G	E3J	Unit
V _{RRM}	Maximum Repetitive Peak Reverse Voltage	200	400	600	V
V _{RMS}	Maximum RMS Voltage	140	280	420	
V _{DC}	Maximum DC Blocking Voltage	200	400	600	
I _(AV)	Maximum Average Forward Rectified Current	3			A
I _{FSM}	Peak Forward Surge Current, 8.3ms Single Half-Sine-Wave Superimposed on rated Load (JEDEC Method)	100			A
V _F	Maximum Forward Voltage at 3.0A	0.95	1.25	1.7	V
I _R	Maximum Reverse Current at Rated DC Blocking Voltage	T _J =25°C	5		μA
		T _J =100°C	100		
t _{rr}	Maximum Reverse Recovery Time ¹	35			ns
C _J	Typical Junction Capacitance ²	45			pF
R _{θJA}	Typical Thermal Resistance ³	47			°C/W
T _J	Junction Temperature Range	-55 to 150			°C
T _{STG}	Storage Temperature Range	-55 to 150			°C

NOTE:

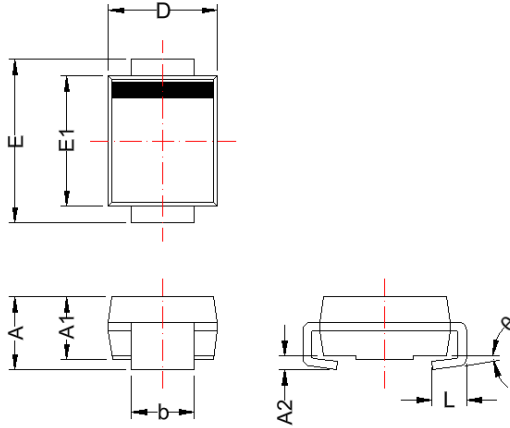
- Reverse recovery condition I_F=0.5A, I_R=1.0A, I_{rr}=0.25A
- Measured at 1MHz and applied reverse voltage of 4.0 V_{DC}.
- Mounted with 0.4 x 0.4" (10.0 x 10.0mm) Copper Pad Areas

Typical Characteristics ($T_A=25^{\circ}\text{C}$ unless otherwise specified)

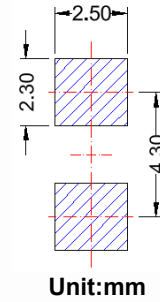


SMB (DO-214AA)

Package Dimension



Recommended Land Pattern



Dimensions				
SYMBOL	Millimeters		Inches	
	MIN	MAX	MIN	MAX
A	1.95	2.65	0.077	0.104
A1	1.90	---	0.075	---
A2	0.00	0.30	0.000	0.012
b	1.90	2.20	0.075	0.087
D	3.20	4.00	0.126	0.157
E	5.00	6.00	0.197	0.236
E1	4.00	4.90	0.157	0.193
L	0.75	1.60	0.030	0.063
θ	0°	8°	0°	8°





NOTE:



Dimensions are exclusive of Burrs, Mold Flash & Tie Bar extrusions.

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