

GSDMSB410F

Bridge Rectifier

Product Description

Bridge Rectifier 4A / 1000V

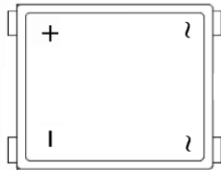
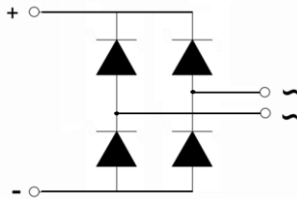
Features

- Glass Passivated Chip
- High Surge Current Capability
- Low Power Loss

Mechanical Data

- MSB Package
- Terminals: Tin Plated Leads, Solderable per Mil-STD-750 Method 2026
- Epoxy UL: 94V-0
- RoHS Compliant and Halogen Free

Packages & Pin Assignments

MSB	Equivalent Circuit
	

Ordering and Marking Information

Ordering Information			
Part Number	Package	Marking Code	Quantity/Reel
GSDMSB410F	MSB	MSB410	3,000 PCS
- Product Code: GSDMSB410		- Green Level: F for RoHS Compliant and Halogen Free	
Marking Information			
		Product Code: MSB410	

Absolute Maximum Ratings (T_A=25°C unless otherwise specified)

Symbol	Parameter	Value	Units
V _{RRM}	Maximum Repetitive Peak Reverse Voltage	1000	V
V _{RMS}	Maximum RMS Voltage	700	V
V _{DC}	Maximum DC Blocking Voltage	1000	V
I _{O(AV)}	Maximum Average Forward Rectified Current at T _L = 100°C	4	A
I _{FSM}	Peak Forward Surge Current 8.3ms Single half-sine-wave superimposed on rated load(JEDEC Method) on rated	90	A
	Peak Forward Surge Current (Non-Repetitive) (t _P =1ms, T _J = 25°C)	180	
I ² t	Current squared time @1ms≤t≤8.3ms T _J =25°C , Rating of per diode	33.6	A ² S
R _{θJA}	Typical Thermal Resistance from Junction to Ambient	75	°C/W
T _J	Max Junction Temperature	-55 to 150	°C
T _{STG}	Storage Temperature Range	-55 to 150	°C

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

Symbol	Parameter	Test Condition	Min	Max	Units
I_R	Reverse Leakage Current	V _R = 1000V, T _J =25°C		5	μA
		V _R = 1000V, T _J =100°C		500	
V_F	Forward Voltage	I _F = 4A		1.1	V
C_J	Typical Capacitance	V _R = 0V, f = 1MHz	40		pF

Typical Characteristics

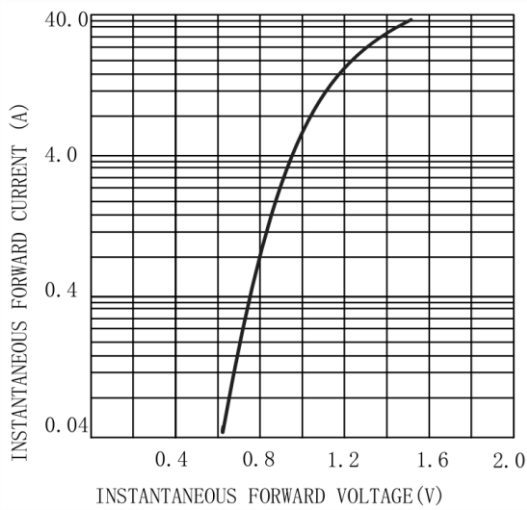


Fig. 1 Forward Characteristics

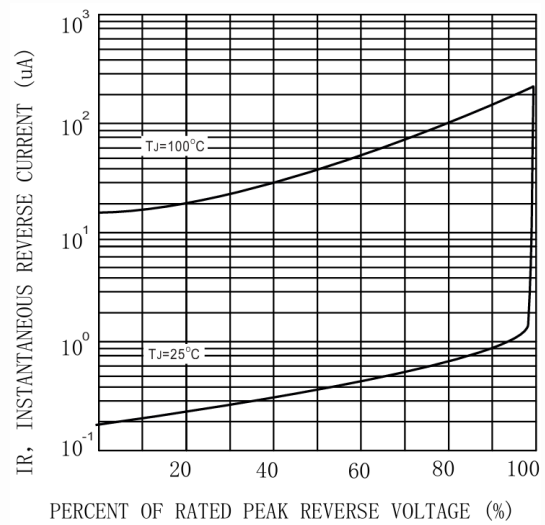


Fig. 2 Reverse Characteristics

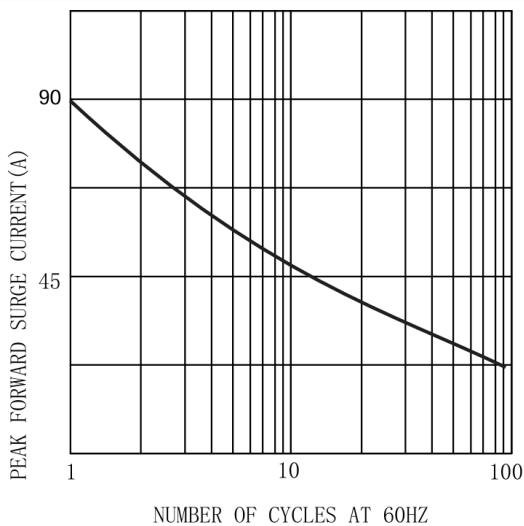


Fig. 3 Forward Surge Current

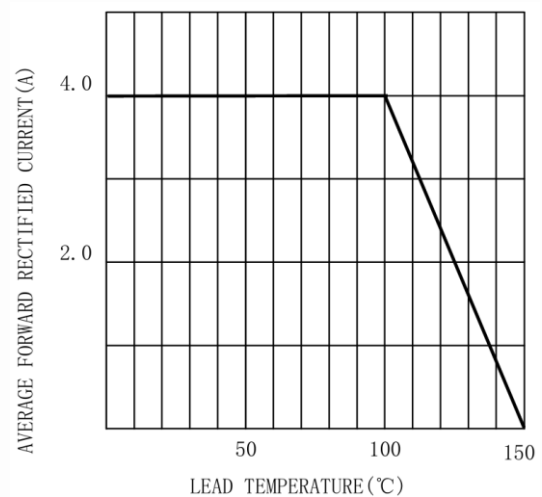
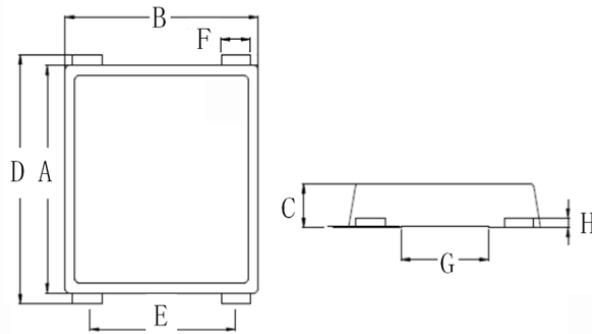


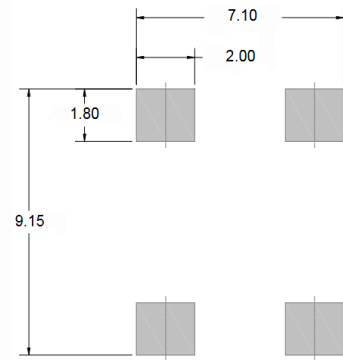
Fig. 4. Power Derating Curve

MSB

Package Dimension



Recommended Land Pattern



Unit: mm

Dimensions				
Symbol	Millimeters		Inches	
	MIN	MAX	MIN	MAX
A	7.0	7.4	0.28	0.29
B	6.5	6.9	0.26	0.27
C	1.2	1.6	0.05	0.06
D	8.2	8.8	0.32	0.35
E	4.9	5.3	0.19	0.21
F	0.9	1.3	0.04	0.05
G	2.8	3.2	0.11	0.13
H	0.2	0.4	0.01	0.02

NOTE:

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

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