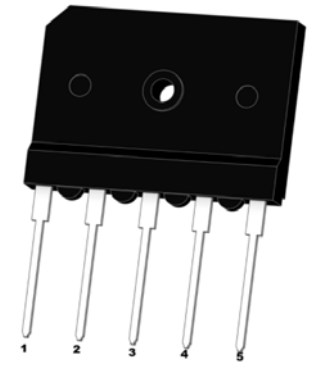
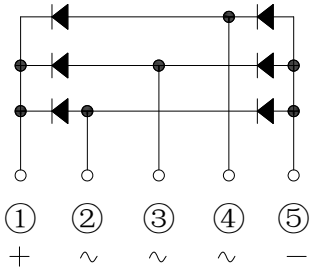
Three Phase Bridge Rectifiers





Features

- Thin single in-line package
- Glass passivated chip junction
- High surge current capability
- Solder dip 275 °C max. 7 s, per JESD 22-B106

Typical Applications

General purpose use in AC/DC bridge full wave rectification for Server、Frequency converter、Industrial power supply.

Mechanical Data

- **Package**: 3GBJ
  Molding compound meets UL 94 V-0 flammability rating, RoHS-compliant
- **Terminals**: Tin plated leads, solderable per J-STD-002 and JESD22-B102
- **Polarity:** As marked on body

■Maximum Ratings (T_a=25℃ Unless otherwise specified)

PARAMETER		SYMBOL	UNIT	DG50NA140	DG50NA160
Device marking code				DG50NA140	DG50NA160
Maximum Repetitive Peak Reverse Voltage		V_{RRM}	V	1400	1600
Maximum RMS Voltage		V_{RMS}	V	980	1120
Maximum DC blocking Voltage		V_{DC}	V	1400	1600
Average rectified output current @60Hz sine wave, R-load	With heatsink Tc =95℃	I_O	A	50.0	
	Without heatsink Ta =25℃			4.5	
Forward Surge Current (Non-repetitive) @8.3ms Half-sine wave,1 cycle, Tj=25℃		I_{FSM}	A	500	
Forward Surge Current (Non-repetitive) @1ms, square wave, 1 cycle, Tj=25℃				1000	
Current squared time @1ms≤t≤8.3ms Tj=25℃, Rating of per diode		I^2t	A^2s	1037.5	
Storage temperature		T_{stg}	℃	-55 ~ +150	
Junction temperature		T_j	℃	-55 ~ +150	
Dielectric strength @ Terminals to case, AC 1 minute		V_{dis}	KV	2.5	
Mounting torque @Recommend torque：5kg·cm		Tor	kg·cm	8	

■Electrical Characteristics（T_a=25℃ Unless otherwise specified）

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	DG50NA140	DG50NA160
Maximum instantaneous forward voltage drop per diode	V_F	V	I_{FM}=25A	1.1	
Maximum DC reverse current at rated DC blocking voltage per diode	I_R	μA	T_j=25℃	5	
			T_j=125℃	500	
Typical junction capacitance	Cj	pF	Measured at 1MHz and Applied Reverse Voltage of 4.0 V.D.C	200	

■Thermal Characteristics （T_a=25℃ Unless otherwise specified）

PARAMETER		SYMBOL	UNIT	DG50NA140	DG50NA160
Typical Thermal Resistance	Between junction and ambient, Without heatsink	RθJ-A	℃/W	18.0	
	Between junction and case, With heatsink	RθJ-C		0.5	

Note: Device mounted on 75mm x 45mm x 5.5mm Aluminum Plate Heatsink.

■Ordering Information (Example)

PREFERED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
DG50NA140 ~ DG50NA160	A1	Approximate 10	100	100	1000	BOX
DG50NA140 ~ DG50NA160	B1	Approximate 10	10	/	1000	TUBE

■ Characteristics (Typical)

FIG1:Io-Tc Curve

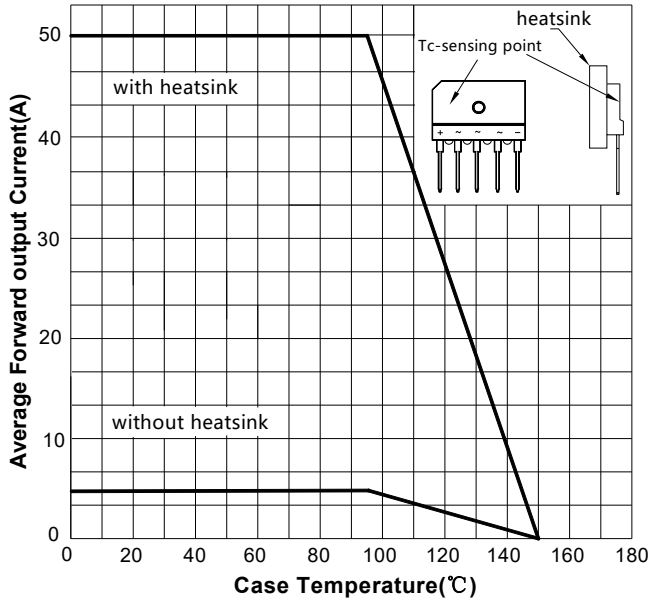


FIG2:Surge Forward Current Capability

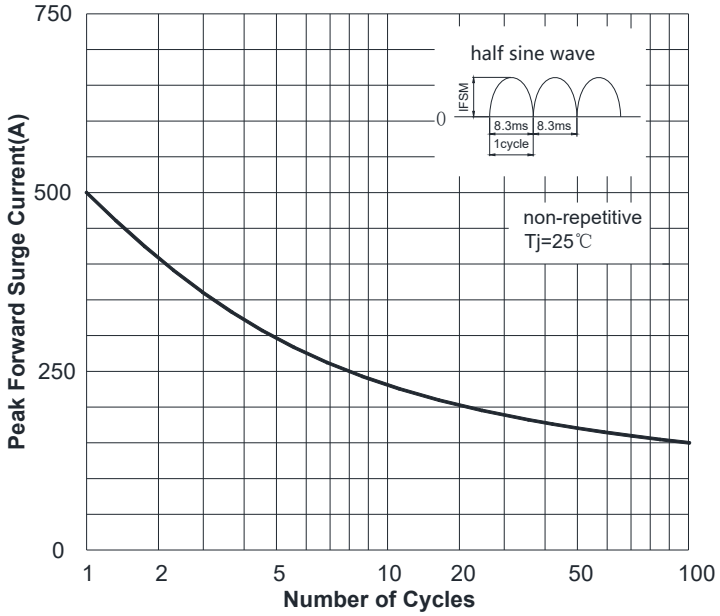


FIG3: Typical Forward Voltage

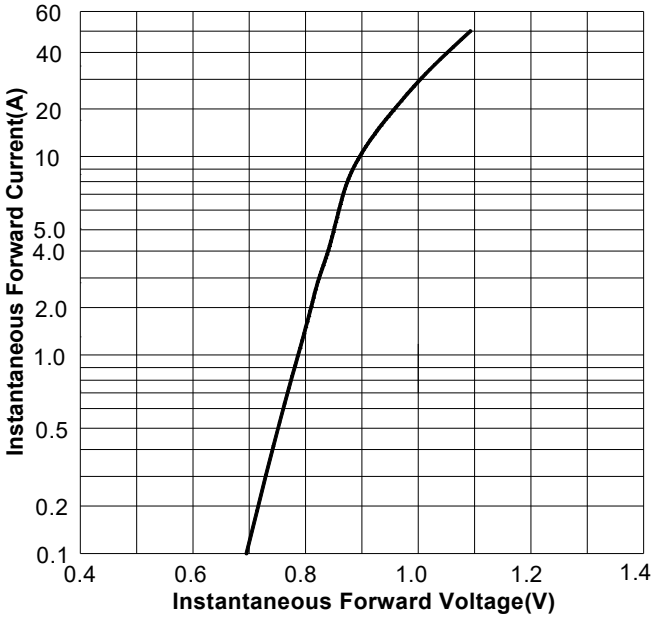
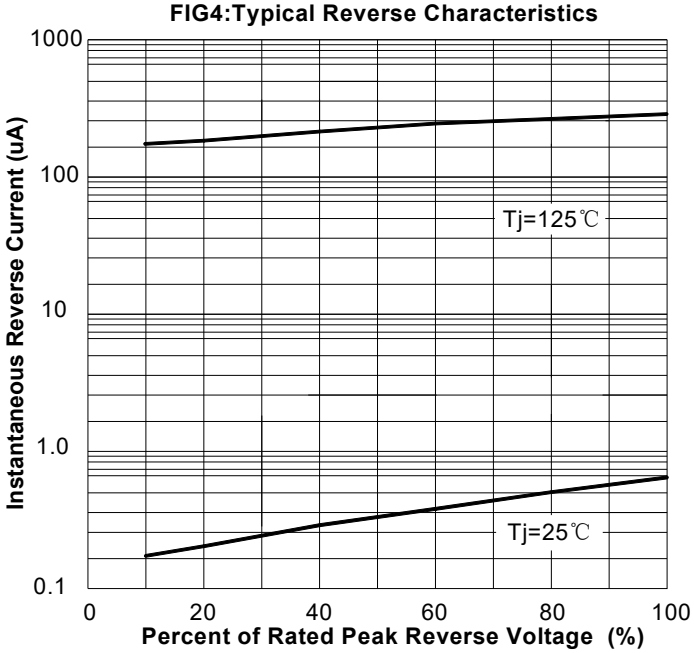
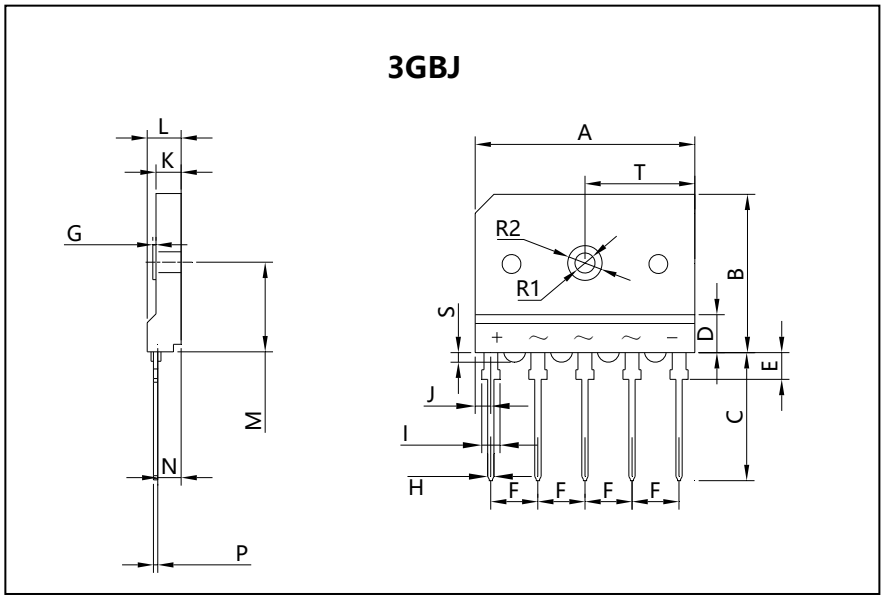


FIG4:Typical Reverse Characteristics



■ Outline Dimensions



3GBJ		
Dim	**Min**	**Max**
A	34.7	35.3
B	24.7	25.3
C	19.5	20.1
D	5.1	5.6
E	3.9	4.5
F	7.2	7.8
G	0.4	0.6
H	0.9	1.1
I	2.0	2.4
J	2.2	2.6
K	3.8	4.2
L	5.2	5.6
M	13.9	14.5
N	3.5	3.9
P	0.60	0.80
R1	2.7	3.7
R2	5.3	6.3
S	1.3	1.9
T	17.2	17.8

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