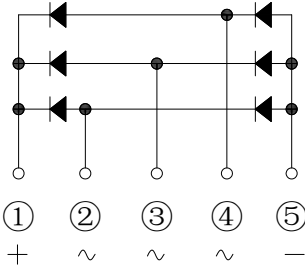
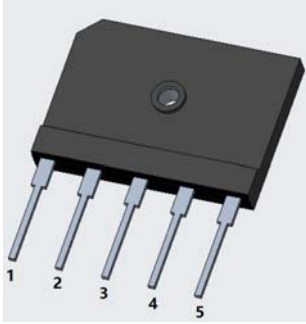


Three Phase Bridge Rectifiers



Features

- UL recognition, file #E230084
- 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°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	DG50NA140	DG50NA160
Device marking code			DG50NA140	DG50NA160
Maximum Repetitive Peak Reverse Voltage	VRRM	V	1400	1600
Maximum RMS Voltage	VRMS	V	980	1120
Maximum DC blocking Voltage	VDC	V	1400	1600
Average rectified output current @60Hz sine wave, R-load	With heatsink T _c =95°C	I _O	A	50.0
	Without heatsink T _a =25°C			4.5
Forward Surge Current (Non-repetitive) @8.3ms Half-sine wave, 1 cycle, T _j =25°C	IFSM	A	500	
Forward Surge Current (Non-repetitive) @1ms, square wave, 1 cycle, T _j =25°C			1000	
Current squared time @1ms≤t≤8.3ms T _j =25°C, Rating of per diode	I ² t	A ² s	1037.5	
Storage temperature	T _{stg}	°C	-55 ~ +150	
Junction temperature	T _j	°C	-55 ~ +150	
Dielectric strength @ Terminals to case, AC 1 minute	V _{dis}	KV	2.5	
Mounting torque @Recommend torque: 5kg·cm	T _{or}	kg·cm	8	



DG50NA140 THRU DG50NA160

■ Electrical Characteristics (T_a=25°C 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°C	5	
			T _j =125°C	500	
Typical junction capacitance	C _j	pF	Measured at 1MHz and Applied Reverse Voltage of 4.0 V.D.C	200	

■ Thermal Characteristics (T_a=25°C Unless otherwise specified)

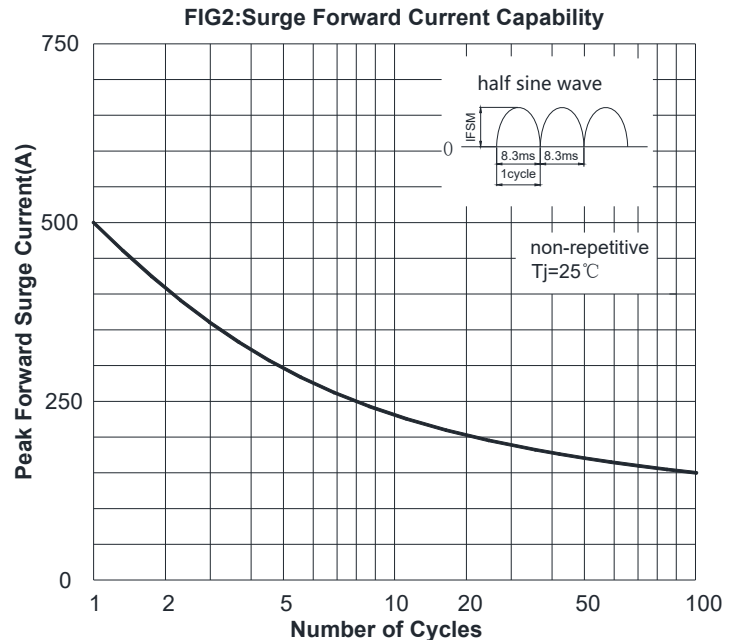
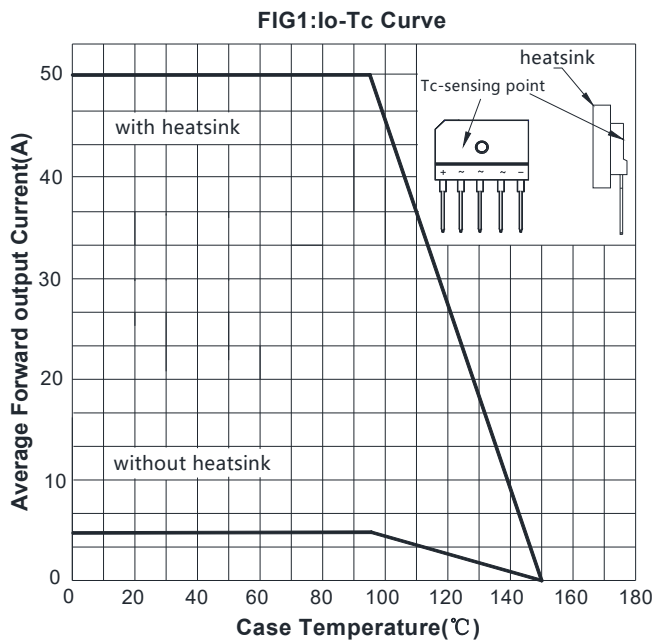
PARAMETER		SYMBOL	UNIT	DG50NA140	DG50NA160
Typical Thermal Resistance	Between junction and ambient, Without heatsink	R _{θJ-A}	°C/W	18.0	
	Between junction and case, With heatsink	R _{θJ-C}		0.5	

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

■ Ordering Information (Example)

PREFERRED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIMUM 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)





DG50NA140 THRU DG50NA160

FIG3: Typical Forward Voltage

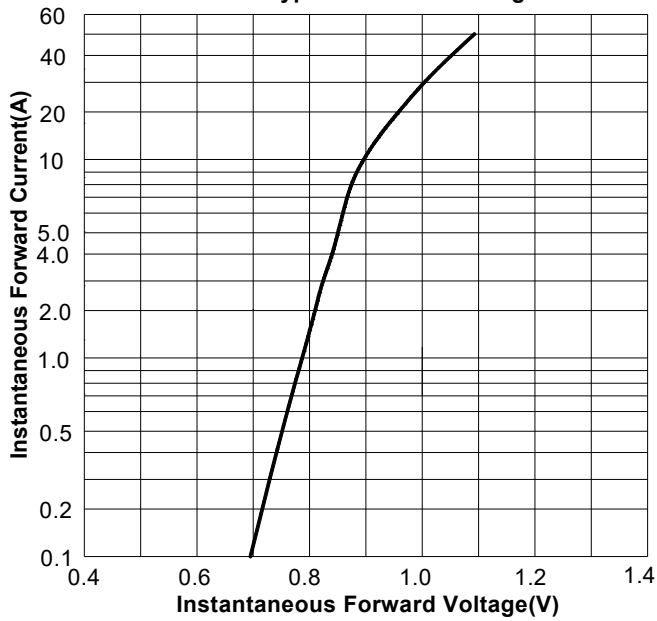
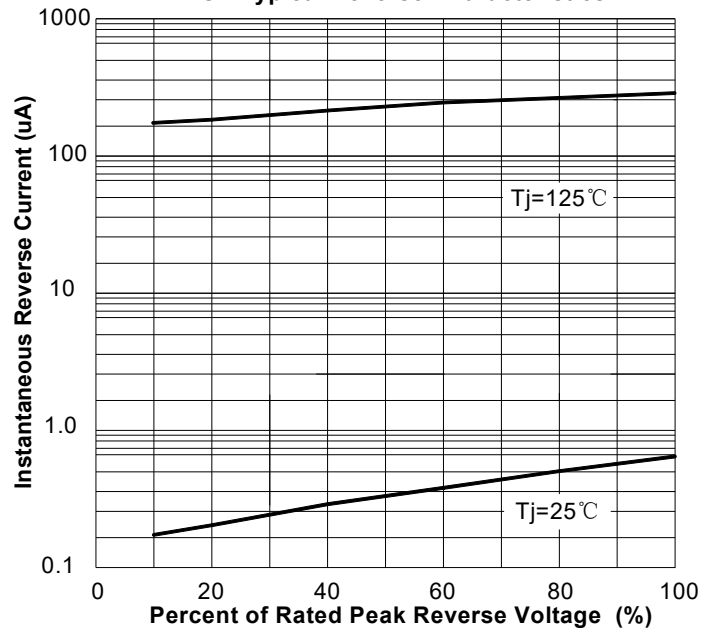
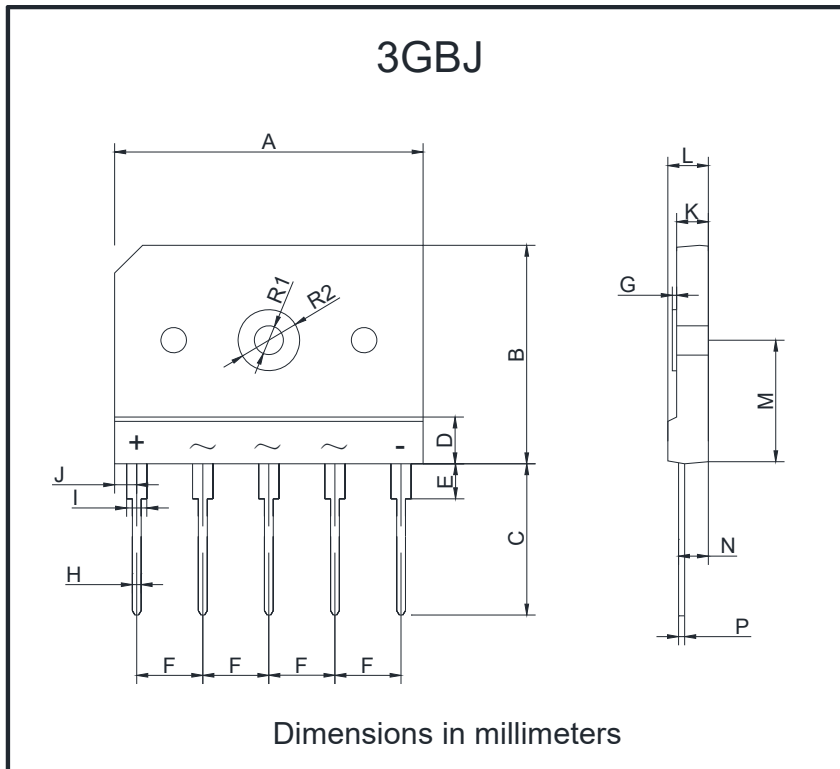


FIG4: Typical Reverse Characteristics



■ Outline Dimensions



3GBJ		
Dim	Min	Max
A	34.7	35.3
B	24.7	25.3
C	17.0	17.6
D	5.6	6.2
E	3.8	4.4
F	7.2	7.8
G	0.4	0.6
H	0.9	1.1
I	2.2	2.4
J	2.2	2.6
K	3.4	3.8
L	4.4	4.8
M	13.9	14.5
N	3.15	3.65
P	0.65	0.75
R1	2.7	3.7
R2	6.7	7.3



Disclaimer

The information presented in this document is for reference only. Yangzhou Yangjie Electronic Technology Co., Ltd. reserves the right to make changes without notice for the specification of the products displayed herein to improve reliability, function or design or otherwise.

The product listed herein is designed to be used with ordinary electronic equipment or devices, and not designed to be used with equipment or devices which require high level of reliability and the malfunction of which would directly endanger human life (such as medical instruments, transportation equipment, aerospace machinery, nuclear-reactor controllers, fuel controllers and other safety devices), Yangjie or anyone on its behalf, assumes no responsibility or liability for any damages resulting from such improper use of sale.

This publication supersedes & replaces all information previously supplied. For additional information, please visit our website [http:// www.21yangjie.com](http://www.21yangjie.com) , or consult your nearest Yangjie's sales office for further assistance.