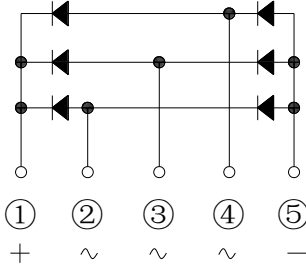
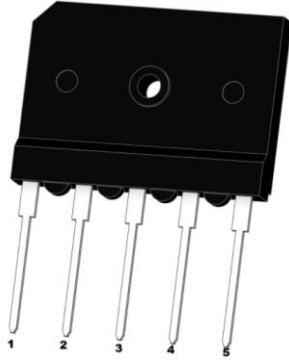


## Three Phase Bridge Rectifiers



### 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<sub>a</sub>=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	DG15NA140	DG15NA160
Device marking code			DG15NA140	DG15NA160
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 <sub>c</sub> =135°C	I <sub>O</sub>	A	15.0
	Without heatsink T <sub>a</sub> =25°C			4.0
Forward Surge Current (Non-repetitive) @8.3ms Half-sine wave, 1 cycle, T <sub>j</sub> =25°C	IFSM	A	350	
Forward Surge Current (Non-repetitive) @1ms, square wave, 1 cycle, T <sub>j</sub> =25°C			700	
Current squared time @1ms≤t≤8.3ms T <sub>j</sub> =25°C, Rating of per diode	I <sup>2</sup> t	A <sup>2</sup> s	508	
Storage temperature	T <sub>stg</sub>	°C	-55 ~ +150	
Junction temperature	T <sub>j</sub>	°C	-55 ~ +150	
Dielectric strength @ Terminals to case, AC 1 minute	V <sub>dis</sub>	KV	2.5	
Mounting torque @Recommend torque: 5kg·cm	T <sub>or</sub>	kg·cm	8	



# DG15NA140 THRU DG15NA160

## ■ Electrical Characteristics (T<sub>a</sub>=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	DG15NA140	DG15NA160
Maximum instantaneous forward voltage drop per diode	V <sub>F</sub>	V	I <sub>FM</sub> =7.5A	1.0	
Maximum DC reverse current at rated DC blocking voltage per diode	I <sub>R</sub>	μA	T <sub>j</sub> =25°C	5	
			T <sub>j</sub> =125°C	500	
Typical junction capacitance	C <sub>j</sub>	pF	Measured at 1MHz and Applied Reverse Voltage of 4.0 V.D.C	115	

## ■ Thermal Characteristics (T<sub>a</sub>=25°C Unless otherwise specified)

PARAMETER		SYMBOL	UNIT	DG15NA140	DG15NA160
Typical Thermal Resistance	Between junction and ambient, Without heatsink	R <sub>θJ-A</sub>	°C/W	18.0	
	Between junction and case, With heatsink	R <sub>θJ-C</sub>		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
DG15NA140 ~ DG15NA160	A1	Approximate 10	100	100	1000	BOX
DG15NA140 ~ DG15NA160	B1	Approximate 10	10	/	1000	TUBE

## ■ Characteristics (Typical)

FIG1: I<sub>o</sub>-T<sub>c</sub> Curve

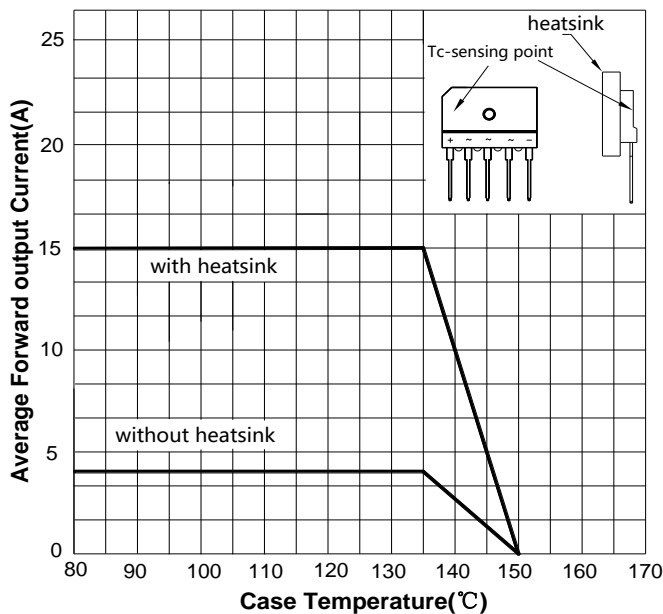
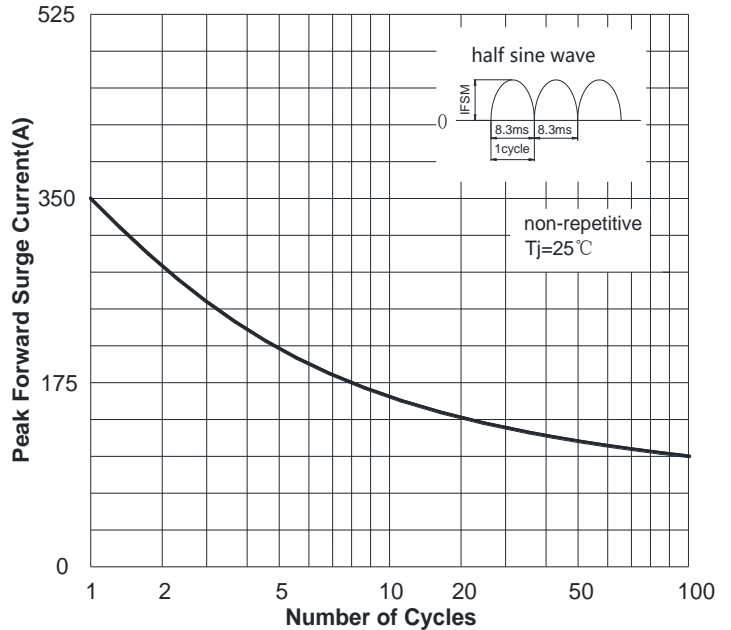


FIG2: Surge Forward Current Capability





# DG15NA140 THRU DG15NA160

FIG3: Typical Forward Voltage

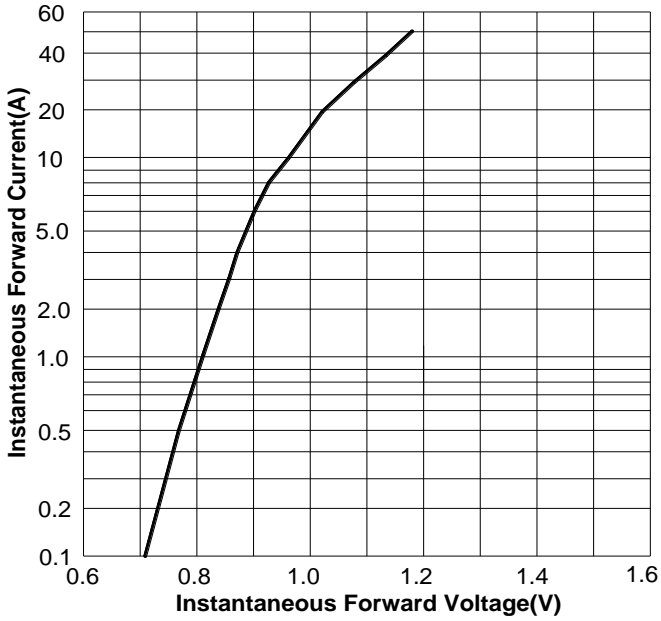
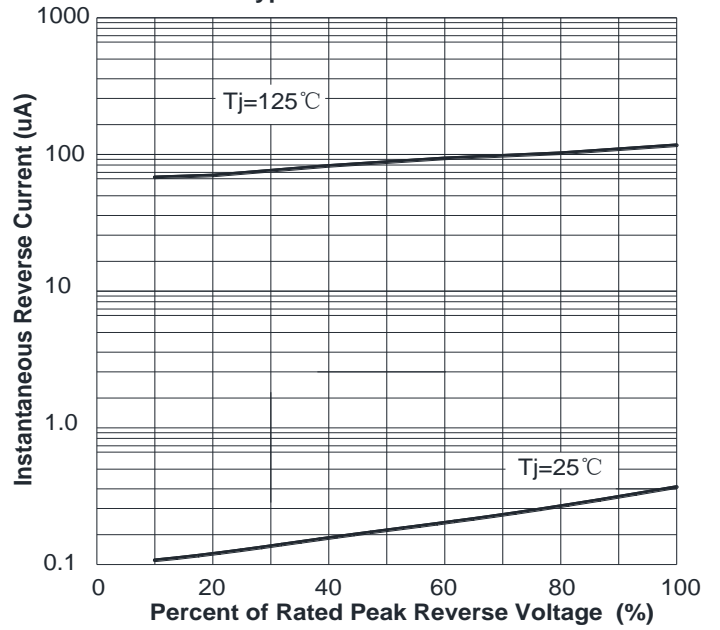
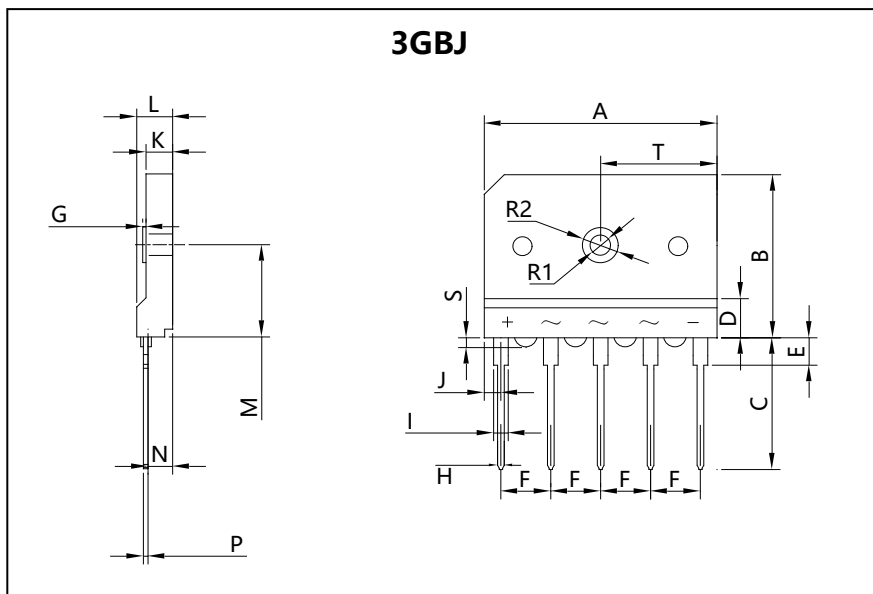


FIG4: Typical Reverse Characteristics



## ■ 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	2.1	2.3
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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