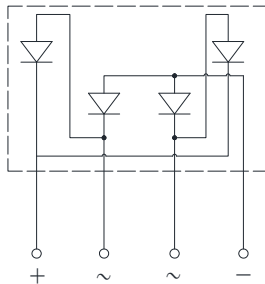


Bridge Rectifiers



Features

- UL recognition, file #E230084
- Glass passivated chip junction
- Thin single in-line package
- 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 switching power supply, home appliances, office equipment, industrial automation applications.

Mechanical Data

- **Package:** 6KBJ
Molding compound meets UL 94 V-0 flammability rating, -
- **Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22-B102
- **Polarity:** As marked on body

■Maximum Ratings (Ta=25°C Unless otherwise specified)

PARAMETER		SYMBOL	UNIT	GBJ20AA	GBJ20BA	GBJ20DA	GBJ20GA	GBJ20JA	GBJ20KA	GBJ20MA
Device marking code				GBJ20AA	GBJ20BA	GBJ20DA	GBJ20GA	GBJ20JA	GBJ20KA	GBJ20MA
Maximum Repetitive Peak Reverse Voltage		VRRM	V	50	100	200	400	600	800	1000
Maximum RMS Voltage		VRMS	V	35	70	140	280	420	560	700
Maximum DC blocking Voltage		VDC	V	50	100	200	400	600	800	1000
Average rectified output current @60Hz sine wave, R-load,	With heatsink Tc =100°C	IO	A	20.0						
	Without heatsink Ta =25°C			4.0						
Forward Surge Current (Non-repetitive) @8.3ms,Half-sine wave,1 cycle, Tj=25°C		IFSM	A	320						
Forward Surge Current (Non-repetitive) @1ms, square wave, 1 cycle, Tj=25°C				640						
Current squared time @1ms≤t<8.3ms Tj=25°C,Rating of per diode		I²t	A²s	425						
Storage temperature		Tstg	°C	-55 ~ +150						
Junction temperature		Tj	°C	-55 ~ +150						
Dielectric strength @ Terminals to case, AC 1 minute		Vdis	KV	2.5						
Mounting torque @Recommend torque: 5kg·cm		Tor	kg·cm	8						

GBJ20AA THRU GBJ20MA

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

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	GBJ20AA	GBJ20BA	GBJ20DA	GBJ20GA	GBJ20JA	GBJ20KA	GBJ20MA
Maximum instantaneous forward voltage drop per diode	V _F	V	I _{FM} =10.0A	1.0						
Maximum DC reverse current at rated DC blocking voltage per diode	I _R	μA	T _j =25°C	5						
			T _j =125°C	100						
Typical junction capacitance	C _j	pF	Measured at 1MHz and Applied Reverse Voltage of 4.0 V.D.C	94						

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

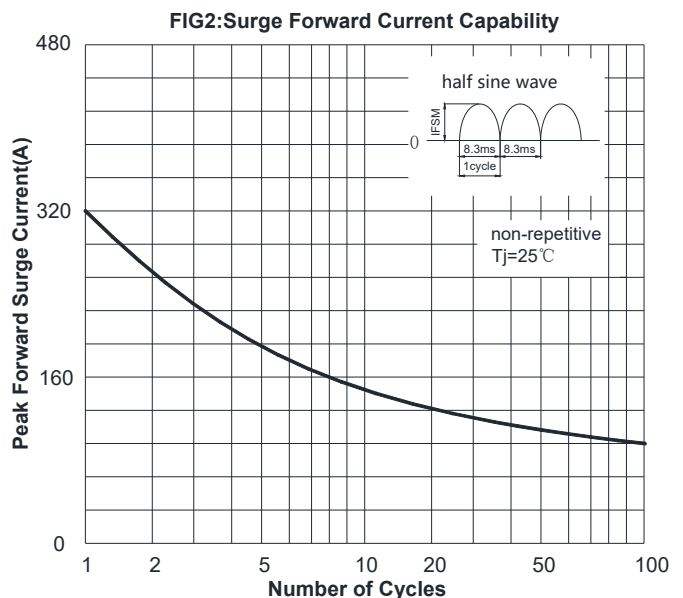
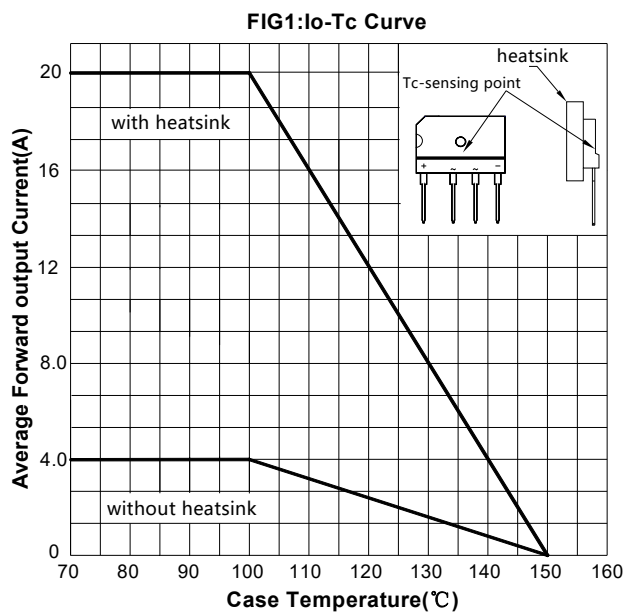
PARAMETER		SYMBOL	UNIT	GBJ20AA	GBJ20BA	GBJ20DA	GBJ20GA	GBJ20JA	GBJ20KA	GBJ20MA
Thermal Resistance	Between junction and ambient, Without heatsink	R _{θJ-A}	°C/W	18.0						
	Between junction and case, With heatsink	R _{θJ-C}		1.0						

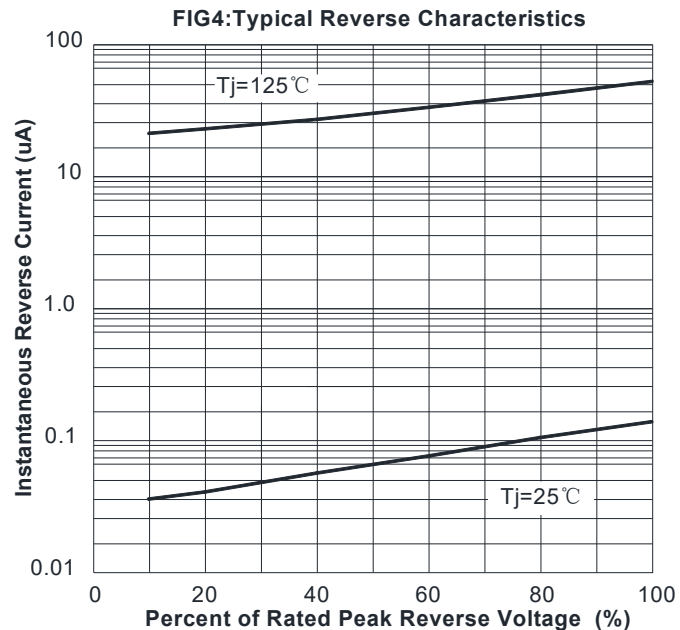
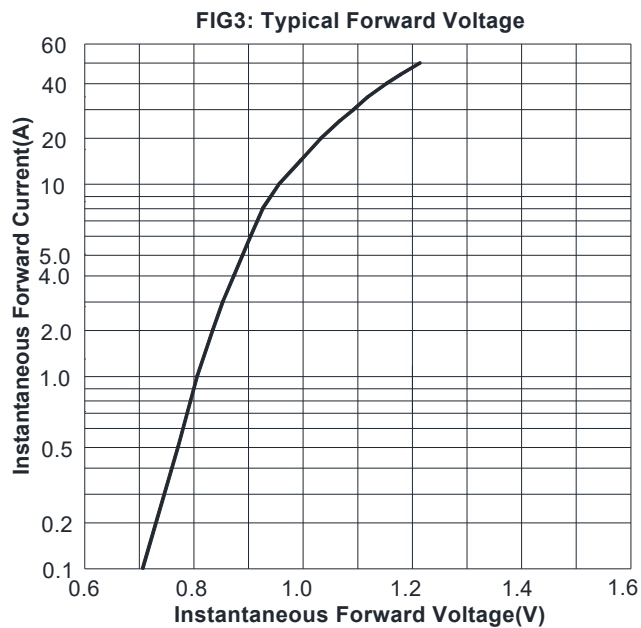
Note: Device mounted on 75mm x 45mm x 5.5mm Aluminum Plate Heatsink.

■Ordering Information (Example)

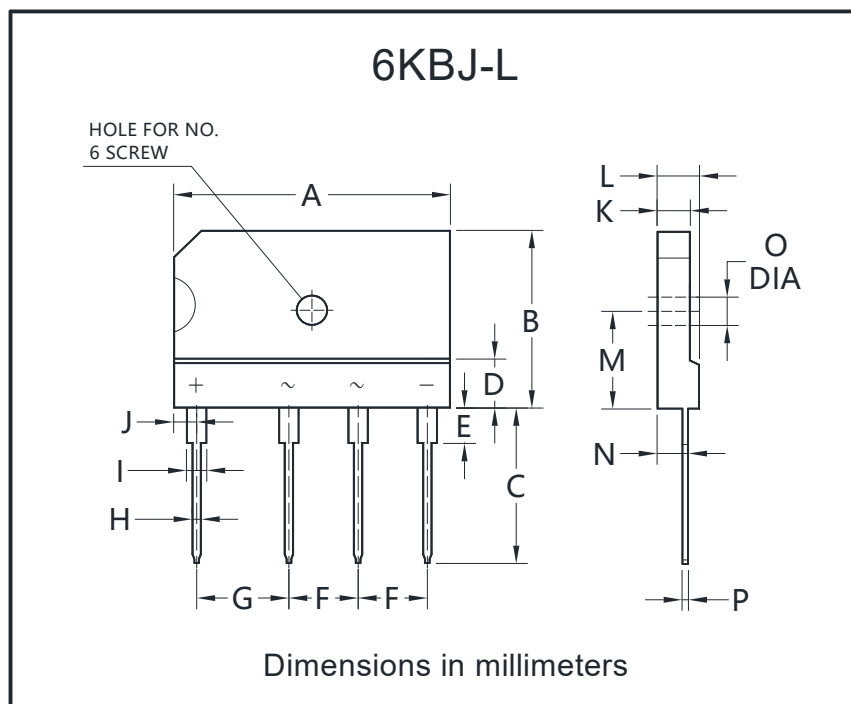
PREFERRED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
GBJ20AA THRU GBJ20MA	B1	Approximate 5.67	15	750	1500	TUBE

■ Characteristics(Typical)





■ Outline Dimensions



6KBJ-L		
Dim	Min	Max
A	29.7	30.3
B	19.7	20.3
C	17.0	18.0
D	5.3	6.3
E	3.8	4.2
F	7.3	7.7
G	9.8	10.2
H	0.9	1.1
I	2.0	2.4
J	2.3	2.7
K	3.4	3.8
L	4.4	4.8
M	10.8	11.2
N	3.1	3.7
O	3.1	3.4
P	0.35	0.65

Disclaimer

The information presented in this document is for reference only. Shanghai Sunco Electronics 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), Russiansunco 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.russiansunco.com](http://www.russiansunco.com) , or consult your nearest Russiansunco's sales office for further assistance.