



DC COMPONENTS CO., LTD.

RECTIFIER SPECIALISTS

**GBK6A
THRU
GBK6M**

TECHNICAL SPECIFICATIONS OF SINGLE-PHASE GLASS PASSIVATED BRIDGE RECTIFIER

VOLTAGE RANGE - 50 to 1000 Volts

CURRENT - 6.0 Amperes

FEATURES

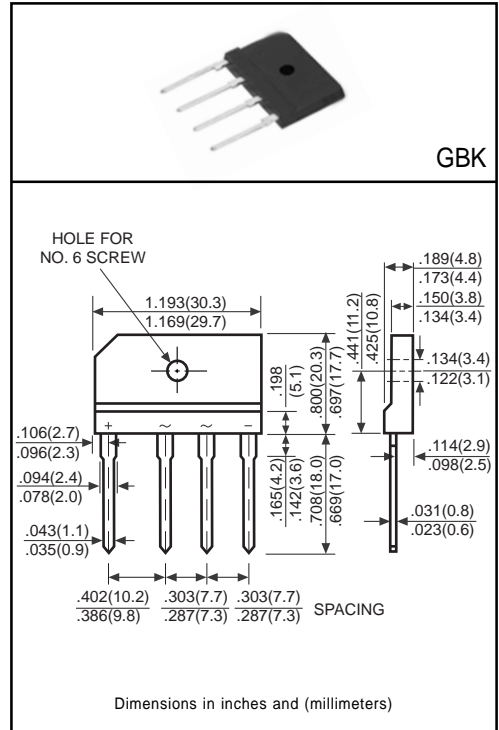
- * Ideal for printed circuit board
- * Surge overload rating: 175 Amperes peak
- * Glass passivated junction

MECHANICAL DATA

- * Case: Molded plastic
- * Epoxy: UL 94V-0 rate flame retardant
- * Terminals: MIL-STD-202E, Method 208 guaranteed
- * Polarity: Symbols molded or marked on body
- * Mounting position: Any

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.
Single phase, half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%.



	SYMBOL	GBK6A	GBK6B	GBK6D	GBK6G	GBK6J	GBK6K	GBK6M	UNITS
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	50	100	200	400	600	800	1000	Volts
Maximum RMS Bridge Input Voltage	V _{RMS}	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage	V _{DC}	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Rectified Current @T _c =100°C	I _(AV)	6.0 2.8							Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	175							Amps
Maximum Forward Voltage Drop per element at 3.0A DC	V _F	1.1							Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage per element	@T _J = 25°C	10							μAmps
	@T _J = 125°C	500							
I ² t Rating for Fusing (t<8.3ms)	I ² t	120							A ² Sec
Typical Junction Capacitance (Note1)	C _J	55							pF
Typical Thermal Resistance (Note 2)	R _{θJA}	1.8							°C/W
Operating Temperature Range	T _J	-55 to +150							°C
Storage Temperature Range	T _{STG}	-55 to +150							°C

NOTES : 1.Measured at 1 MHz and applied reverse voltage of 4.0 volts

2.Thermal Resistance from Junction to Case per element Unit mounted on 100x100x1.6mm Cu plate heat-sink.

RATING AND CHARACTERISTIC CURVES (GBK6A THRU GBK6M)

FIG. 1 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

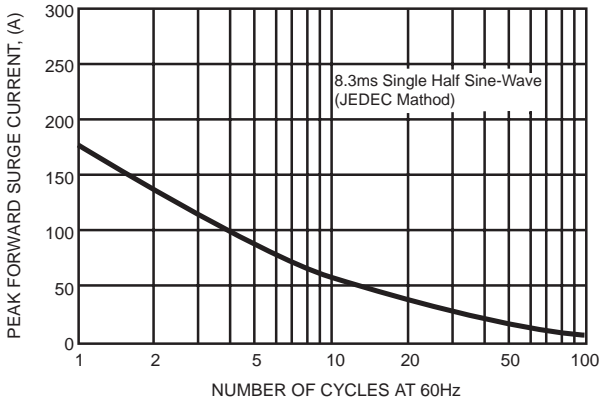


FIG. 2 - TYPICAL FORWARD CURRENT DERATING CURVE

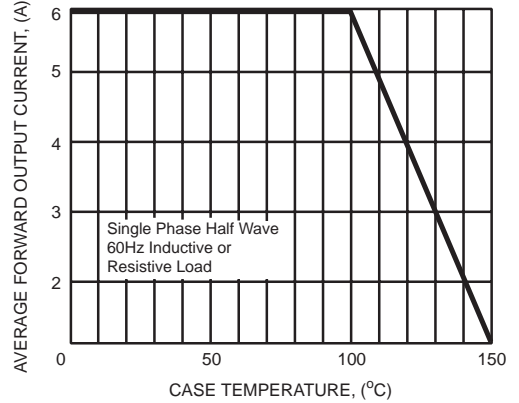


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

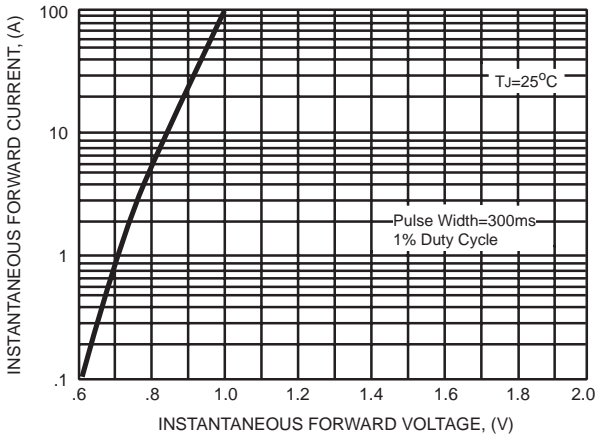
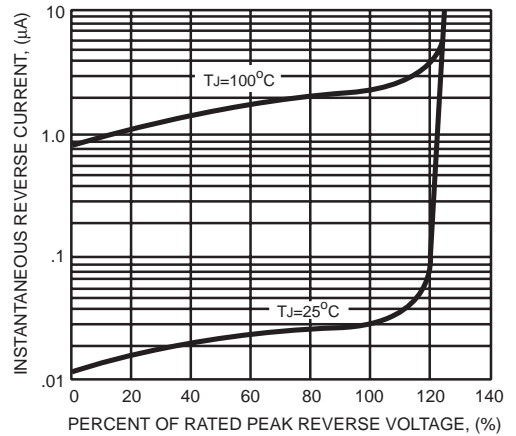


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS



DC COMPONENTS CO., LTD.

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for [Bridge Rectifiers](#) category:

Click to view products by [DC Components](#) manufacturer:

Other Similar products are found below :

[G3SBA60-E351](#) [GBJ1504-BP](#) [GBU10B-BP](#) [GBU15J-BP](#) [GBU15K-BP](#) [GBU4A-BP](#) [GBU4D-BP](#) [GBU6B-E3/45](#) [GSIB680-E3/45](#) [DB101-BP](#) [DF10SA-E345](#) [RMB2S](#) [RCG](#) [APT30DF100HJ](#) [APT60DF20HJ](#) [B2S-E3/80](#) [BU1506-E351](#) [BU15085S-E345](#) [BU1508-E3/45](#) [BU1510-E3/45](#) [RS404GL-BP](#) [RS405GL-BP](#) [G3SBA20-E3/51](#) [G5SBA20-E3/51](#) [G5SBA60-E3/51](#) [GBJ1502-BP](#) [GBL02-E351](#) [GBL10-E3/45](#) [GBU10J-BP](#) [GBU4J-BP](#) [GBU4K-BP](#) [GBU8B-E3/45](#) [GBU8D-BP](#) [GBU8J-BP](#) [GSIB1520-E3/45](#) [MB1510](#) [MB352W](#) [MB6M-G](#) [B2M-E345](#) [B40C7000A](#) [B500C7000A](#) [MP5010W-BP](#) [MP501W-BP](#) [MP502-BP](#) [BR1005-BP](#) [BR101-BP](#) [BU1006-E345](#) [BU12065S-E3/45](#) [BU1508-E3/51](#) [BU2006-E3/45](#) [BU2008-E345](#)