

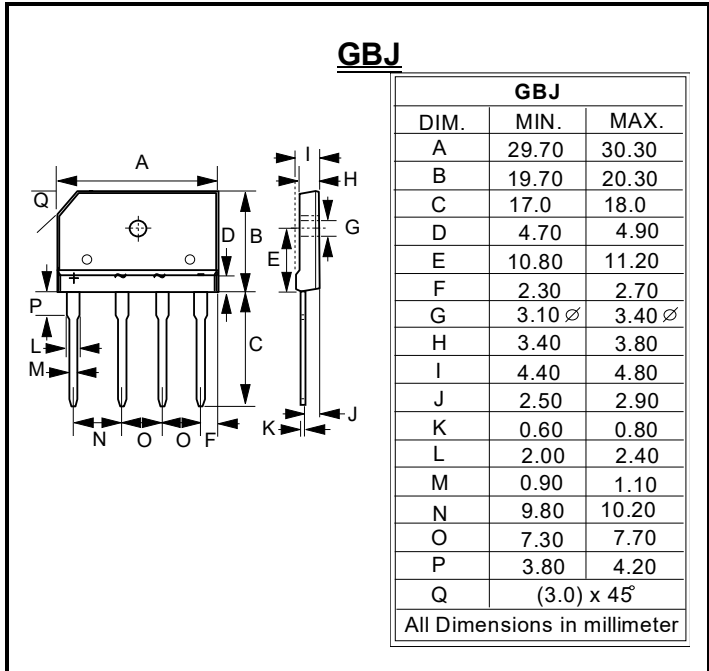
**GLASS PASSIVATED BRIDGE RECTIFIERS**      **REVERSE VOLTAGE – 600Volts**  
**FORWARD CURRENT – 15 Amperes**

**FEATURES**

- Low forward Voltage (VF) Drop performance
- High Thermal Radiation
- High Average Current
- High Surge Current Capability
- UL Recognition file # E95060

**MECHANICAL DATA**

- Case: GBJ
- Case Material: “Green” molding compound , UL flammability classification 94V-0,( No Br. Sb. Cl)
- Component in accordance to RoHs 2002/95/EC
- Polarity indicator: Symbol molded on body
- Weight: 0.23 ounces, 6.6 grams
- Mounting position: Any



**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**  
 Ratings at 25°C ambient temperature unless otherwise specified.

**ABSOLUTE RATINGS**

PARAMETER	SYMBOL	GBJ15JL	UNIT
Device marking code	Note	GBJ15JL	---
Maximum Repetitive Peak Reverse Voltage	VRRM	600	V
Average Rectified Output Current	IF(AV)	15	A
With heatsink Tc=120°C		4.5	
Peak Forward Surge Current 8.3ms single half sine-wave,	IFSM	200	A
Tj=25°C		160	
Peak Forward Surge Current 1.0ms single half sine-wave,	IFSM	400	A
Tj=25°C		320	
I <sup>2</sup> t Rating for fusing ( t = 8.3ms)	I <sup>2</sup> t	166	A <sup>2</sup> S
Storage temperature range	TSTG	-55 to +150	°C
Operating junction temperature range	TJ	-40 to +150	°C

**STATIC ELECTRICAL CHARACTERISTICS**

PARAMETER	TEST CONDITIONS		SYMBOL	Min.	Typ.	Max.	UNIT
Breakdown voltage	IR=10uA	Tj=25°C	VB	600	---	---	V
Forward Voltage (1)	IF=7.5A	Tj=25°C	VF	---	0.86	0.90	V
Leakage Current	VR=600V	Tj=25°C	IR	---	---	10	uA

**THERMAL CHARACTERISTICS**

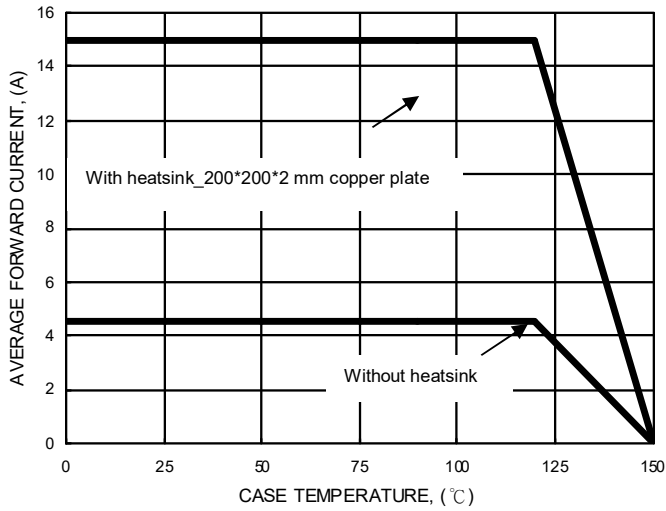
THERMAL CHARACTERISTIC	SYMBOL	Typical	UNIT
Typical Junction Capacitance per element (Note 1)	Cj	80	pF
Typical thermal resistance_Junction to Case (2)	ReJC	1.2	°C/W
Typical thermal resistance_Junction to Lead (2)	ReJL	2.3	°C/W

Note :

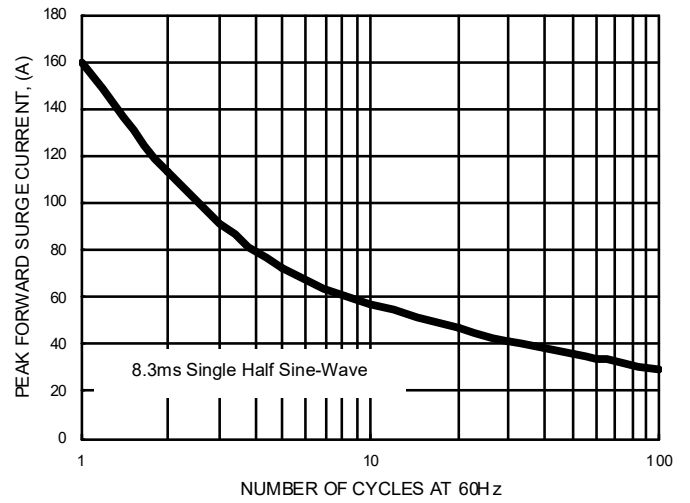
1. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.
2. Device mounted on 200mm x 200mm x 2mm Cu Plate Heatsink.

REV.2, Apr-2019, KBDG47

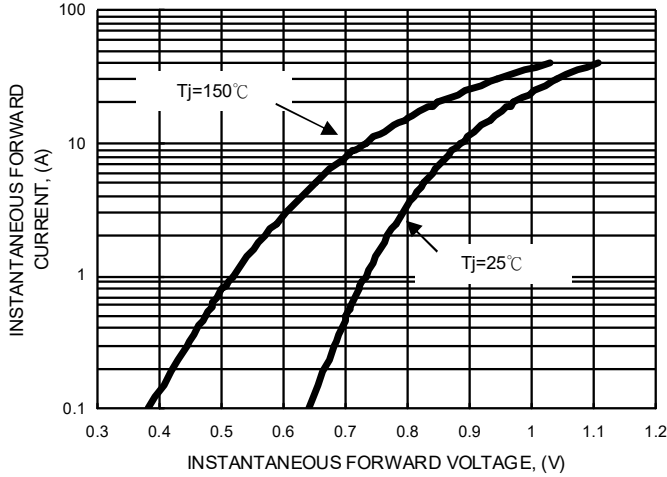
**FIG.1- FORWARD CURRENT DERATING CURVE**



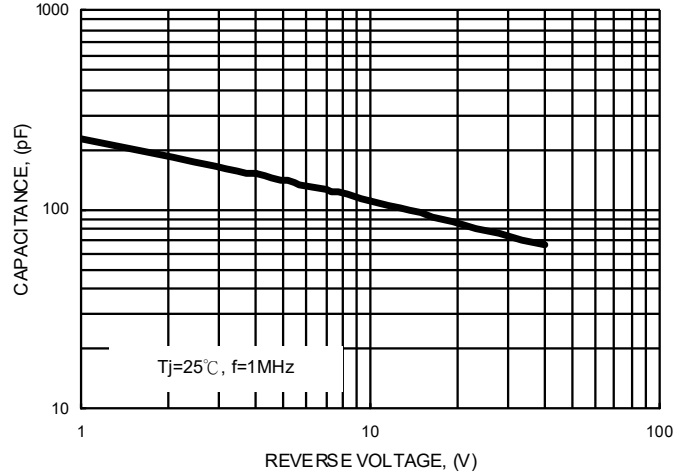
**FIG.2- MAXIMUM NON-REPETITIVE SURGE CURRENT**



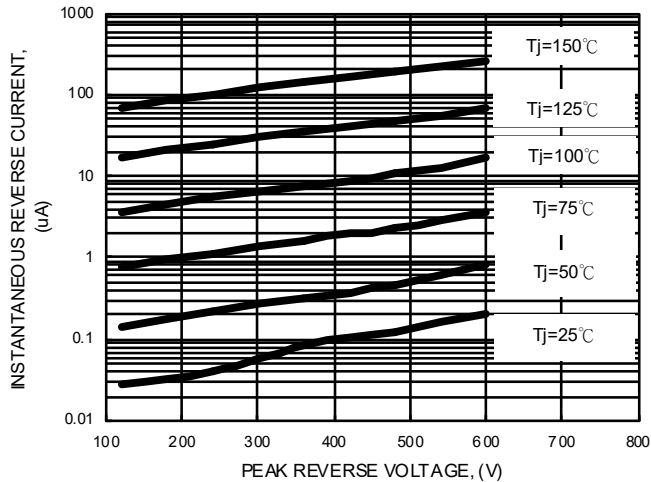
**FIG.3- TYPICAL FORWARD CHARACTERISTICS**



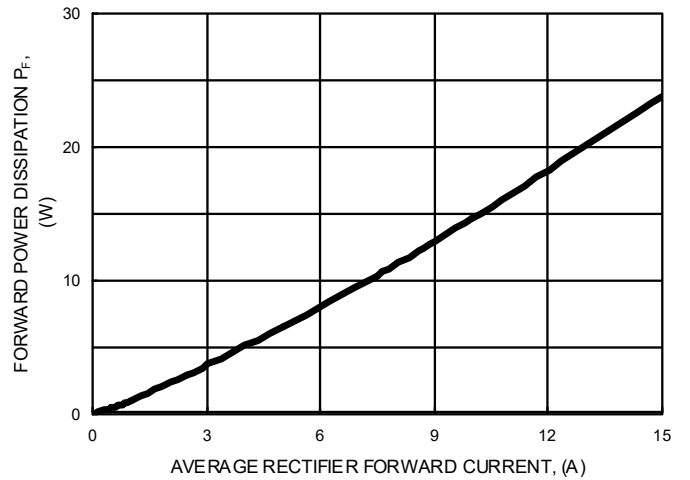
**FIG.4- TYPICAL JUNCTION CAPACITANCE**



**FIG.5- TYPICAL REVERSE CHARACTERISTICS**



**FIG.6- FORWARD POWER DISSIPATION**



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