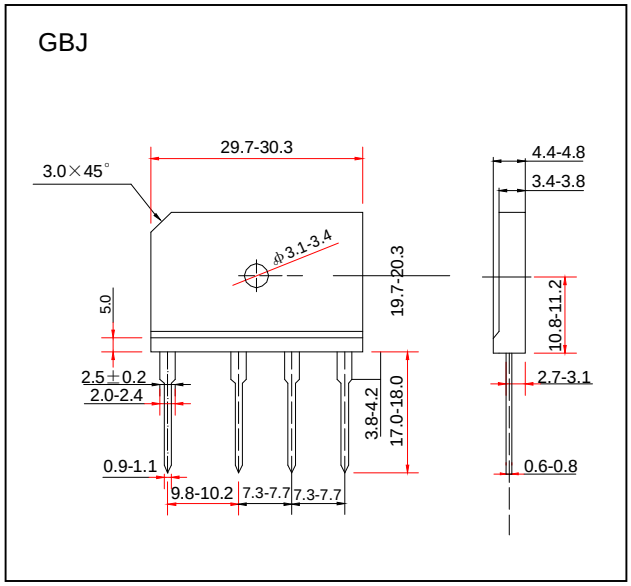
SINGLE PHASE GLASS PASSIVATED BRIDGE RECTIFIER

GBJ6005 THRU GBJ610

VOLTAGE RANGE	50 to 1000 Volts
CURRENT	6.0 Amperes

FEATURES

- Plastic package has UL Flammability Glassification 94V-0
- Glass passivated chip junctions
- High case dielectric strength of 1500 V_{RMS}
- High surge current capability
- High temperature soldering guaranteed 260℃/10 seconds, 0.375”(9.5mm) lead length



MECHANICAL DATA

- Case: molded plastic body
- Terminal: Plated leads solderable per MIL-STD-750 Method 2026
- Mounting position: Any (Note 3)
- Mounting Torque: 6 in – 1bs max.
- Weight: 0.26 ounce, 7.4 gram

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

- Ratings at 25℃ ambient temperature unless otherwise specified
- Single Phase, half wave, 60Hz, resistive or inductive load
- For capacitive load derate current by 20%

		SYMBOLS	GBJ 6005	GBJ 601	GBJ 602	GBJ 604	GBJ 606	GBJ 608	GBJ 610	UNIT
Maximum Reverse Peak Repetitive Voltage		V_{RRM}	50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage		V_{RMS}	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage		V_{DC}	50	100	200	400	600	800	100	Volts
Maximum Average Forward Rectified Current, At T_C=110℃ (Note 1)		$I_{(AV)}$	6.0							Amps
Peak Forward Surge Current 8.3ms single half sine wave superimposed on rated load (JEDEC Method)		I_{FSM}	150							Amps
Rating for Fusing (t＜8.3ms)		I^2t	127							A^2s
Maximum Instantaneous Forward Voltage drop Per leg at 3.0A		V_F	1.0							Volts
Maximum DC Reverse Current at rated DC blocking voltage per element	T_A=25℃	I_R	5.0							μA
	T_A=125℃		500							
Typical Junction Capacitance, per let (Note 4)		C_J	211.0				94.0			pF
Typical Thermal Resistance (Note 2)		R_{JA}	35.0							℃/W
Operating Junction Temperature Range		T_J	(-55 to +150)							℃/W
Storage Temperature Range		T_{STG}	(-55 to +150)							℃

Notes: 1. Unit mounted on AL Plate heatsink (100mm×100mm×1.6mm)
2. Unit mounted on P.C.B With 0.5”×0.5”×(12×12mm) copper pads on 0.375”(9.5mm) lead length
3. Recommended mounting position is to bolt down on heatsink with silicone thermal compound for maximum Heat transfer with #6 screws
4. Measured at 1.0 MHz and applied reverse voltage of 4.0 V

E-mail: sales@cnmic.com Web Site: www.cnmic.com
www.BDTIC.com/MIC

SINGLE PHASE GLASS PASSIVATED BRIDGE RECTIFIER

GBJ6005 THRU GBJ610

VOLTAGE RANGE	**50 to 1000Volts**
CURRENT	**6.0 Amperes**

RATINGS AND CHARACTERISTIC CURVES GBJ6005 THRU GBJ610

FIG. 1- DERATING CURVE
OUTPUT RECTIFIED CURRENT

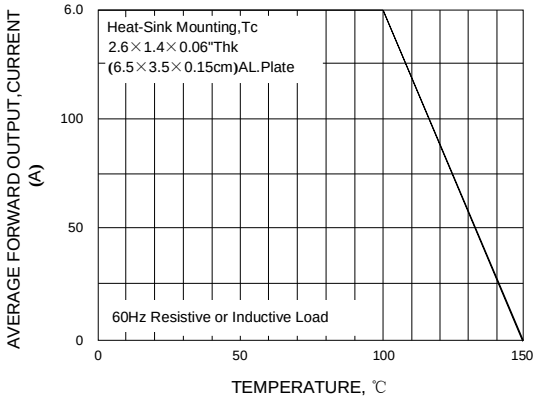


FIG. 2- MAXIMUM NON-REPETITIVE PEAK
FORWARD SURGE CURRENT PER LEG

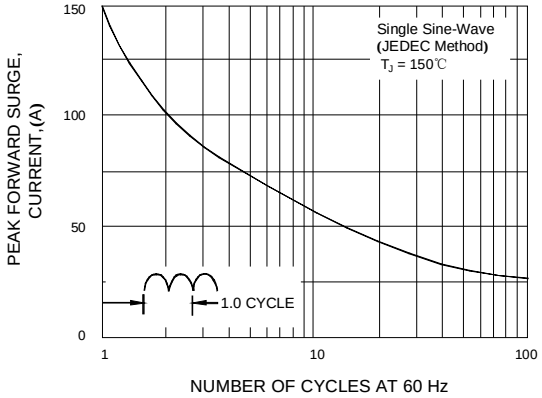


FIG. 3- TYPICAL FORWORD CHARACTERISTICS
PER LGE

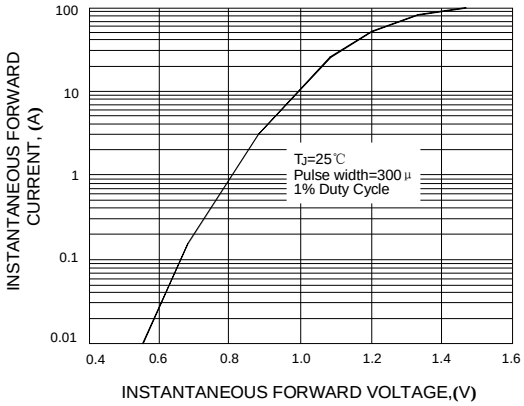


FIG. 4- TYPICAL REVERSE LEAKAGE
CHARACTERISTICS PER LEG

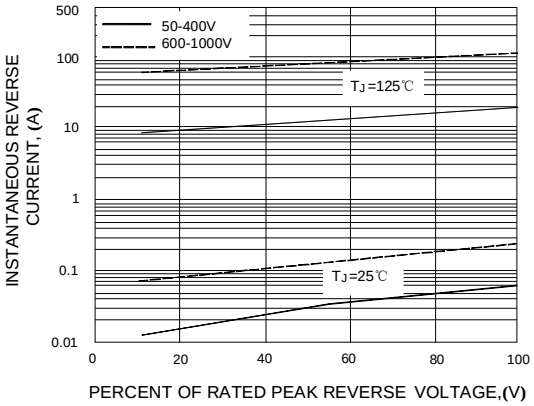


FIG. 5- TYPICAL JUNCTION CAPACITANCE
PER LEG

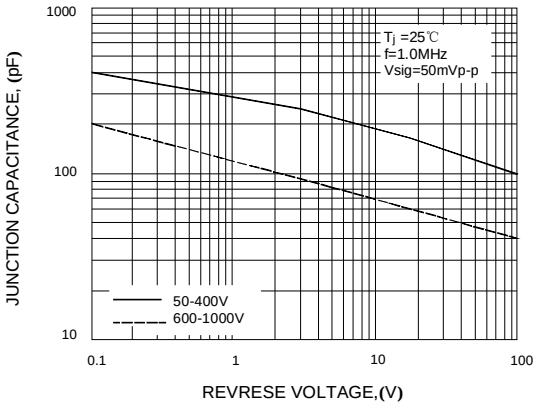
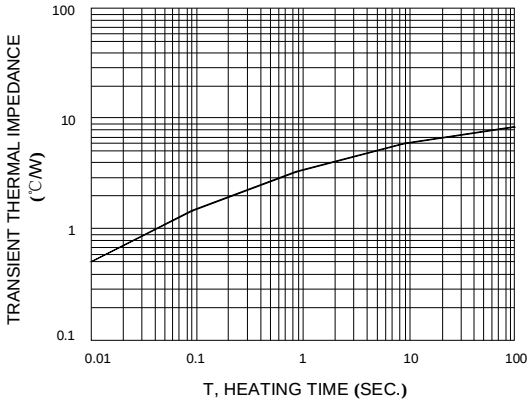


FIG. 6- TYPICAL TRANSIENT THERMAL
IMPEDANCE



E-mail: sales@cnmic.com Web Site: www.cnmic.com

www.BDTIC.com/MIC