

# Glass Passivated Bridge Rectifier

**COMCHIP**  
SMD DIODE SPECIALIST

## KBU8005G-G THRU KBU810G-G (ROHS Device)

**Voltage Range 50 to 1000 V**

**Current 8.0 Ampere**

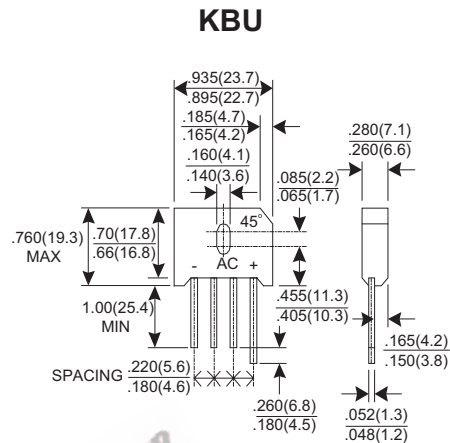
### Features

- ★ Plastic package has Underwriters Laboratory Flammability Classification 94V-0

- ★ High surge current capability
- ★ Ideal for printed circuit boards

### Mechanical Data

- ★ Case: Molded plastic body over passivated junctions
- ★ Terminals: Solderable per MIL-STD-202, method 208
- ★ Polarity: As marked on body
- ★ Mounting position: Any
- ★ Weight: 0.3 ounce, 8.0 grams



### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

CHARACTERISTIC	SYMBOL	KBU 8005G-G	KBU 801G-G	KBU 802G-G	KBU 804G-G	KBU 806G-G	KBU 808G-G	KBU 810G-G	UNIT
Maximum Recurrent Peak Reverse Voltage	VRRM	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	VRMS	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	VDC	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current Tc=100°C	I(AV)	8.0							A
Peak Forward Surge Current, 8.3ms single Half sine-wave superimposed on rated load (JEDEC method)	IFSM	170							A
Maximum Instantaneous Forward Voltage @ 8.0 A	VF	1.1							V
Maximum DC Reverse Current @TJ=25°C At Rated DC Blocking Voltage @TJ=125°C	IR	5.0 500							uA uA
Typical Thermal Resistance per leg (Note 1)	RθJA	18							°C/W
Typical Thermal Resistance per leg (Note 2)	RθJC	3.0							°C/W
Typical Junction Capacitance (Note 3)	CJ	260							pF
Operating Junction and Storage Temperature Range	TJ, TSTG	-55 to + 150							°C

NOTES : (1) Mounted on P.C.B at 9.5mm lead length with 12 x 12mm copper pads.  
(2) Mounted on 75 X 75 x 3.0mm Al. Plate heatsink.  
(3) Measured at 1.0 MHz and applied reverse voltage og 4.0 Volts DC.



## RATINGS AND CHARACTERISTIC CURVES KBU8005G-G THRU KBU810G-G

FIG.1 - FORWARD CURRENT DERATING CURVE

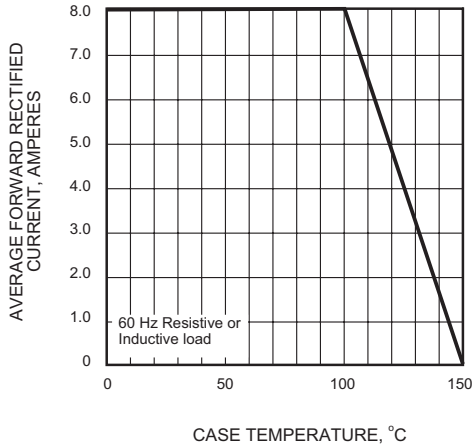


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

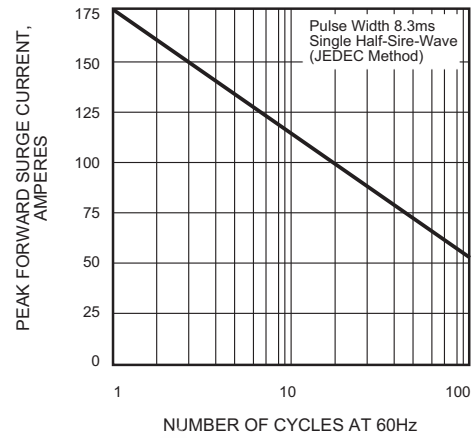


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

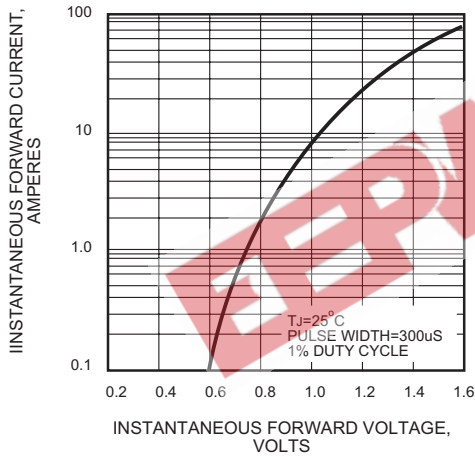


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

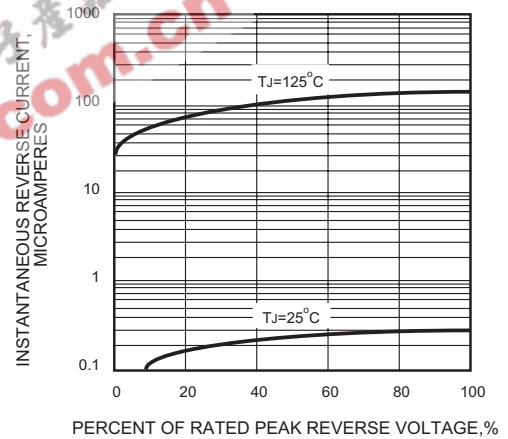
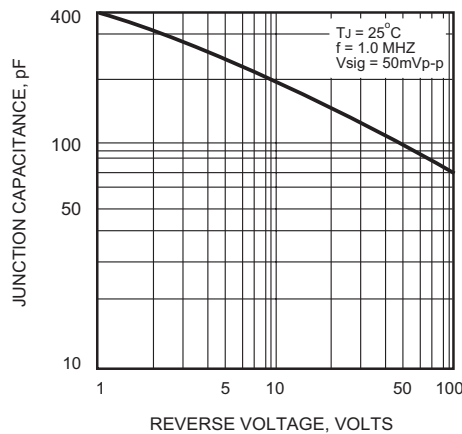


FIG.5 - TYPICAL JUNCTION CAPACITANCE



"-G" suffix designates RoHS compliant Version