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

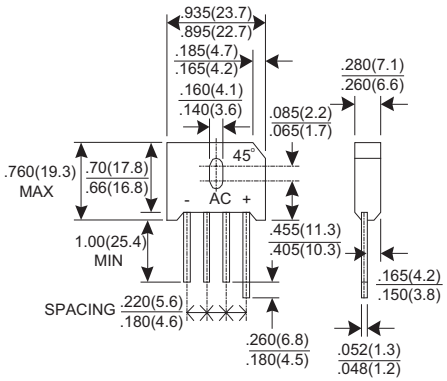
Features

- ✶ 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

KBU



Dimensions in inches and (millimeters)

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	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current T_C=100°C	$I_{(AV)}$	8.0							A
Peak Forward Surge Current, 8.3ms single Half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	170							A
Maximum Instantaneous Forward Voltage @ 8.0 A	V_F	1.1							V
Maximum DC Reverse Current @T_J=25°C At Rated DC Blocking Voltage @T_J=125°C	I_R	5.0 500							uA uA
Typical Thermal Resistance per leg (Note 1)	$R_{\phi JA}$	18							°C/W
Typical Thermal Resistance per leg (Note 2)	$R_{\phi JC}$	3.0							°C/W
Typical Junction Capacitance (Note 3)	C_J	260							pF
Operating Junctionand Storage Temperature Range	T_J, T_{STG}	-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

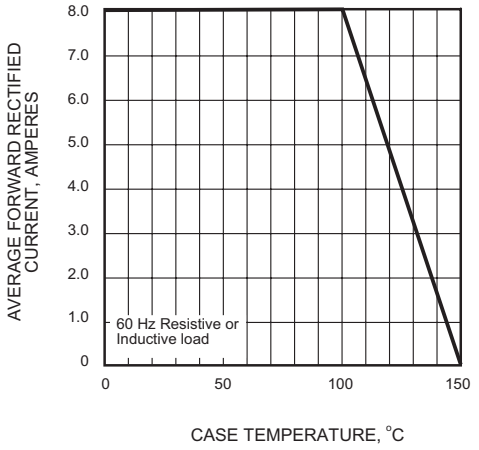


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

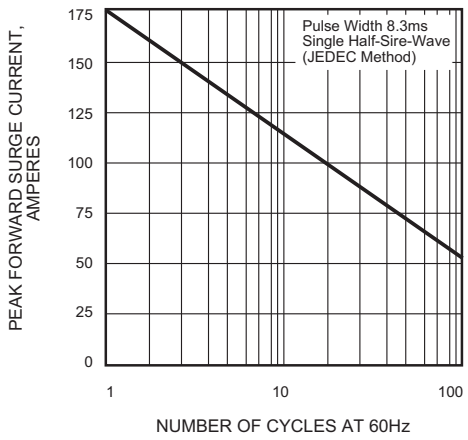


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

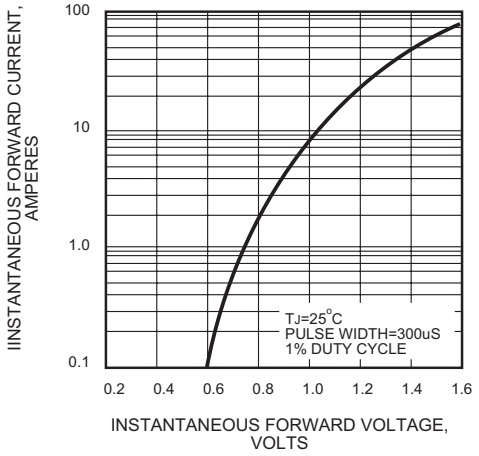


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

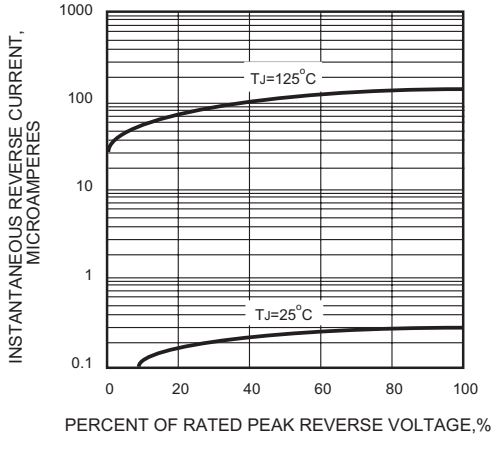
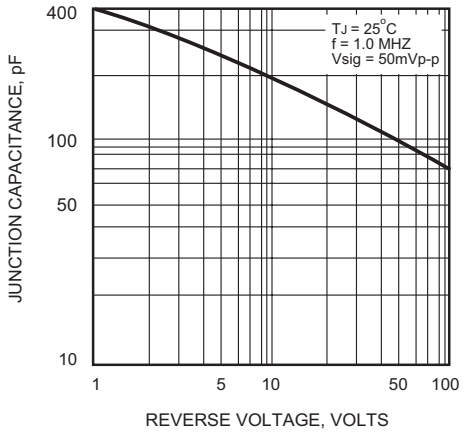


FIG.5 - TYPICAL JUNCTION CAPACITANCE



"**-G**" suffix designates RoHS compliant Version