# **Glass Passivated Bridge Rectifier**



## KBU8005G THRU KBU810G

#### **FEATURES**

- Ideal for printed circuit boards
- High surge current capability
- Low forward voltage drop
- Glass passivated chip

#### **MECHANICAL DATA**

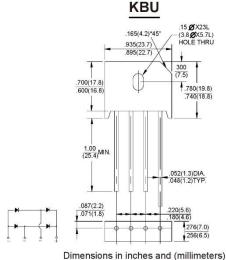
Case: Molded plastic, KBU

Epoxy: UL 94V-0 rate flame retardant

Terminals: Solderable per MIL-STD-202, method 208

Polarity: As marked on body

### Voltage Range 50 to 1000 V **Current 8.0 Ampere**



#### **MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

Rating at 25°C ambient temperature unless otherwise specified. Single phase, half wave, 60Hz, resistive or inductive load.

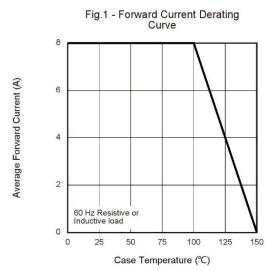
For capacitive load, derate current by 20%.

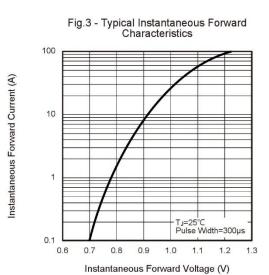
Parameter	Symbol	KBU 8005G	KBU 801G	KBU 802G	KBU 804G	KBU 806G	KBU 808G	KBU 810G	Unit
Maximum repetitive peak reverse voltage	$V_{RRM}$	50	100	200	400	600	800	1000	V
Maximum RMS voltage	$V_{RMS}$	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	$V_{DC}$	50	100	200	400	600	800	1000	V
Maximum average forward rectified current @T <sub>C</sub> =100°C	I <sub>F(AV)</sub>	8.0							Α
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load	I <sub>FSM</sub>	300							Α
Maximum instantaneous forward drop per diode @ I <sub>F</sub> =8.0A	V <sub>F</sub>	1.0							V
Maximum DC reverse current $@T_A=25^{\circ}C$ at rated DC blocking voltage $@T_A=125^{\circ}C$	I <sub>R</sub>	10 1000							μΑ
Typical junction capacitance per diode (Note1)	CJ	250							pF
Operating junction and storage temperature range	$T_J$ , $T_{STG}$	-50 to +150							°C

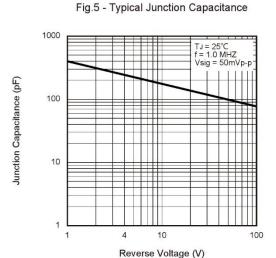
NOTES: (1) Measured at 1.0 MHz and applied reverse voltage of 4.0V DC.



## **RATINGS AND CHARACTERISTICS CURVES KBU8005G THRU KBU810G**







Forward Surge Current 300 Pulse Width 8.3ms Single Half-Sire-Wave (JEDEC Method) 250 Peak Forward Surge Current (A) 200 150 100 50 0 0 10 100 Number of Cycles at 60 Hz

Fig.2 - Maximum Non-Repetitive Peak

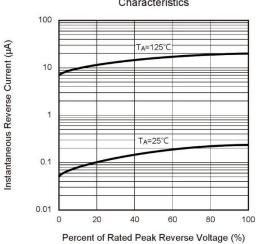


Fig.4 - Typical Reverse Leakage Characteristics