

Features

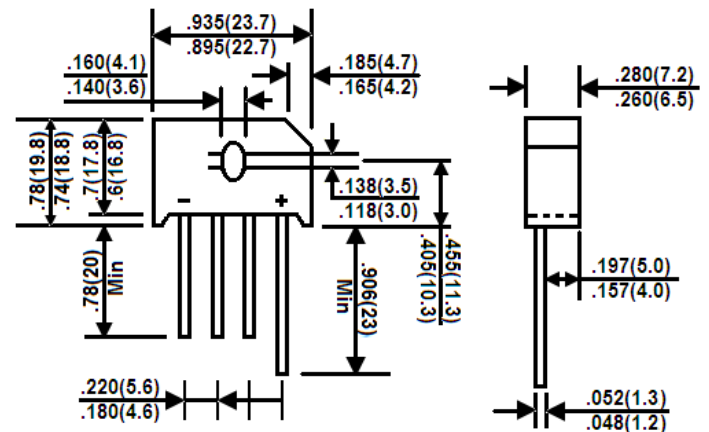
- * Ideal for printed circuit board
- * High surge current capability
- * Reliable low cost construction technique results in inexpensive product



RoHS
COMPLIANT

Package Outline Dimensions in inches (millimeters)

KBU:



Maximum Ratings and Electrical Characteristics

Rating at 25 °C ambient temperature unless otherwise specified. Single phase, half wave, 60 Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Type Number	Symbols	KBU 6005	KBU 601	KBU 602	KBU 604	KBU 606	KBU 608	KBU 610	Unit
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Bridge Input Voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum D.C Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current @ $T_C=100^{\circ}C$ (Note1) @ $T_A=40^{\circ}C$ (Note3)	$I_{F(AV)}$	6.0							A
Peak Forward Surge Current, 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	150							A
Maximum Forward Voltage Drop per element at 3.0A	V_F	1.10							V
Maximum Reverse Current @ $T_A=25^{\circ}C$ at Rated D.C Blocking Voltage @ $T_A=125^{\circ}C$	I_R	10 500							μA
Typical thermal resistance per leg (Note2) (Note3)	$R_{\theta JA}$ $R_{\theta JL}$	18.6 3.1							$^{\circ}C/W$
Operating Temperature Range	T_J	-55 to +150							$^{\circ}C$
Storage Temperature Range	T_{STG}	-55 to +150							$^{\circ}C$

- Note:
1. Recommended mounted position is to bolt down on heat sink with silicone thermal compound for maximum heat transfer with #6 screw.
 2. Thermal resistance from junction to ambient with units in free air, P.C.B. mounted on 0.5×0.5" (12×12mm) copper pads, 0.375" (9.5mm) lead length
 3. Thermal resistance from junction to case with units mounted on a 2.6×1.4×0.06" thick (6.5×3.5×0.15cm) plate.

Ratings and Characteristic Curves

FIG.1 – MAXIMUM NON – REPETITIVE FORWARD SURGE CURRENT – PER ELEMENT

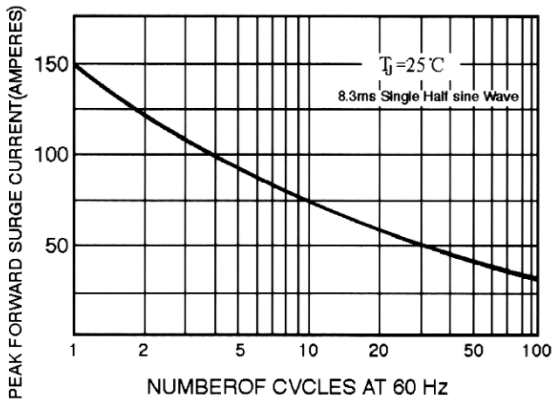


FIG.2 – TYPICAL FORWARD OUTPUT CURRENT DERATING CURVE

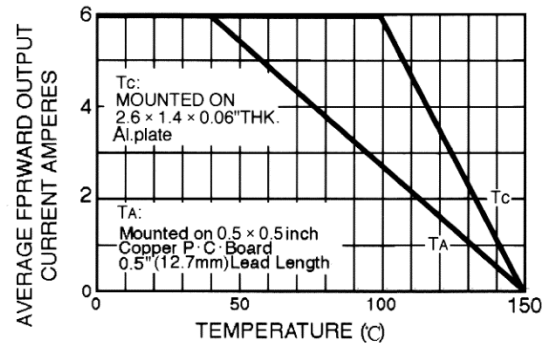


FIG.3 – TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS – PER ELEMENT

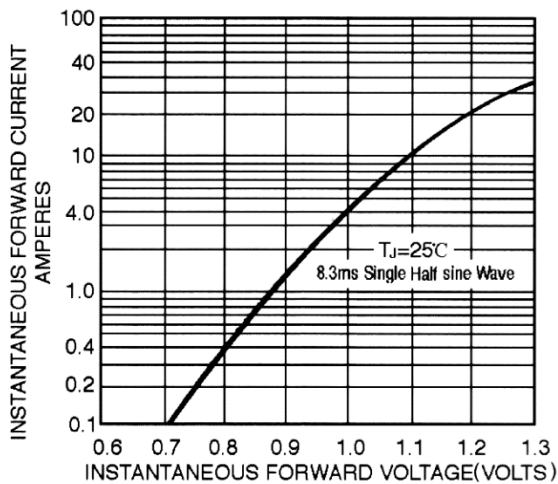
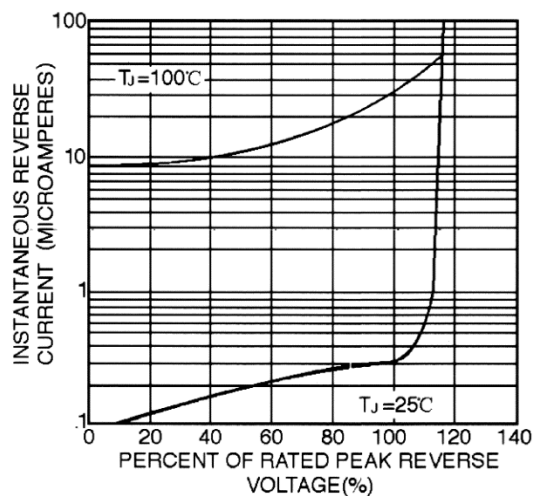


FIG.4 – TYPICAL REVERSE CHARACTERISTICS – PER ELEMENT





KBU6006 THRU KBU610

Single Phase 6.0 Amps. Glass Passivated Bridge Rectifiers

Ordering Information

Part No.	Package	Packing
KBU6005~KBU610	KBU	0.4K/Tray