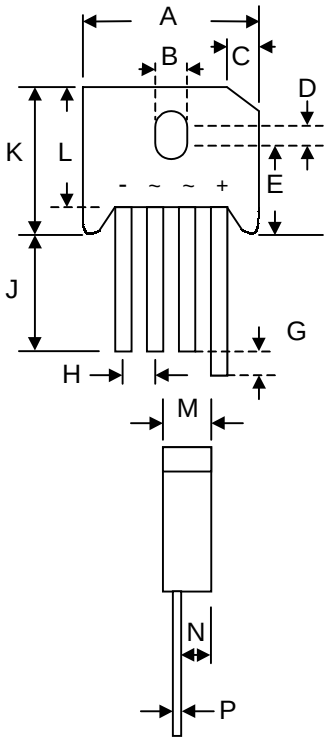
KBU800 – KBU810

8.0A SINGLE-PHASE BRIDGE RECTIFIER

Features

- Diffused Junction
- Low Forward Voltage Drop
- High Current Capability
- High Reliability
- High Surge Current Capability
- Ideal for Printed Circuit Boards
- Recognized File # E157705



KBU		
Dim	**Min**	**Max**
A	22.70	23.70
B	3.60	4.10
C	4.20	4.70
D	1.70	2.20
E	10.30	11.30
G	4.50	5.60
H	4.60	5.60
J	25.40	—
K	—	19.30
L	16.80	17.80
M	6.60	7.10
N	4.10	4.60
P	1.20	1.30
All Dimensions in mm		

Mechanical Data

- Case: KBU, Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: As Marked on Body
- Weight: 8.0 grams (approx.)
- Mounting Position: Any
- Mounting Torque: 10 cm-kg (8.8 in-lbs) Max.
- **Lead Free: For RoHS / Lead Free Version, Add "-LF" Suffix to Part Number, See Page 4**

Maximum Ratings and Electrical Characteristics @T_A=25°C unless otherwise specified

Single Phase, half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

Characteristic	Symbol	KBU 800	KBU 801	KBU 802	KBU 804	KBU 806	KBU 808	KBU 810	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	50	100	200	400	600	800	1000	V
RMS Reverse Voltage	$V_{R(RMS)}$	35	70	140	280	420	560	700	V
Average Rectified Output Current @T_C = 100°C (Note 1)	I_O	8.0							A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	300							A
Forward Voltage per leg @I_F = 4.0A	V_{FM}	1.0							V
Peak Reverse Current @T_A = 25°C At Rated DC Blocking Voltage @T_A = 125°C	I_R	10 1.0							µA mA
Typical Thermal Resistance per leg (Note 2)	$R_{\theta JA}$	18							°C/W
Typical Thermal Resistance per leg (Note 1)	$R_{\theta JC}$	3.0							°C/W
Operating and Storage Temperature Range	T_j, T_{STG}	-65 to +150							°C

Note: 1. Mounted on 75 x 75 x 3.0mm Al. plate.
2. Mounted on PCB at 9.5mm lead length with 12mm^2 copper pad.

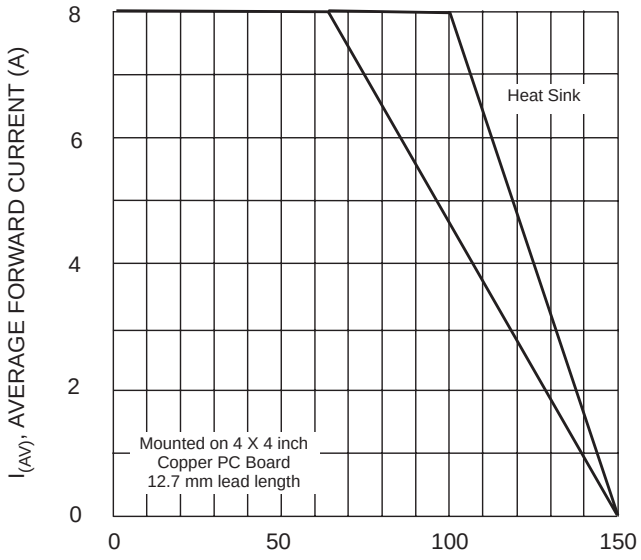


Fig. 1 Forward Current Derating Curve

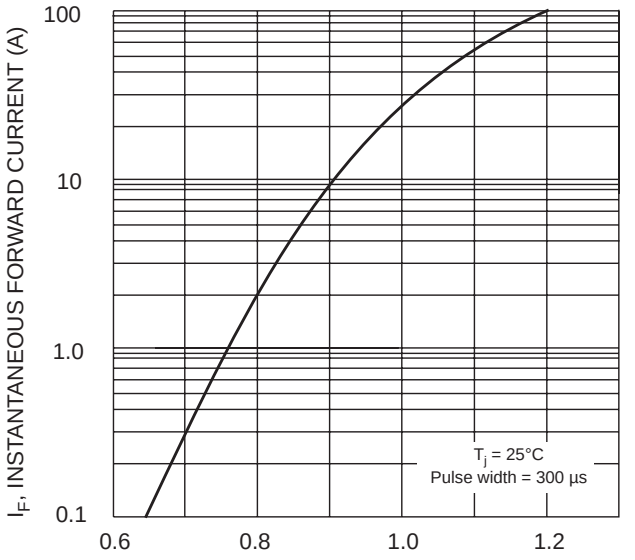


Fig. 2 Typical Forward Characteristics, per element

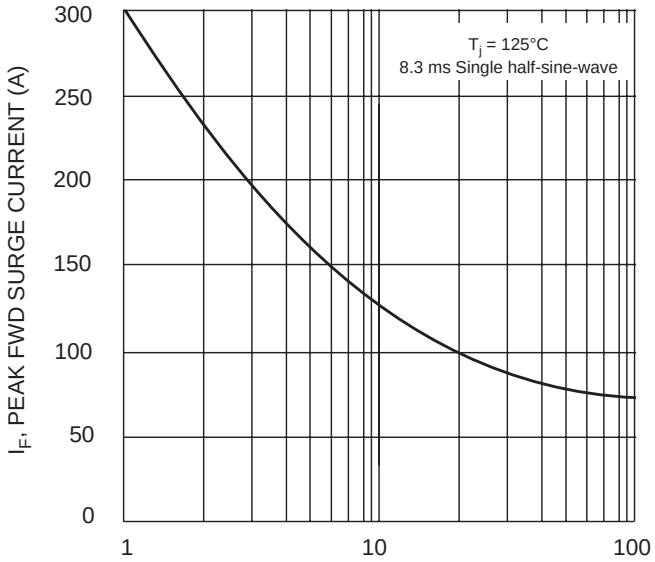


Fig. 3 Max Non-Repetitive Forward Surge Current

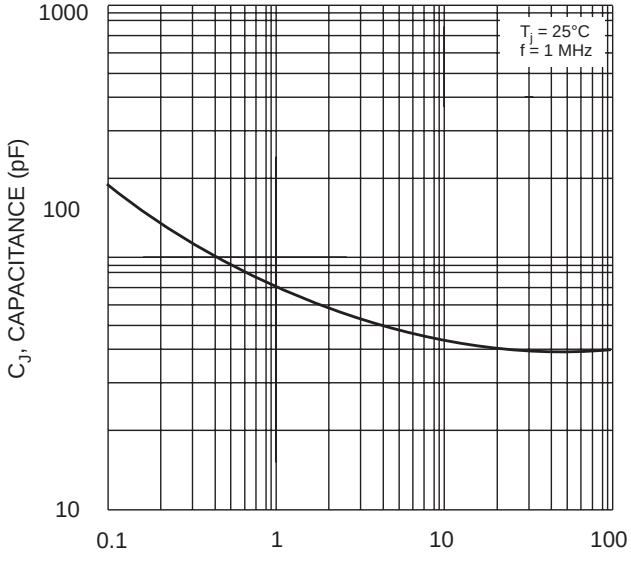


Fig. 4 Typ Junction Capacitance per element

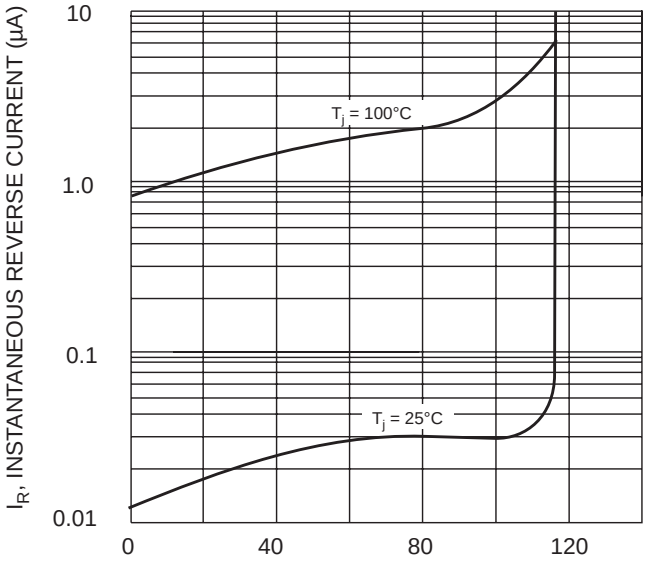
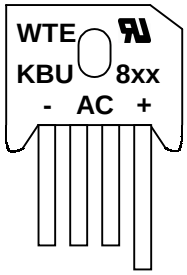


Fig. 5 Typical Reverse Characteristics

MARKING INFORMATION



WTE	= Manufacturer's Logo
KBU8xx	= Device Number
xx	= 00, 01, 02, 04, 06, 08 or 10
Polarity	= As Marked on Body

PACKAGING INFORMATION

BULK

Inner Box Size L x W x H (mm)	Quantity (PCS)	Carton Size L x W x H (mm)	Quantity (PCS)	Approx. Gross Weight (KG)
268 x 227 x 51	400	463 x 283 x 185	2,400	20.5

Note: 1. Paper box, white or brown color.