

Features:

- High Surge Current Capability
- Low Forward Voltage Drop
- High Reliability
- Molded Plastic Case
- Plastic material has UL 94V-0 Classification

1600V, 6 Amps Single-Phase Rectifier Bridge

Table 1: Maximum Ratings @ 25°C

Parameter	Max Rating
Peak Repetitive Reverse Voltage, V_{RRM}	1600 V
DC Reverse Blocking Voltage, V_{DC}	
Maximum RMS Bridge Input Voltage V_{RMS}	1120 V
Average Forward Current, $I_O @ T=100^{\circ}C$	6 A
Non-Repetitive Peak Surge Current, I_{FSM}	250 A
Rating for fusing ($t < 8.3ms$), $I^2 t$	300 A ² sec
Voltage Isolation, terminals to case V_{ISO}	>2500 V
Operating and Storage Junction Temp. Range	-55 to +150 °C
Thermal Resistance, Junction to Ambient	2.7 °C/W

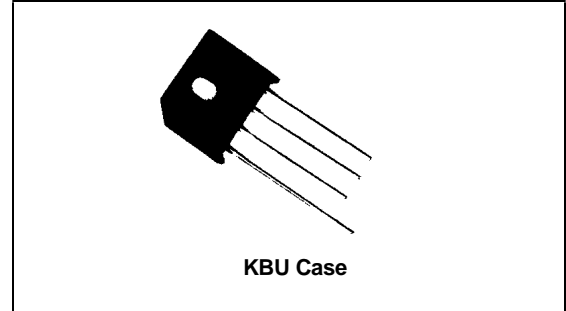
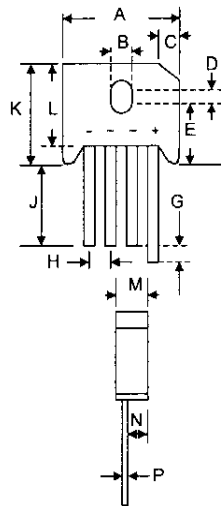


Table 2: Electrical Characteristics per leg @ 25°C

Parameter	Symbol	Conditions	Limits		Units
			Min	Max	
Reverse Current	I_{R1}	$V_R = 1600V$		10	μA
Reverse Current	I_{R2}	$V_R = 1600V, T_A = 125^{\circ}C$		500	μA
Forward Voltage	V_F	$I_F = 6A$		1.1	V

- Note: 1. Plated terminal leads solderable per MIL-STD-202 Method 208
 2. High Temperature soldering guaranteed 265°C/10 seconds at 5lbs(2.3kg) tension
 3. Polarity symbols molded on body
 4. Mounting Torque: 5 in-lbs max.
 5. Weight: 0.3 ounce, 8 grams (approx.)

Mechanical Dimensions



Dim	Min	Max
A	22.7	23.7
B	3.80	4.10
C	4.20	4.60
D	1.70	2.20
E	10.30	11.30
G	5.10	6.10
H	4.60	5.60
J	25.40	---
K	---	19.30
L	16.80	17.80
M	6.60	7.00
N	4.70	5.10
P	1.20	1.30

All Dimensions in mm

Rating and Characteristic Curves (TA=25°C Unless otherwise noted) KBU6M

Fig. 1 Derating Curve for Output Rectified Current

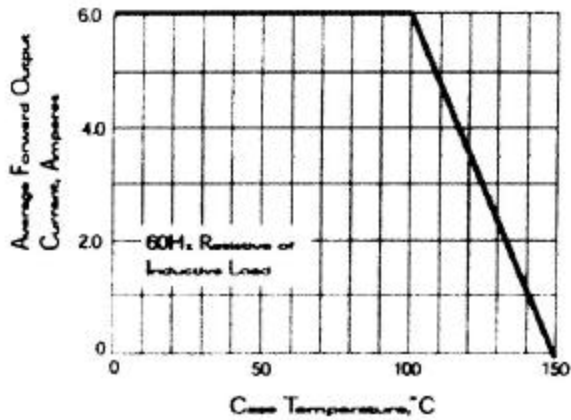


Fig. 2 Maximum Non-repetitive Peak Forward Surge Current

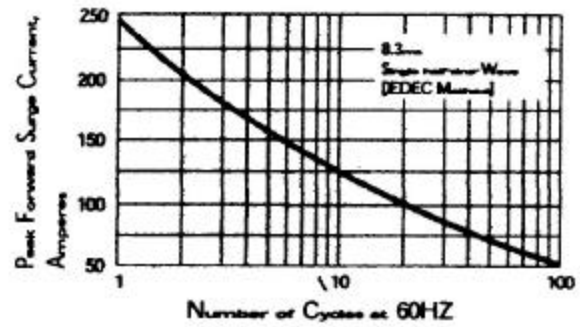


Fig. 3 Typical Instantaneous Forward Characteristics

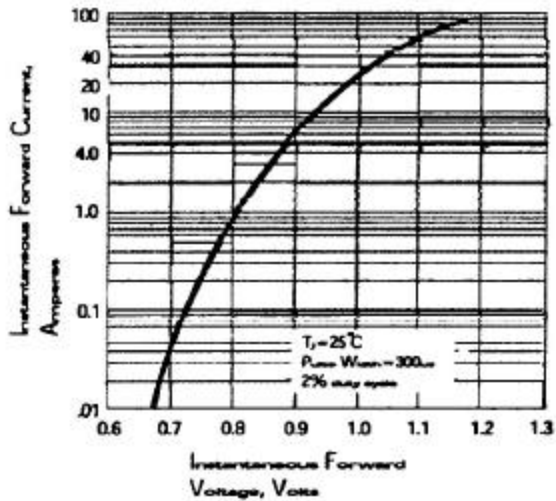


Fig. 4 Typical Reverse Characteristics

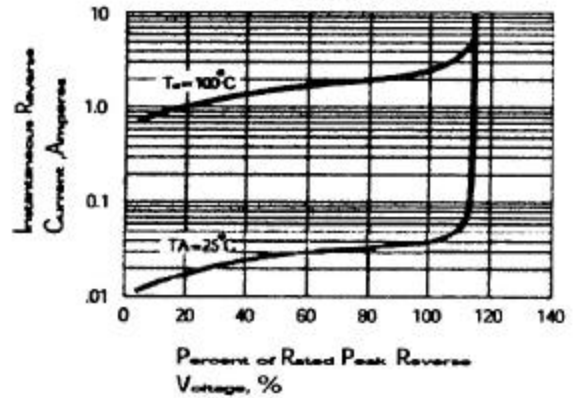


Fig. 5 Typical Junction Capacitance

