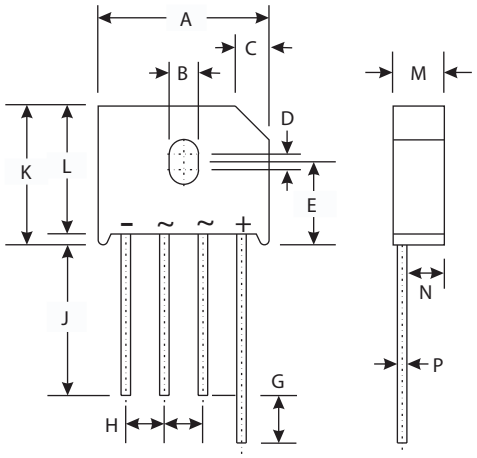
KBU6A THRU KBU6M

CURRENT 6.0 Amperes
VOLTAGE 50 to 1000 Volts

Features

- Diffused Junction
- Low Forward Voltage Drop, High Current Capability
- Surge Overload Rating to 250A Peak
- Ideal for Printed Circuit Board Applications
- Case to Terminal Isolation Voltage 1500V
- Plastic Material - UL Flammability Classification Rating 94V-0



KBU					
Dim	Min	Max	Dim	Min	Max
A	22.70	23.70	J	25.40	—
B	3.80	4.10	K	—	19.30
C	4.20	4.70	L	16.80	17.80
D	1.70	2.20	M	6.60	7.10
E	10.30	11.30	N	4.70	5.20
G	4.50	6.80	P	1.20	1.30
H	4.80	5.80			
All Dimensions in mm					

Mechanical Data

- Case : Molded Plastic
- Terminals : Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity : As Marked on Case
- Mounting : Through Hole for #6 Screw
- Mounting Torque : 5.0 Inch-pounds Maximum
- Weight : 8.0 grams (approx.)
- Mounting Position : Any
- Marking : Type Number

Maximum Ratings And Electrical Characteristics

(Ratings at 25℃ ambient temperature unless otherwise specified, Single phase, half wave 60Hz, resistive or inductive load. For capacitive load, derate by 20%)

	Symbols	KBU 6A	KBU 6B	KBU 6D	KBU 6G	KBU 6J	KBU 6K	KBU 6M	Units
Peak Repetitive Reverse voltage Working Peak Reverse voltage DC Blocking voltage	V_{RMM} V_{RWM} V_R	50	100	200	400	600	800	1000	Volts
RMS Reverse voltage	V_{RMS}	35	70	140	280	420	560	700	Volts
Average Rectified Output Current @ T_C=100℃	Io	6.0							Amps
Non-Repetitive Peak Forward Surge Current, 8.3ms single half-sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	200							Amps
Forward voltage (per element) @ I_F=3.0 A	V_{FM}	1.0							Volts
Peak Reverse Current at Rated DC Blocking voltage @ T_C=25℃	I_{RM}	10							μA
Peak Reverse Current at Rated DC Blocking voltage @ T_C=100℃	I_{RM}	1.0							mA
I^2t Rating for Fusing (Note 2)	I^2t	166							A^2s
Typical Thermal Resistance, Junction to Case (Note 1)	$R_{\Theta JA}$	6.3							℃/W
Operating and Storage Temperature Range	T_j T_{STG}	-65 to +150							℃

Notes:
(1) Thermal resistance junction to case mounted on heat sink.
(2) Non-repetitive, for t > 1.0ms and t < 8.3ms.

RATINGS AND CHARACTERISTIC CURVES KBU6A THRU KBU6M

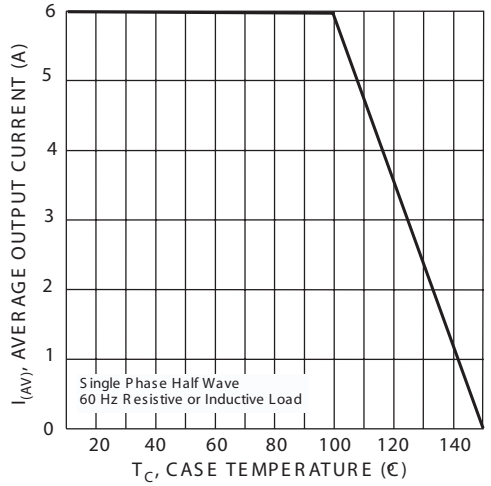


Fig. 1 Forward Current Derating Curve

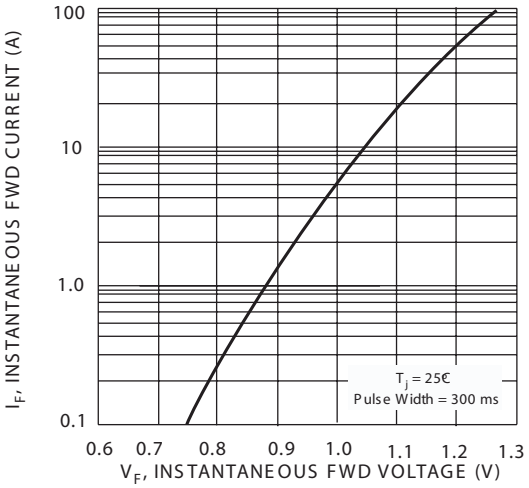


Fig. 2 Typical Forward Characteristics

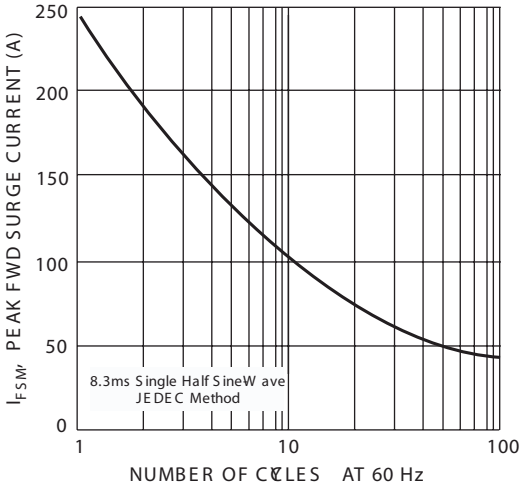


Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

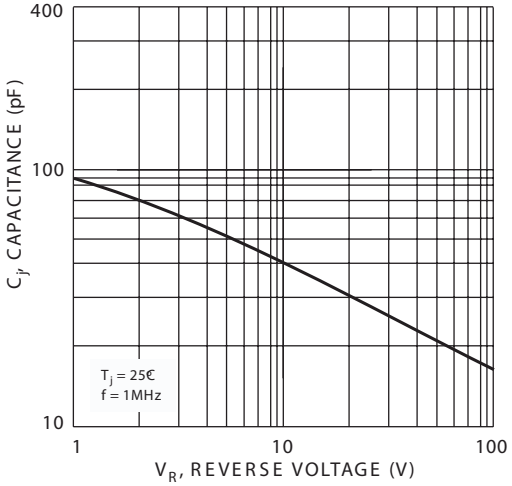


Fig. 4 Typical Junction Capacitance Per Element

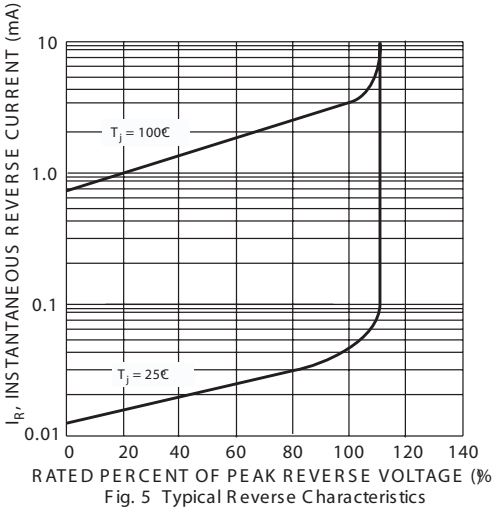


Fig. 5 Typical Reverse Characteristics