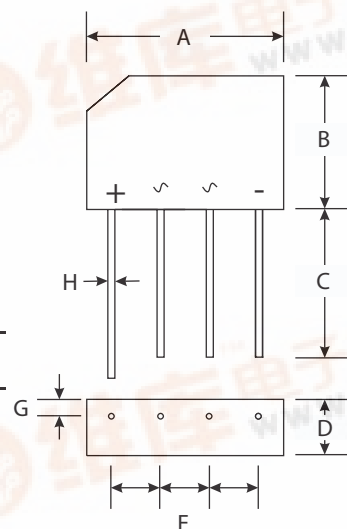


KBL6005 THRU KBL607

CURRENT 6.0 Amperes
VOLTAGE 50 to 1000 Volts

- High case dielectric Strength of 1500V
- Low Forward Voltage Drop, High Current Capability
- Surge Overload Rating to 250A Peak
- Ideal for Printed Circuit Board Application
- Plastic Material - UL Flammability Classification 94V-0



KBL		
Dim	Min	Max
A	18.50	19.50
B	15.40	16.40
C	19.00	—
D	6.20	6.50
E	4.60	5.60
G	1.50	2.00
H	1.30 Typical	
All Dimensions in mm		

Mechanical Data

- Case : Molded Plastic
- Terminals : Plated Leads, Solderable per MIL-STD-202, Method 208
- Polarity : Symbols Marked on Case
- Approx. Weight: 5.6 grams
- Marking : Type Number

Maximum Ratings And Electrical Characteristics

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

	Symbols	KBL 6005	KBL 601	KBL 602	KBL 604	KBL 605	KBL 606	KBL 607	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 @ $T_C=75^{\circ}C$	I_o	6.0							Amps	
Non-Repetitive Peak Forward Surge Current, 8.3ms single half-sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	150							Amps	
Forward Voltage per element @ $I_F=3.0 A$	V_{FM}	1.1							Volts	
Peak Reverse Current at Rated DC Blocking Voltage	@ $T_C=25^{\circ}C$	I_R	10							μA
	@ $T_C=100^{\circ}C$		1.0							mA
I^2t Rating for Fusing (t<8.3ms) (Note 2)	I^2t	166							A^2s	
Typical Thermal Resistance, Junction to Case (Note 1)	$R\theta_{JA}$	19							$^{\circ}C/W$	
Operating and Storage Temperature Range	T_j T_{STG}	-40 to +150							$^{\circ}C$	

Notes:

- 1) Thermal Resistance from junction to case per element mounted on PC board with 13 x 13 x 0.03mm land areas.
2) Non-repetitive for $t > 1\text{ms}$ and $< 8.3\text{ms}$.



RATING AND CHARACTERISTIC CURVES KBL6005 THRU KBL6007

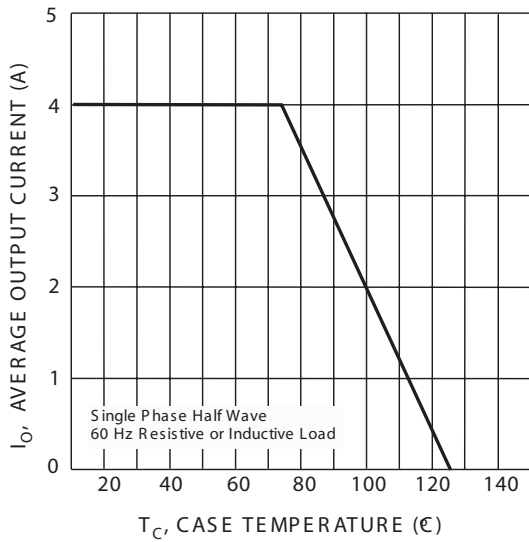


Fig. 1 Forward Current Derating Curve

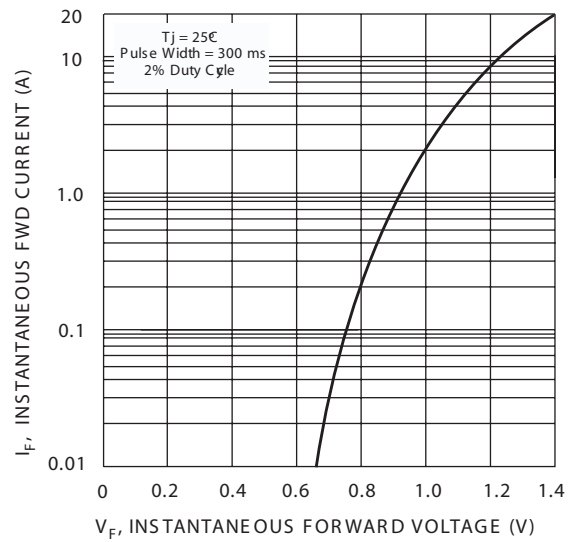


Fig. 2 Typical Forward Characteristics

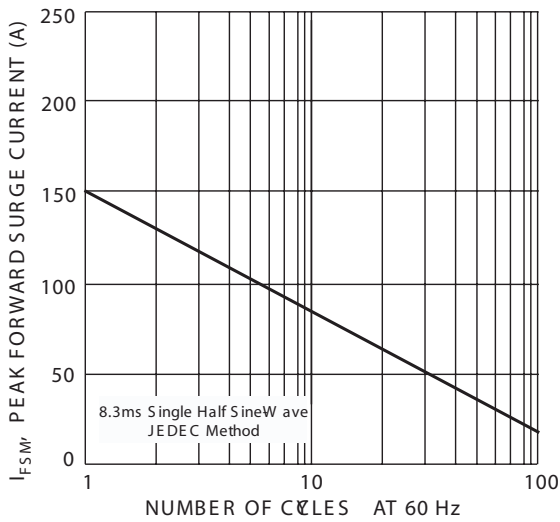


Fig. 3 Max NonRepetitive Peak Fwd Surge Current

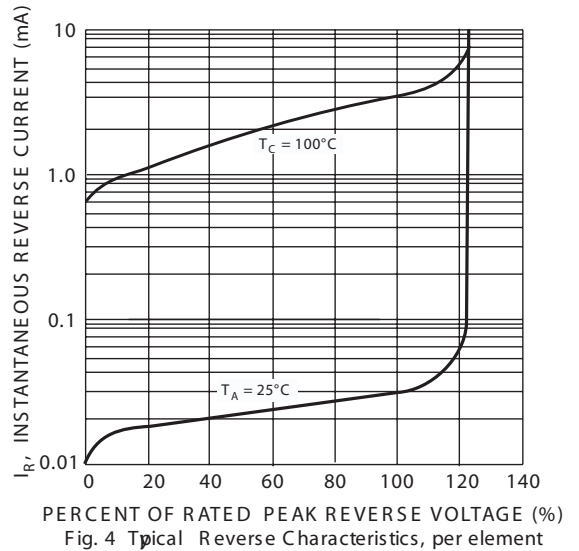


Fig. 4 Typical Reverse Characteristics, per element