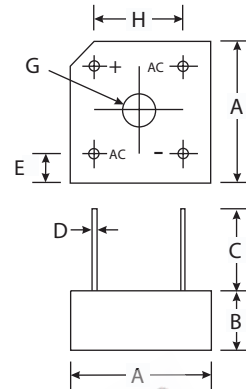


KBPC6005 THRU KBPC610

CURRENT 6.0 Amperes
VOLTAGE 50 to 1000 Volts

Features

- High Current Capability
- Surge Overload Rating to 125A Peak
- High Case Dielectric Strength of 1500V
- Ideal for Printed Circuit Board Application
- Plastic Material - UL Flammability Classification 94V-0



KBPC-3		
Dim	Min	Max
A	14.73	15.75
B	5.84	6.86
C	19.00	—
D	0.76 ϕ Typical	
E	1.70	3.20
G	Hole for #6 screw	
	3.60	4.00
H	10.30	11.30
All Dimensions in mm		

Mechanical Data

- Case : Molded Plastic
- Terminals : Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity : Marked on Body
- Mounting : Through Hole for #6 Screw
- Mounting Torque : 5.0 Inch-pounds Maximum
- Weight : 3.8 grams (approx.)
- 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	KBPC 6005	KBPC 601	KBPC 602	KBPC 604	KBPC 606	KBPC 608	KBPC 610	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	$V_{R(RMS)}$	35	70	140	280	420	560	700	Volts
Average Rectified Output Current (Note 1) (Note 2)	@ $T_C=50^\circ\text{C}$ @ $T_C=50^\circ\text{C}$	8.0 6.0						Amps	
Non-Repetitive Peak Forward Surge Current, 8.3ms single half-sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	125						Amps	
Forward voltage (per element) @ $I_F=3.0\text{ A}$	V_{FM}	1.1						Volts	
Peak Reverse Current at Rated DC Blocking voltage (per element) @ $T_C=25^\circ\text{C}$	I_R	10						$\mu\text{ A}$	
@ $T_C=100^\circ\text{C}$		1.0						mA	
I^2t Rating for Fusing ($t<8.3\text{ms}$) (Note 3)	I^2t	64						A^2s	
Typical Junction Capacitance (Note 4)	C_j	55						pF	
Typical Thermal Resistance, Junction to Case (per element)	$R_{\theta\text{ JA}}$	12.5						$^\circ\text{C/W}$	
Operating and Storage Temperature Range	T_j T_{STG}	-65 to +125						$^\circ\text{C}$	

Notes:

- (1) Mounted on metal chassis.
- (2) Mounted on PC board FR-4 material.
- (3) Non-repetitive, for $t > 1.0\text{ms}$ and $< 8.3\text{ms}$.
- (4) Measured at 1.0 MHz and applied reverse voltage of 4.0V DC.

RATINGS AND CHARACTERISTIC CURVES KBPC6005 THRU KBPC610

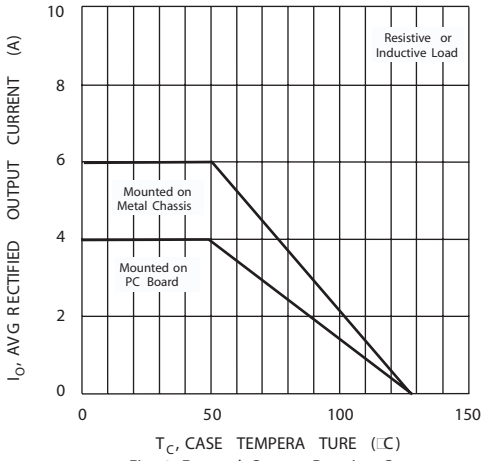


Fig. 1 Forward Current Derating Curve

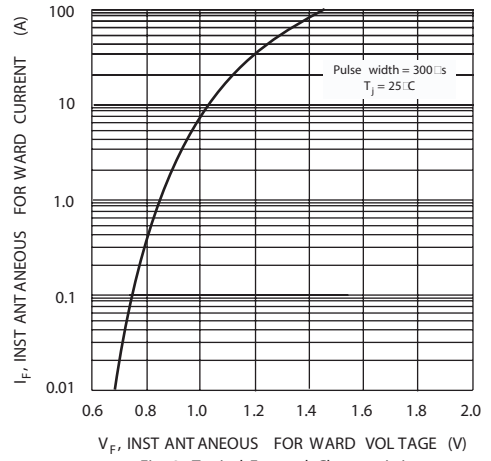


Fig. 2 Typical Forward Characteristics

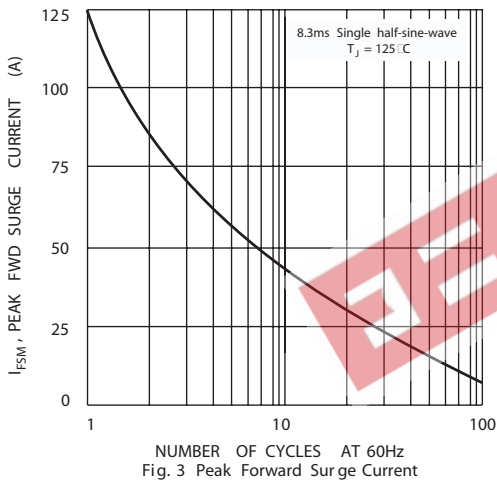


Fig. 3 Peak Forward Surge Current

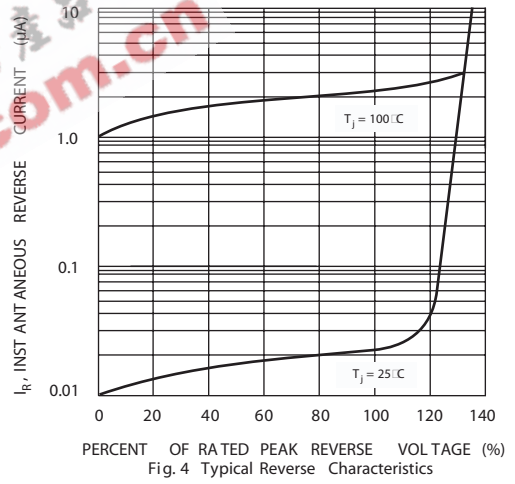


Fig. 4 Typical Reverse Characteristics