

KBPC50005/W THRU KBPC5010/W

CURRENT 50.0 Amperes VOLTAGE 50 to 1000 Volts

Features

- · Diffused Junction
- · Low Reverse Leakage Current
- · Low Power Loss, High Efficiency
- · Surge Overload Rating to 400A Peak
- · Electrically Isolated Metal Case for Maximum Heat Dissipation
- · High Case Dielectric Strength of 1500VRMS

Mechanical Data

· Case: High Conductivity Metal

· Terminals : Plated Leads Solderable per

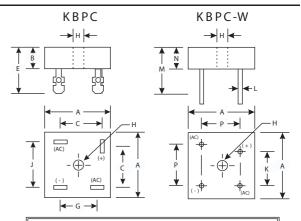
MIL-STD-202, Method 208 · Polarity : Symbols Marked on Case

· Mounting: Through Hole for #10 Screw

Mounting Torque: 8.0 Inch-pounds Maximum
Weight: KBPC
31.6 grams (approx.)

KBPC-W 28.5 grams (approx.)

· Mounting Position : Any · Marking : Type Number



KBPC / KBPC-W											
Dim	Min	Max	Dim	Min	Max						
А	28.40	28.70	J	17.10	19.10						
В	10.97	11.23	K	10.40	12.40						
C	15.50	17.60	L	0.97 Ø	1.07 Ø						
9 E	22.86	25.40	М	30.50	_						
G	13.30	15.30	N	10.97	11.23						
411	Hole for #	10 screw	Р	17.10	19.10						
H	4.85 Ø	5.59 Ø									
All Dimensions in mm											

"W" Suffix Designates Wire Leads No Suffix Designates Fast-on Terminals

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	KBPC50 005/W	KBPC50 01/W	KBPC50 02/W	KBPC50 04/W	KBPC50 06/W	KBPC50 08/W	KBPC50 10/W	Units
Peak Repetitive Reverse voltage Working Peak Reverse voltage DC Blocking voltage		VRMM VRWM VR	50	100	200	400	600	800	1000	Volts
RMS Reverse voltage		VR(RMS)	35	70	140	280	420	560	700	Volts
Average Rectified Output Current	lo	50							Amps	
Non-Repetitive Peak Forward Surga 8.3ms single half-sine-wave superir on rated load (JEDEC method)	lfsm	500							Amps	
Forward voltage (per element)	@ IF=25 A	VFM	1.2							Volts
Peak Reverse Current at Rated	@ Tc=25 ℃	lr	10							μΑ
DC Blocking voltage	@ Tc=125 ℃		1.0							mA
I ² t Rating for Fusing (t<8.3ms) (Note 2)		l ² t	800							A ² s
Typical Junction Capacitance (Note 3)		Cj	300							pF
Typical Thermal Resistance Junction to Case		R θ ја	1.5						°C/W	
Operating and Storage Temperature Range		Tj Tstg	-50 to +150						°C	

Notes:

- (1) Thermal resistance junction to case mounted on heat sink.
- (2) Measured at non-repetitive, for t > 1.0ms and < 8.3ms.
- (3) Measured at 1.0MHz and applied reverse voltage of 4.0V DC.



RATINGS AND CHARACTERISTIC CURVES KBPC50005/W THRU KBPC5010/W

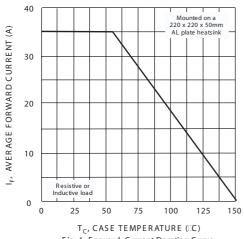
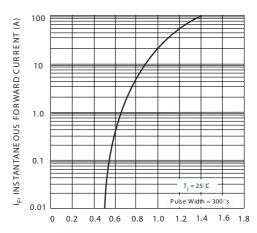
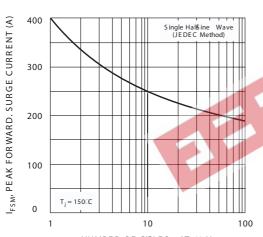


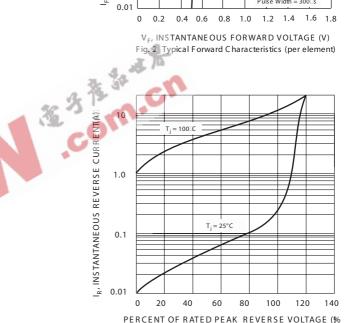
Fig. 1 Forward. Current Derating Curve.



V_F, INSTANTANEOUS FORWARD VOLTAGE (V) Fig. 2 Typical Forward Characteristics (per element)



NUMBER OF CYLES AT 60 Hz Fig. 3 Maimum NonRepetitive Surge Current



PERCENT OF RATED PEAK REVERSE VOLTAGE (% Fig. 4 Typical Reverse Characteristics (per element)