

# KBPC15005/W THRU KBPC1510/W

CURRENT 15.0 Amperes VOLTAGE 50 to 1000 Volts

KBPC-W

### **Features**

- · Diffused Junction
- · Low Reverse Leakage Current
- · Low Power Loss, High Efficiency
- · Surge Overload Rating to 300A Peak
- · Electrically Isolated Metal Case for Maximum Heat Dissipation
- · High Case Dielectric Strength of 1500VRMS

**KBPC** 

#### KBPC / KBPC-W Dim Min Max Max Dim Min 28.70 17.10 19.10 10.97 10.40 12.40 11.23 Κ 17.60 0.97 Ø 1.07 Ø 25.40 М 30.50 Ν 10.97 11.23 15.30 Hole for #10 screw Ρ 17.10 19.10 4.85 Ø 5.59 Ø

All Dimensions in mm

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

## 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

## **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	KBPC15 005/W	KBPC15 01/W	KBPC15 02/W	KBPC15 04/W	KBPC15 06/W	KBPC15 08/W	KBPC15 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 @ Tc=55 ℃		lo	15							Amps
Non-Repetitive Peak Forward Surge Current, 8.3ms single half-sine-wave superimposed on rated load (JEDEC method)		IFSM	300							Amps
Forward voltage (per element) @ IF=7.5 A		VFM	1.2							Volts
eak Reverse Current at Rated C Blocking voltage (per element)		IR	10 1.0							μA mA
I <sup>2</sup> t Rating for Fusing (t<8.3ms) (Note 2)		l <sup>2</sup> t	373							A <sup>2</sup> s
Typical Junction Capacitance (Note 3)		Cj	300							pF
Typical Thermal Resistance Junction to Case		R $\theta$ ја	6.3							°C/W
Operating and Storage Temperature Range		Tj Tstg	-65 to +150							င

#### 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 KBPC15005/W THRU KBPC1510/W

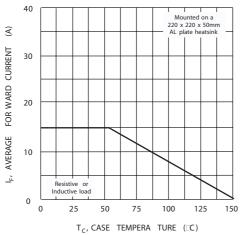
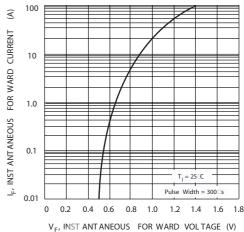
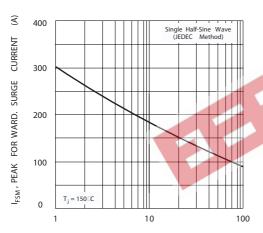


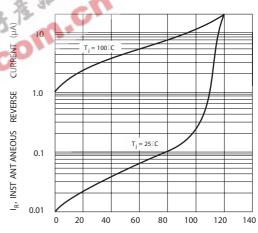
Fig. 1 Forward. Current Derating Curve.



V<sub>F</sub>, INST ANTANEOUS FOR WARD VOLTAGE (V) Fig. 2 Typical Forward Characteristics (per element)



NUMBER OF CYCLES AT 60 Hz Fig. 3 Maximum Non-Repetitive Surge Current



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