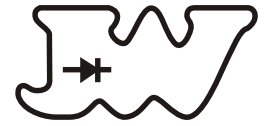


KBPC00 THRU KBPC12

SINGLE PHASE 1.0 AMP SURFACE MOUNT BRIDGE RECTIFIERS

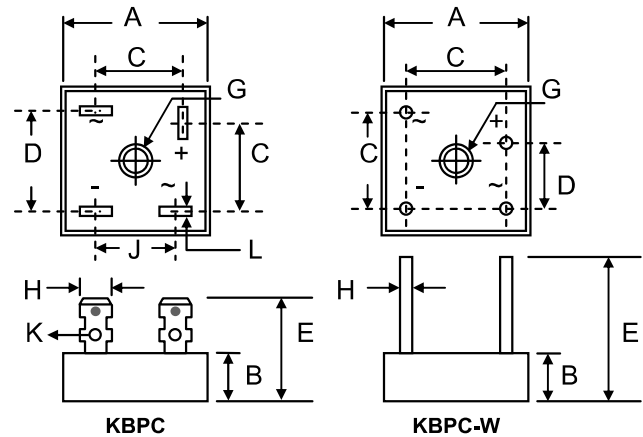


Features

- Diffused Junction
- Low Reverse Leakage Current
- Low Power Loss, High Efficiency
- Electrically Isolated Metal Case for Maximum Heat Dissipation
- Low Thermal Resistance
- High Surge Current Capability

Mechanical Data

- Case: KBPC (Metal Case with Faston Lugs) or KBPC-W (Metal Case with Wire Leads)
- Terminals: Plated Faston Lugs or Wire Leads, Add "W" Suffix to Indicate Wire Leads
- Polarity: As Marked on Case
- Mounting: Through Hole with #10 Screw
- Mounting Torque: 2.0 N.m Max.
- Weight: 30 grams (KBPC); 28 grams (KBPC-W)
- Marking: Type Number
- **Lead Free: For RoHS / Lead Free Version, Add "-LF" Suffix to Part Number, See Page 4**



	KBPC		KBPC-W	
Dim	Min	Max	Min	Max
A	27.94	28.96	27.94	28.96
B	10.77	11.23	10.77	11.23
C	15.30	17.60	17.10	19.10
D	17.10	19.10	10.40	12.40
E	21.50	—	30.50	—
G	Hole for #10 screw, 5.08Ø Nominal			
H	6.35 Typical		0.97Ø	1.07Ø
J	13.20	15.20		
K	2.5Ø Typical			
L	0.71	0.91		
All Dimension in mm				

Maximum Ratings and Electrical Characteristics @T_A=25°C unless otherwise specified

Single Phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Characteristic	Symbol	KBPC50								Unit
		00	01	02	04	06	08	10	12	
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V _{RRM} V _{RWM} V _R	50	100	200	400	600	800	1000	1200	V
RMS Reverse Voltage	V _{R(RMS)}	35	70	140	280	420	560	700	840	V
Average Rectified Output Current @T _C = 55°C	I _O	50								A
Non-Repetitive Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method)	I _{FSM}	500								A
Forward Voltage per leg @I _F = 25A	V _{FM}	1.1								V
Peak Reverse Current @T _C = 25°C At Rated DC Blocking Voltage @T _C = 125°C	I _{RM}	10 500								µA
I ² t Rating for Fusing (t < 8.3ms)	I ² t	800								A ² s
Typical Junction Capacitance (Note 1)	C _J	300								pF
Typical Thermal Resistance (Note 2)	R _{θJC}	1.2								°C/W
RMS Isolation Voltage, t = 1min	V _{ISO}	2500								V
Operating and Storage Temperature Range	T _J , T _{STG}	-55 to +150								°C

Note: 1. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.

2. Thermal resistance junction to case, mounted on 394 x 114 x 114mm Al. heatsink.

RATING AND CHARACTERISTIC CURVES (KBPC00 THRU KBPC12)

