















ESD

TVS

MOS

LDO

Diode

Sensor

DC-DC

Product Specification

Domestic Part Number	KBPC15005-KBPC1510
Overseas Part Number	KBPC15005-KBPC1510
▶ Equivalent Part Number	KBPC15005-KBPC1510





KBPC15005 thru KBPC1510

15.0 A Single-Phase Silicon Bridge Rectifier Rectifier Reverse Voltage 50 to 1000V



Features

- Surge overload ratings to 300 amperes
- This series is UL listed under the Recognized Component Index, file number E142814
- The plastic material used carries Underwriters Laboratory flammability recognition 94V-0
- Universal 4-way terminals, snap-on, wrap-around, solder or P.C. Board mounting
- High temperature soldering guaranteed 265°C/10 seconds at 5 lbs (2.3kg) tension

Mechanical Data

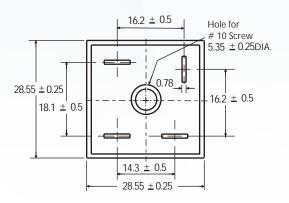
Case: Metal case

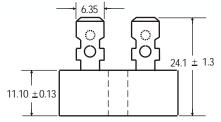
Terminals: Plated .25" (6.53mm) Faston

Mounting Position: Bolt down on heat-sink with silicone thermal compound between bridges and mounting surface for maximum heat transfer efficiency

Mounting Position: Any

Weight: 0.706 ounce, 20 grams (approx)





Dimensions in millimeters (1mm=0.0394")

Maximum Ratings & Thermal Characteristics

Rating at 25°C ambient temperature unless otherwise specified, Resistive or Inductive load, 60 Hz. For Capacitive load derate current by 20%.

Parameter	Symbol	KBPC 15005	KBPC 1501	KBPC 1502	KBPC 1504	KBPC 1506	KBPC 1508	KBPC 1510	unit
Maximum repetitive peak reverse voltage	VRRM	50	100	200	400	600	800	1000	V
Maximum RMS bridge input voltage	VRMS	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	VDC	50	100	200	400	600	800	1000	V
Maximum average forward rectified output current at TA=55°C	IF(AV)	15						А	
Peak forward surge current single sine-wave superimposed on rated load (JEDEC Method)	IFSM	300					А		
Rating for fusing (t<8.3ms)	l ² t	374						A ² sec	
Typical thermal resistance per element (1)	ReJA	2.1						°C/W	
Isolation voltage from case to leads		2500						Vac	
Operating junction and storage temperature range	TJ, TSTG	-55 to + 150						င	

Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified. Resistive or Inductive load, 60Hz. For Capacitive load derate by 20 %.

Parameter	Symbol	KBPC 15005	KBPC 1501	KBPC 1502	KBPC 1504	KBPC 1506	KBPC 1508	KBPC 1510	Unit
Maximum instantaneous forward voltage drop per leg at 7.5A	VF	1.0						V	
Maximum DC reverse current at rated TA =25°C DC blocking voltage per element TA =125°C		10 500					μΑ		

Notes: (1) Thermal resistance from Junction to Ambemt on P.C. board mounting.



Rating and Characteristic Curves (TA=25°C Unless otherwise noted) KBPC15005 thru KBPC1510

Fig. 1 Derating Curve for Output Rectified Current

15

60Hz Resistive or Inductive Load

Case Temperature, C

Fig. 2 Maximum Non-repetitive Peak

Fig. 3 Typical Instantaneous Forward Characteristics

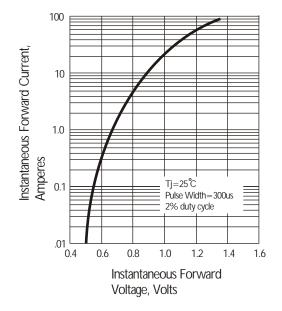
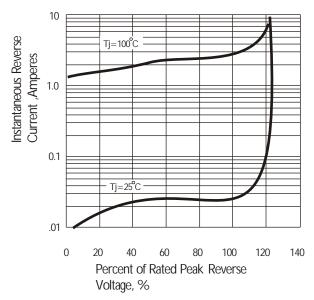


Fig. 4 Typical Reverse Characteristics at Tj=25°C





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