

# EVVOSEMI<sup>®</sup>

THINK CHANGE DO



ESD



TVS



MOS



LDO



Diode



Sensor



DC-DC

## Product Specification

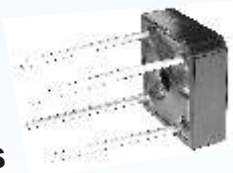
▶ Domestic	Part Number	KBPC8005-KBPC810
▶ Overseas	Part Number	KBPC8005-KBPC810
▶ Equivalent	Part Number	KBPC8005-KBPC810

EV is the abbreviation of name EVVO

## KBPC8005 thru KBPC810

### 8.0 A Single-Phase Silicon Bridge Rectifier

Rectifier Reverse Voltage 50 to 1000V



#### Features

- This series is UL listed under the Recognized Component Index, file number E142814
- High temperature metallurgically bonded internal rectifiers
- Typical  $I_R$  less than  $.1\mu A$
- The plastic material used carries Underwriters Laboratory flammability recognition 94V-0
- High temperature soldering guaranteed 265 °C/10 seconds at 5 lbs (2.3kg) tension

#### Mechanical Data

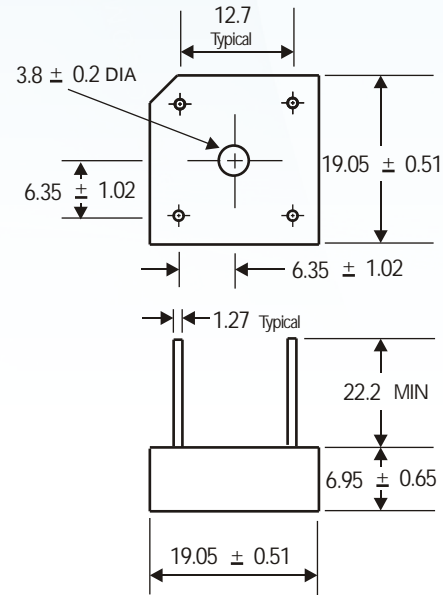
Case: Voil-free plastic package

Terminals: Plated leads solderable per MIL-STD-202, Method 208

Mounting: Thru hole for #6 screw

Mounting position: Any

Weight: 0.24 ounce, 6.9 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 8005	KBPC 801	KBPC 802	KBPC 804	KBPC 806	KBPC 808	KBPC 810	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 Tc = 50 °C (1)	IF(AV)	8.0							A
Peak forward surge current single sine-wave superimposed on rated load (JEDEC Method)	IFSM	125							A
Rating for fusing ( t<8.3ms)	I <sup>2</sup> t	10							A <sup>2</sup> sec
Typical thermal resistance per element (2)	ReJA	9.4							°C / W
Typical junction capacitance per element(3)	Cj	55							pF
Operating junction and storage temperature range	TJ, TSTG	-55 to + 150							°C

#### 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 8005	KBPC 801	KBPC 802	KBPC 804	KBPC 806	KBPC 808	KBPC 810	Unit
Maximum instantaneous forward voltage drop per leg at 4.0A	VF	1.1							V
Maximum DC reverse current at rated TA = 25°C DC blocking voltage per element TA = 100 °C	IR	10 1000							μA

Notes: (1) Mounted on metal chassis.

(2) Non-repetitive, for t&gt;1ms and &lt; 8.3ms.

(3) Measured at 1.0MHz and applied reverse voltage of 4.0V DC.

Rating and Characteristic Curves ( TA=25°C Unless otherwise noted )  
KBPC8005 thru KBPC810

Fig. 1 Derating Curve for Output Rectified Current

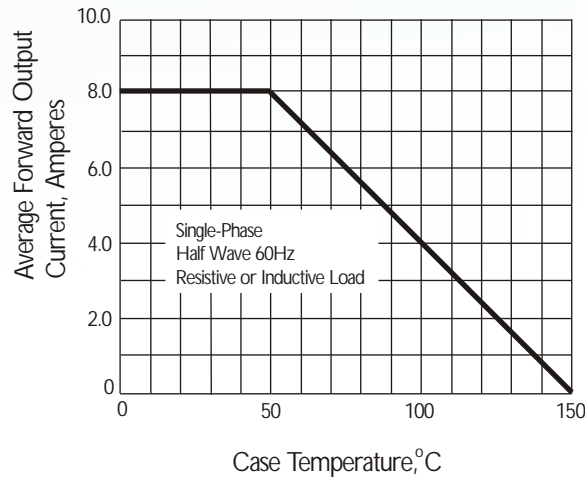


Fig. 2 Maximum Non-repetitive Peak Forward Surge Current

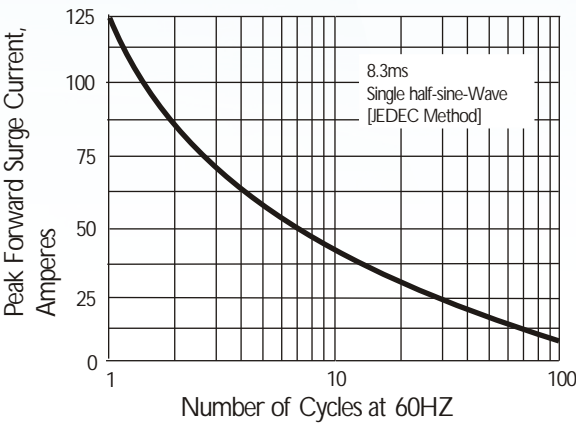


Fig. 3 Typical Instantaneous Forward Characteristics

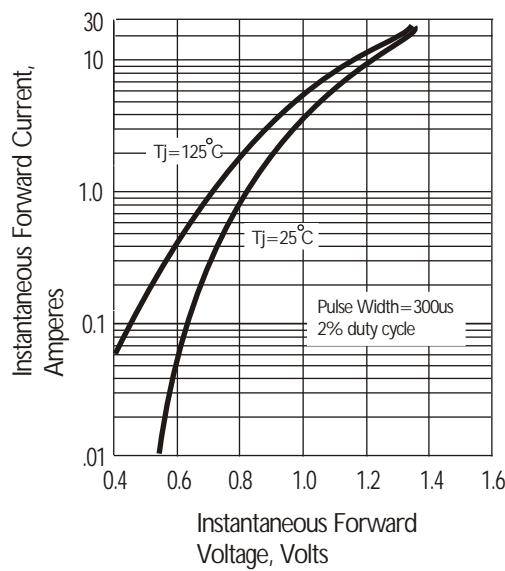
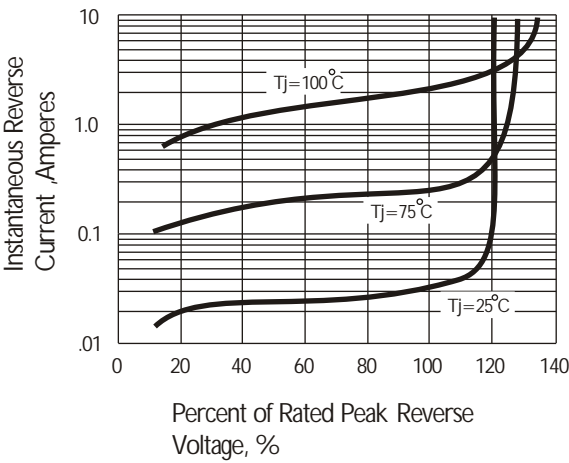


Fig. 4 Typical Reverse Characteristics



## Disclaimer

EVVOSEMI ("EVVO") reserves the right to make corrections, enhancements, improvements, and other changes to its products and services at any time, and to discontinue any product or service without notice.

EVVO warrants the performance of its hardware products to the specifications applicable at the time of sale in accordance with its standard warranty. Testing and other quality control techniques are used as deemed necessary by EVVO to support this warranty. Except where mandated by government requirements, testing of all parameters of each product is not necessarily performed.

Customers should obtain and confirm the latest product information and specifications before final design, purchase, or use. EVVO makes no warranty, representation, or guarantee regarding the suitability of its products for any particular purpose, nor does EVVO assume any liability for application assistance or customer product design. EVVO does not warrant or accept any liability for products that are purchased or used for any unintended or unauthorized application.

EVVO products are not authorized for use as critical components in life support devices or systems without the express written approval of EVVOSEMI.

The EVVO logo and EVVOSEMI are trademarks of EVVOSEMI or its subsidiaries in relevant jurisdictions. EVVO reserves the right to make changes without further notice to any products herein.