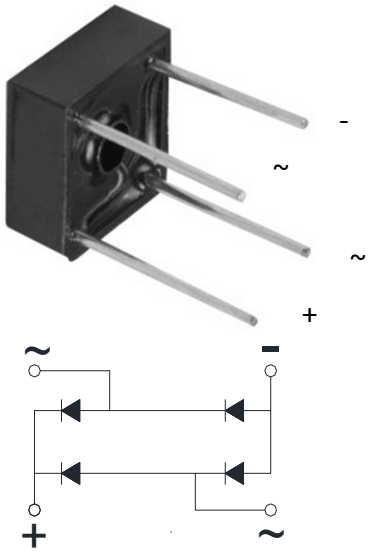
Bridge Rectifiers



Features

- Suitable for printed circuit board or chassis mounting
- Compact construction
- High surge current capability
- Solder dip 275 °C max. 7s, per JESD 22-B106

Typical Applications

The KBPC series of single phase rectifier bridge consists of four silicon junctions connected as a full bridge. These devices are intended for general use in industrial and consumer equipment.

Mechanical Date

- **Package**: KBPC8
  Molding compound meets UL 94 V-0 flammability rating, RoHS-compliant
- **Terminals**: Tin plated leads, solderable per J-STD-002 and JESD22-B102
- **Polarity:** As marked on body

■ Maximum Ratings (T_a=25℃ Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	KBPC15005	KBPC1501	KBPC1502	KBPC1504	KBPC1506	KBPC1508	KBPC1510
Device marking code			KBPC15005	KBPC1501	KBPC1502	KBPC1504	KBPC1506	KBPC1508	KBPC1510
Repetitive Peak Reverse Voltage	V_{RRM}	V	50	100	200	400	600	800	1000
Average Rectified Output Current @60Hz sine wave, R-load, T_a=40℃	I_O	A	15						
Surge(Non-repetitive)Forward Current @60Hz Half- sine Wave, 1 cycle, T_a=25℃	I_{FSM}	A	220						
Current Squared Time @1ms≤t≤8.3ms Tj=25℃, Rating of per diode	I^2t	A^2S	200						
Storage Temperature	T_{stg}	℃	-55 ~+150						
Junction Temperature	T_j	℃	-55 ~+150						

■ Electrical Characteristics (T_a=25℃ Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	KBPC15005	KBPC1501	KBPC1502	KBPC1504	KBPC1506	KBPC1508	KBPC1510
Maximum instantaneous forward voltage drop per diode	V_{FM}	V	I_{FM}=7.5A	1.1						
Maximum DC reverse current at rated DC blocking voltage per diode	I_{RRM}	μA	V_{RM}=V_{RRM}	10						

■ Thermal Characteristics (T_a=25℃ Unless otherwise specified)

PARAMETER		SYMBOL	UNIT	KBPC15005	KBPC1501	KBPC1502	KBPC1504	KBPC1506	KBPC1508	KBPC1510
Thermal Resistance	Between junction and ambient	$R_{\theta J-A}$	℃/W	17						

■ Ordering Information (Example)

PREFERED P/N	PACKAGE CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
KBPC15005~KBPC1510	A1	Approximate 4.75	200	200	2000	Paper Box

■ Characteristics (Typical)

FIG1:Io-Tc Curve

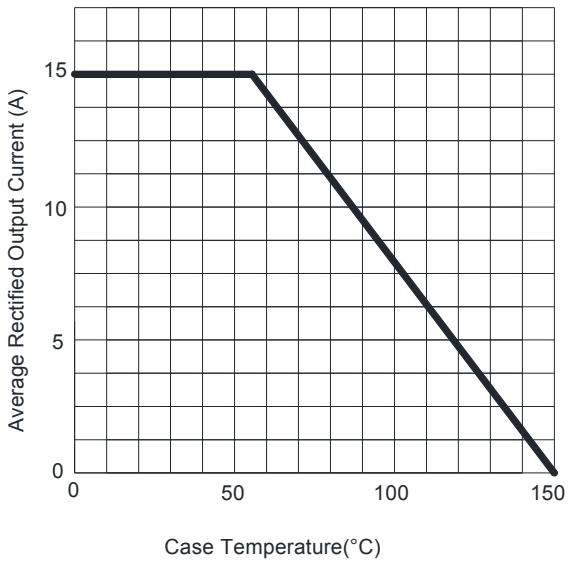


FIG2:Surge Forward Current Capability

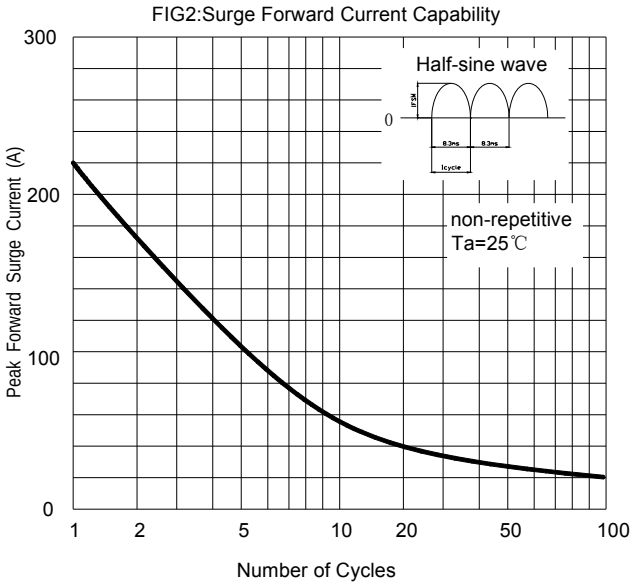


FIG3:Instantaneous Forward Voltage

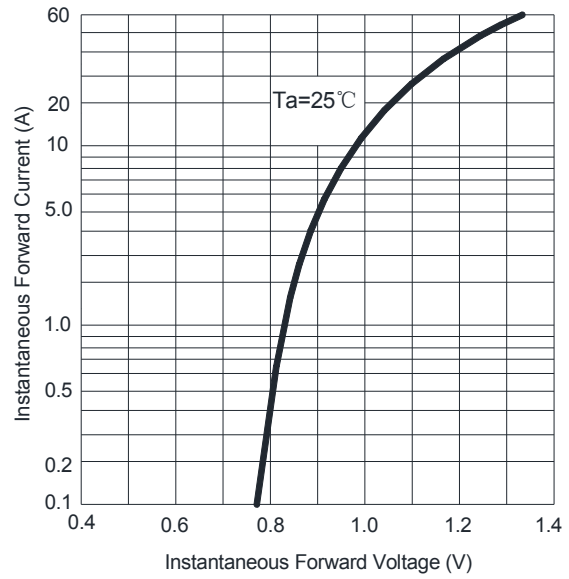
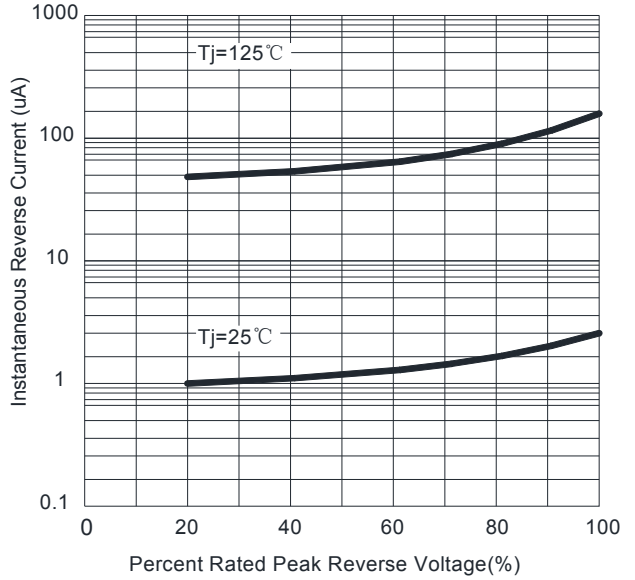
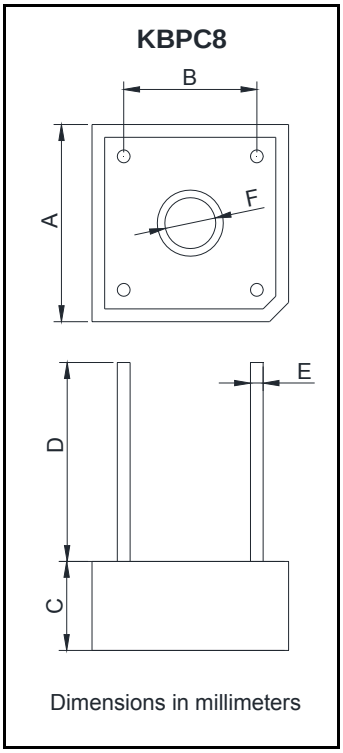


FIG4:Typical Reverse Characteristics



`

■ Outline Dimensions



KBPC8		
Dim	Min	Max
A	18.54	19.58
B	12.2	13.2
C	6.35	7.6
D	15.0	/
E	1.2	1.3
F	3.8	4.2

Notice

All products, product specifications and data are subject to change without notice to improve reliability, function or design or otherwise. Information contained herein is intended to provide a product description only. No license, express or implied, to any intellectual property rights is granted by this document. Except as provided in STARSEA's terms and conditions of sale for such products, STARSEA assumes no liability whatsoever, and disclaims any express or implied warranty, relating to sale and/or use of STARSEA products including liability or warranties relating to fitness for a particular purpose, merchantability, or infringement of any patent, copyright, or other intellectual property right.