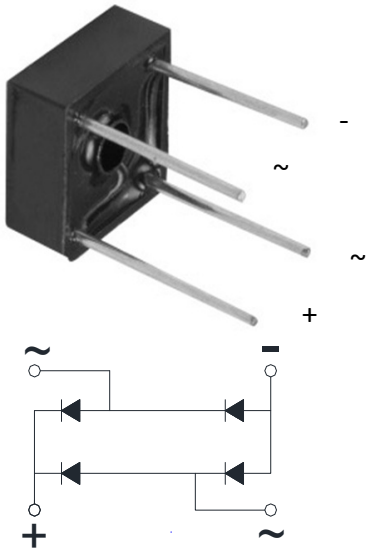
Bridge Rectifiers



Features

- UL recognition, file #E230084
- 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

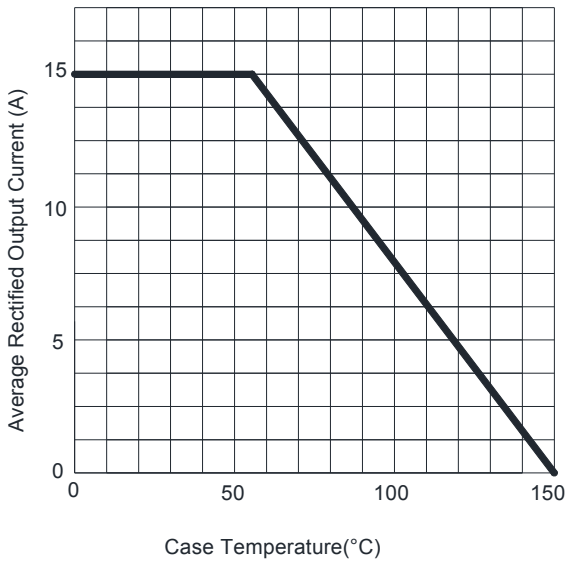


FIG2:Surge Forward Current Capability

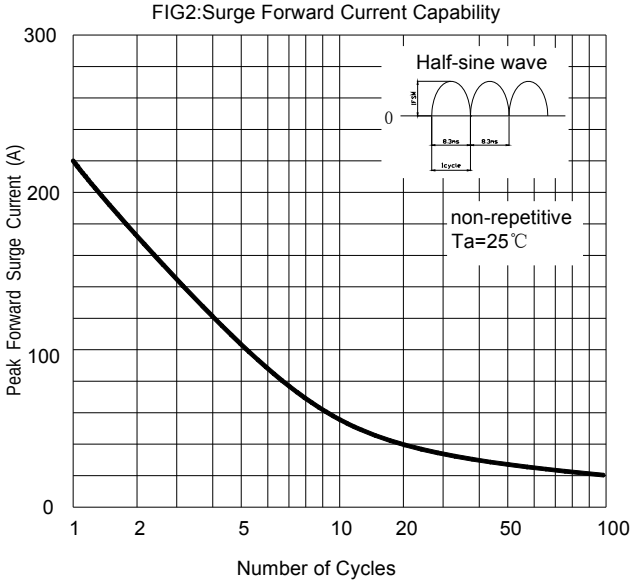


FIG3:Instantaneous Forward Voltage

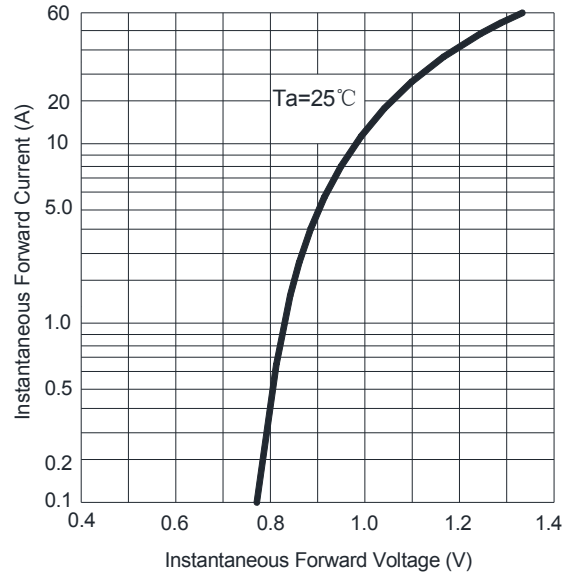
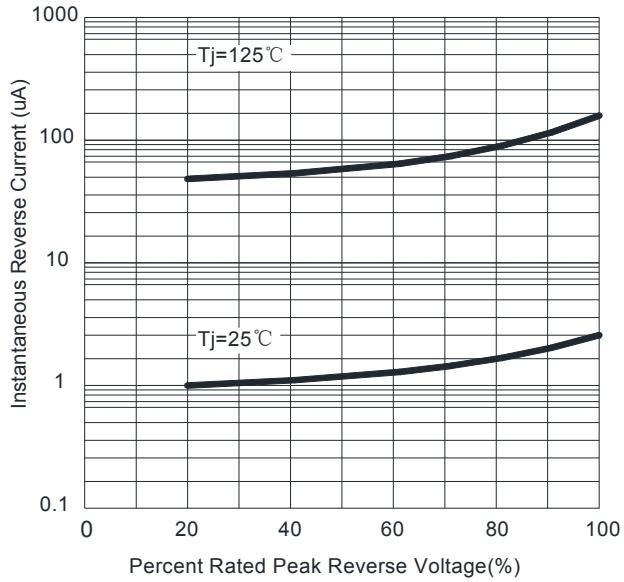


FIG4:Typical Reverse Characteristics



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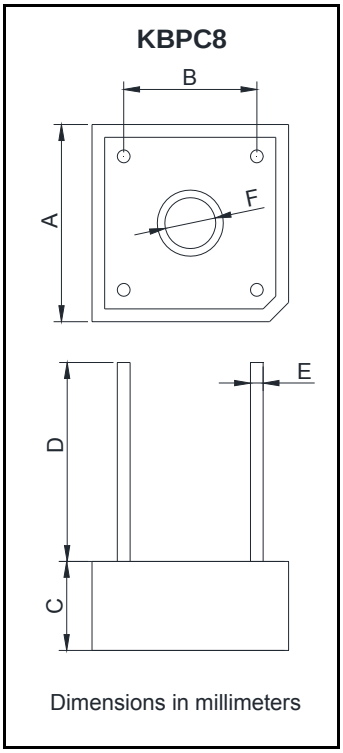
■ Outline Dimensions



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

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