

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. 7 s, 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 Data

- **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 (Ta=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	BR8005	BR801	BR802	BR804	BR806	BR808	BR810
Device marking code			BR8005	BR801	BR802	BR804	BR806	BR808	BR810
Repetitive Peak Reverse Voltage	V _{RRM}	V	50	100	200	400	600	800	1000
Average Rectified Output Current @60Hz sine wave, R-load, Ta=40°C	I _O	A				8			
Surge(Non-repetitive)Forward Current @60HZ Half- sine Wave, 1 cycle, Ta=25°C	I _{FSM}	A				150			
Current Squared Time @1ms≤t<8.3ms Tj=25°C, Rating of per diode	I ² t	A ² S				93			
Storage Temperature	T _{stg}	°C				-55 ~+150			
Junction Temperature	T _j	°C				-55 ~+150			

■ Electrical Characteristics (Ta=25°C Unless otherwise specified)

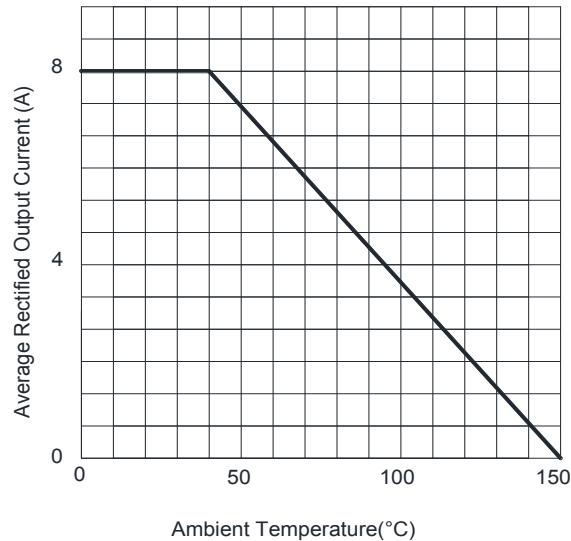
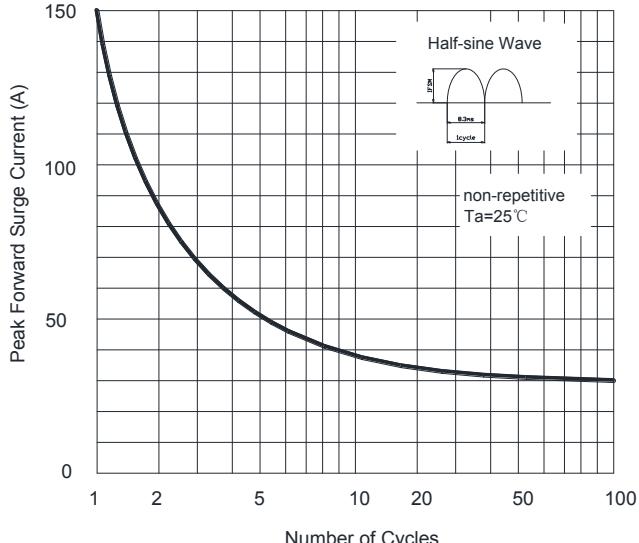
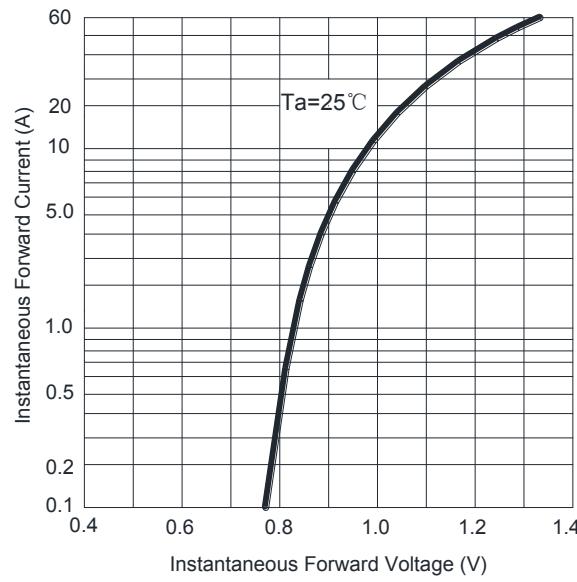
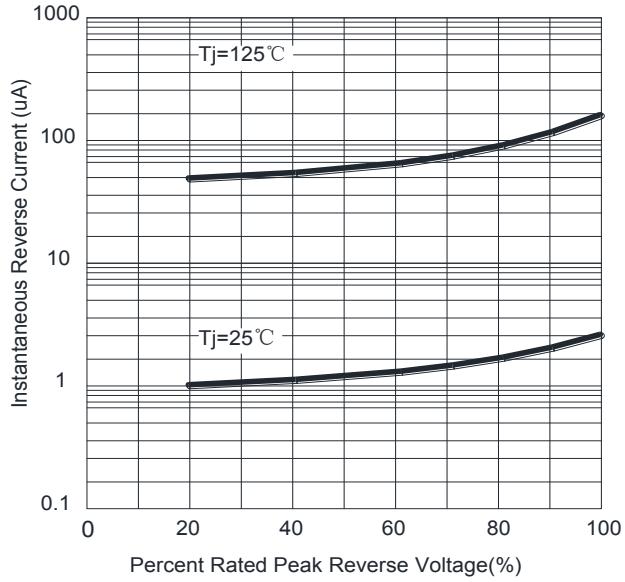
PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	BR8005	BR801	BR802	BR804	BR806	BR808	BR810
Maximum instantaneous forward voltage drop per diode	V _{FM}	V	I _{FM} =4A				1.1			
Maximum DC reverse current at rated DC blocking voltage per diode	I _{RRM}	µA	V _{RM} =V _{RRM}				10			

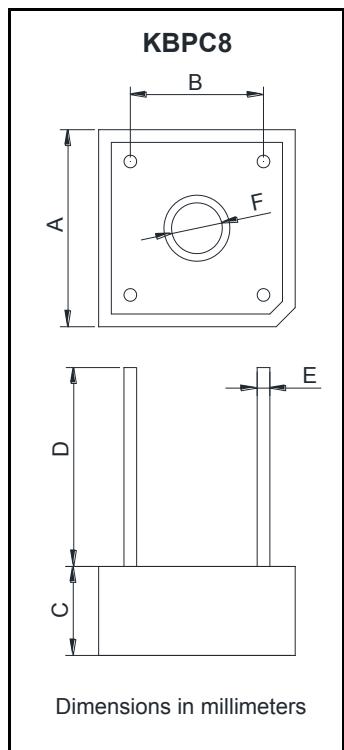
■ Thermal Characteristics (Ta=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	BR8005	BR801	BR802	BR804	BR806	BR808	BR810
Thermal Resistance Between junction and ambient	R _{θJA}	°C/W				21			

■ Ordering Information (Example)

PREFERRED P/N	PACKAGE CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
BR8005~BR810	A1	Approximate 4.75	200	200	2000	Paper Box

■ Characteristics (Typical)
FIG1:Io-Ta 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

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