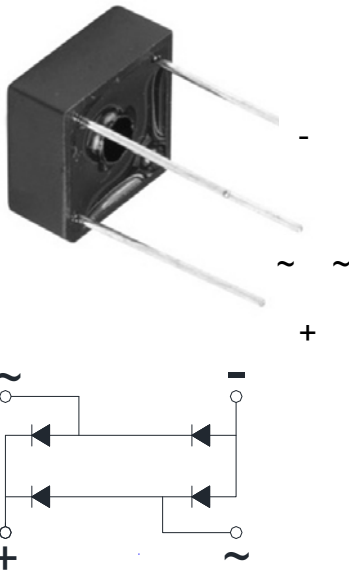


Bridge Rectifiers



Features

- UL recognition, file #E230084
- Suitable for printed circuit board or chassis mount
- Compact construction
- High surge current capability
- Solder dip 275 °C max. 7 s, per JESD 22-B106

Typical Applications

The BR 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:** KBPC1
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°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	BR3005	BR301	BR302	BR304	BR306	BR308	BR310
Device marking code			BR 3005	BR 301	BR 302	BR 304	BR 306	BR 308	BR 310
Repetitive Peak Reverse Voltage	VRRM	V	50	100	200	400	600	800	1000
Average Rectified Output Current @60Hz sine wave, R-load, T _a =40°C	I _O	A	3.0						
Surge(Non-repetitive)Forward Current @60HZ Half- sine Wave, 1 cycle, T _a =25°C	I _{FSM}	A	45						
Current Squared Time @1ms≤t<8.3ms T _j =25°C, Rating of per diode	I ² t	A ² S	8.5						
Storage Temperature	T _{stg}	°C	-55 ~+150						
Junction Temperature	T _j	°C	-55 ~+150						

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

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	BR3005	BR 301	BR 302	BR 304	BR 306	BR 308	BR 310
Maximum instantaneous forward voltage drop per diode	V _{FM}	V	I _{FM} =1.5A	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°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	BR 3005	BR 301	BR 302	BR 304	BR 306	BR 308	BR 310
Thermal Resistance Between junction and ambient	R _{θJ-A}	°C/W	18						



BR3005 THRU BR310

Ordering Information (Example)

PREFERRED P/N	PACKAGE CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
BR3005~BR310	A1	Approximate 2.5	200	200	2000	Paper Box

Characteristics (Typical)

FIG1:Io-Ta Curve

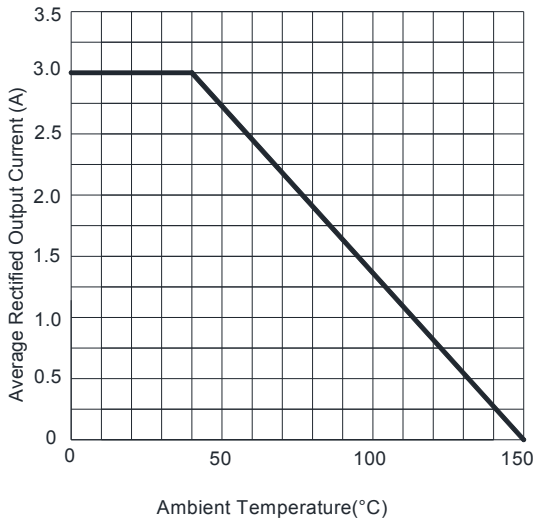


FIG2:Surge Forward Current Capability

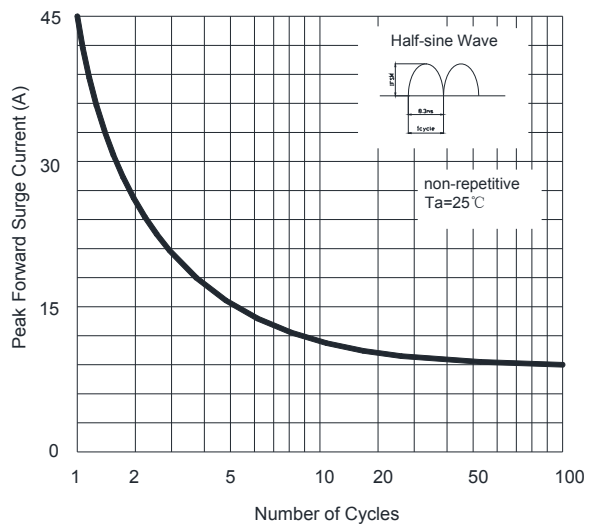


FIG3:Instantaneous Forward Voltage

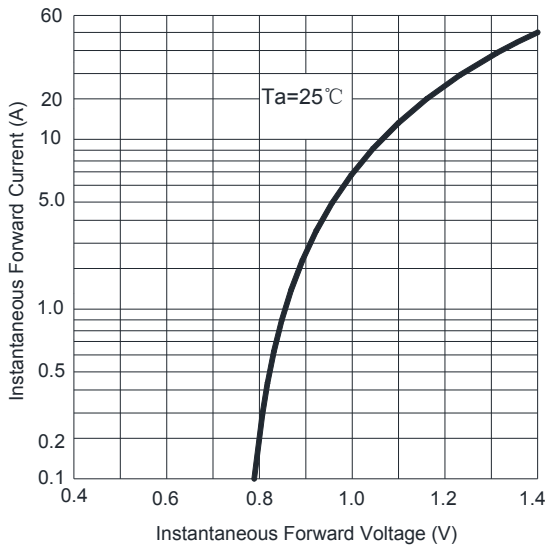
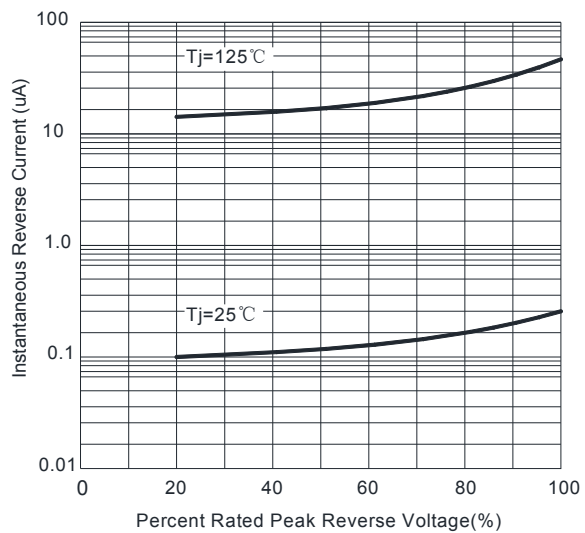


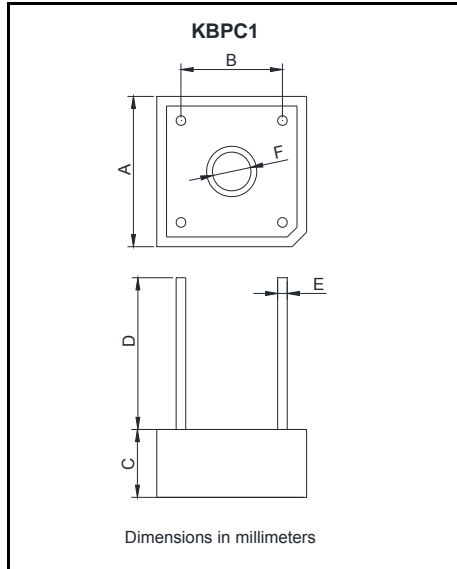
FIG4:Typical Reverse Characteristics



■



■ Outline Dimensions



KBPC1		
Dim	Min	Max
A	14.7	15.7
B	10.3	11.3
C	6.35	7.6
D	15.0	/
E	0.74	0.82
F	3.8	4.2



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