

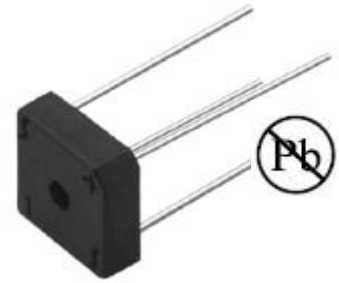


SINGLE PHASE BRIDGE RECTIFIER BR605 ~ BR610 / KBPC6005 ~ KBPC610

Single Phase Bridge Rectifier

Features

- Low cost
- This series is UL recognized under component Index, file number E127707
- High isolation voltage from case to leads
- Ideal for printed circuit board
- High forward surge current capability
- High temperature soldering guaranteed:
260°C/10 seconds, at 5lbs. (2.3kg) tension.
- RoHS and REACH Compliance



Mechanical Data

Case:	Molded plastic body
Polarity	Polarity symbols marked on case
Terminals:	Leads solderable per MIL-STD-202E method 208C
Mounting position:	Thru hole for #6 screw, 5 in, -lbs. Torqute Max
Weight:	0.13 ounce, 3.66 gram

Maximum Ratings ($T_{Ambient}=25^{\circ}\text{C}$ unless noted otherwise)

Symbol	Description	KBPC6005 BR605	KBPC601 BR61	KBPC602 BR62	KBPC604 BR64	KBPC606 BR66	KBPC608 BR68	KBPC610 BR610	Unit	Conditions
VRRM	Max Recurrent Peak Reverse Voltage	50	100	200	400	600	800	1000	V	
VRMS	Max RMS Voltage	35	70	140	280	420	560	700	V	
VDC	Max DC Blocking Voltage	50	100	200	400	600	800	1000	V	
I(AV)	Max Average Forward Rectified Current	6.0							A	TC=50℃ (Note 1) TA=25℃ (Note 2)
		3.0								
IFSM	Peak Forward Surge Current	125							A	8.3ms single half sine-wave
TJ,TSTG	Operating and Storage Temperature Range	-55 to +125, -55 to +150							℃	
I2t	Rating for Fusing	64							A2s	T<8.3mS

Electrical Characteristics ($T_{Ambient}=25^{\circ}\text{C}$ unless noted otherwise)

Symbol	Description	KBPC6005 BR605	KBPC601 BR61	KBPC602 BR62	KBPC604 BR64	KBPC606 BR66	KBPC608 BR68	KBPC610 BR610	Unit	Conditions
VF	Max Instantaneous Forward Voltage	1.0							V	Drop per Bridge element 3.0A
IR	Max DC Reverse Current at Rated DC Blocking Voltage	10							μA	TA=25°C
		1.0							mA	TA=100°C
Rθ-Jc	Typical Thermal Resistance	8.0							°C/W	Note 1
VISO	Isolation Voltage from case to leads	2500							Vac	

Note:

1. Unit mounted on 6.0" X 5.5" X 0.11" thick (15 X 14 X 0.3cm) Al. Plate
2. Unit mounted on P.C.Borad 0.375" (9.5mm) lead length with 0.47"X0.47" (12 X 12mm) copper pads

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RATINGS AND CHARACTERISTIC CURVES THRU BR605~BR610/KBPC6005~KBPC610

FIG.1-DERATING CURVE FOR
OUTPUT RECTIFIED CURRENT

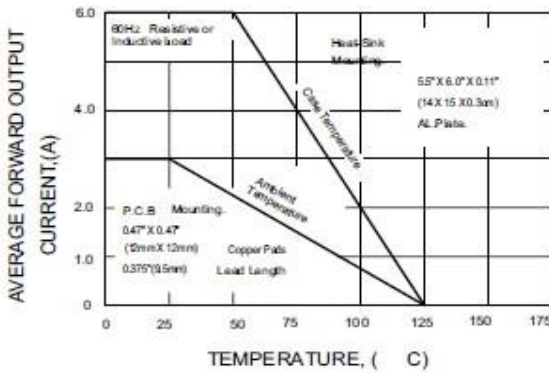


FIG.2-MAXIMUM NON-REPETITIVE PEAK
FORWARD SURGE CURRENT PER ELEMENT

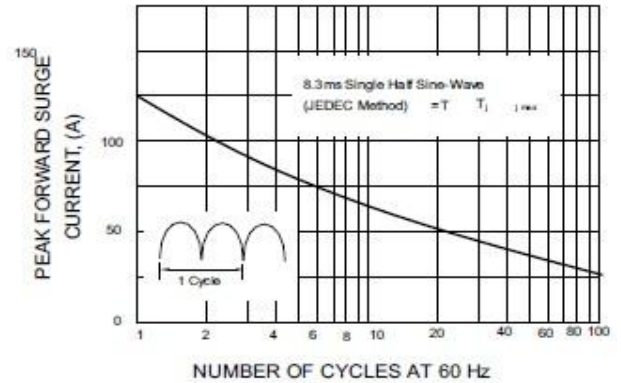


FIG.3-TYPICAL FORWARD CHARACTERISTICS
PER BRIDGE ELEMENT

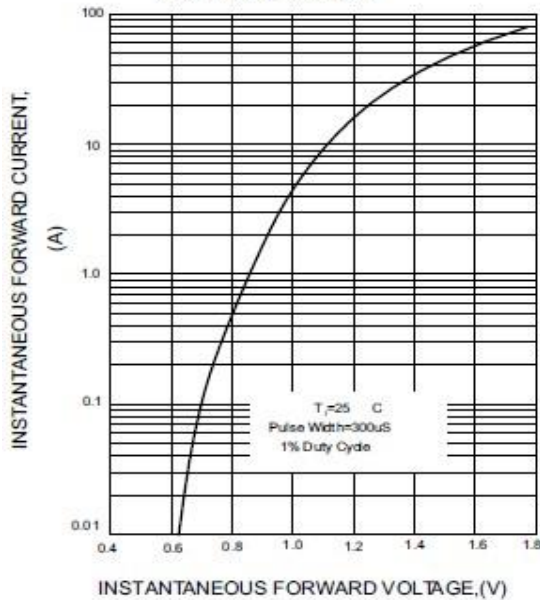


FIG.4-TYPICAL REVERSE CHARACTERISTICS
PER BRIDGE ELEMENT

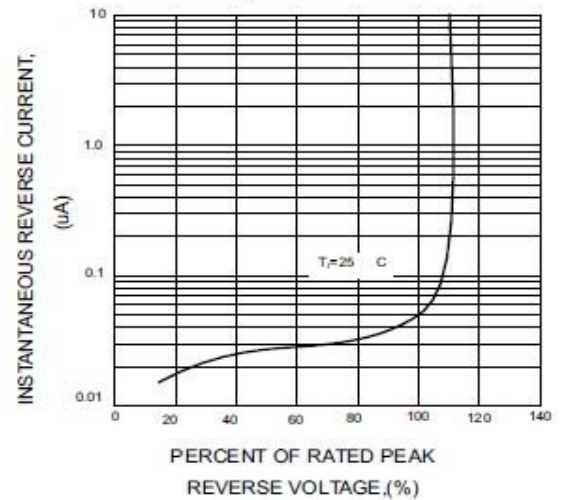
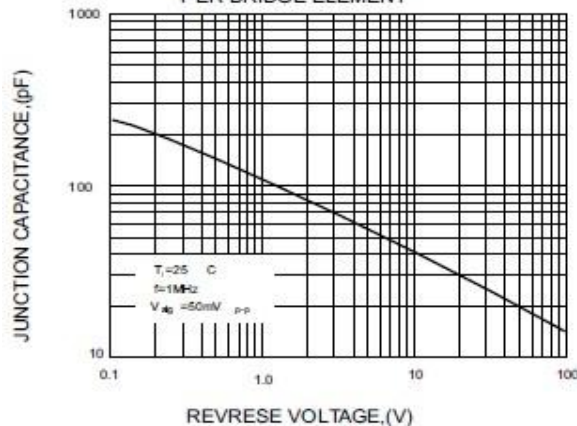
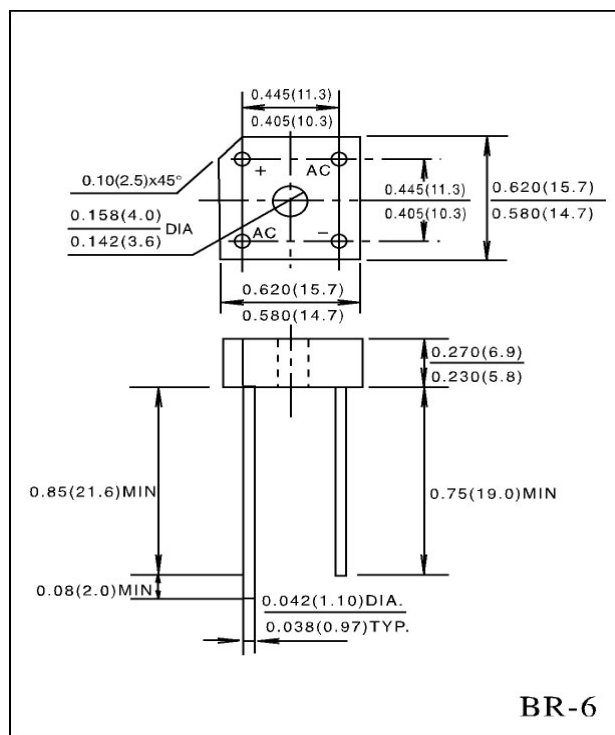


FIG.5-TYPICAL JUNCTION CAPACITANCE
PER BRIDGE ELEMENT



BR605 ~ BR610 / KBPC6005 ~ KBPC610

Dimensions in inches (mm)



Contact us:

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