

# KBJ6005 THRU KBJ610 SINGLE PHASE 6.0 AMP BRIDGE RECTIFIERS



## FEATURES

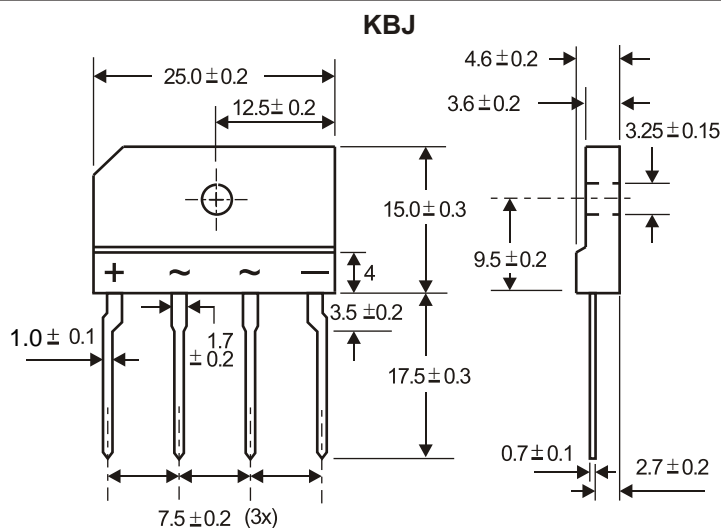
- \* Ideal for printed circuit board
- \* Low forward voltage
- \* Low leakage current
- \* Mounting position: Any

## VOLTAGE RANGE

50 to 1000 Volts

## CURRENT

4.0 Amperes



## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating 25°C ambient temperature unless otherwise specified.  
Single phase half wave, 60Hz, resistive or inductive load.  
For capacitive load, derate current by 20%.

TYPE NUMBER	KBJ6005	KBJ601	KBJ602	KBJ604	KBJ606	KBJ608	KBJ610	UNITS
Maximum Recurrent Peak Reverse Voltage	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	50	100	200	400	600	800	1000	V
Maximum Average Forward (with heatsink Note 1)	6.0							A
Rectified Current at Tc=110°C (Without heatsink)	2.8							
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	150							A
Maximum Forward Voltage Drop per Bridge Element at 3.0A D.C.	1.0							V
Maximum DC Reverse Current Ta=25°C	5.0							μA
at Rated DC Blocking Voltage Ta=100°C	500							μA
Typical Thermal Resistance Rjc (Note 2)	3.4							°C/W
Typical Thermal Resistance RjL (Note 3)	5.0							°C/W
Operating Temperature Range, Tj	-55 — +150							°C
Storage Temperature Range, Tstg	-55 — +150							°C

### NOTES

1. Device mounted on 75mm x 75mm x 1.6mm Cu Plate Heatsink.
2. Thermal Resistance from Junction to Case with device mounted on 75mm x 75mm x 1.6mm Cu Plate Heatsink.
3. Thermal Resistance from Junction to Lead without Heatsink.

# RATING AND CHARACTERISTIC CURVES (KBJ6005 THRU KBJ610)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

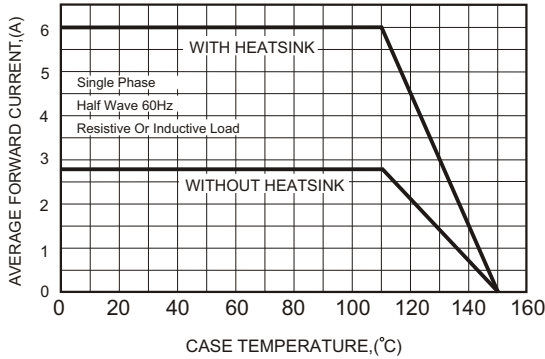


FIG.2-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

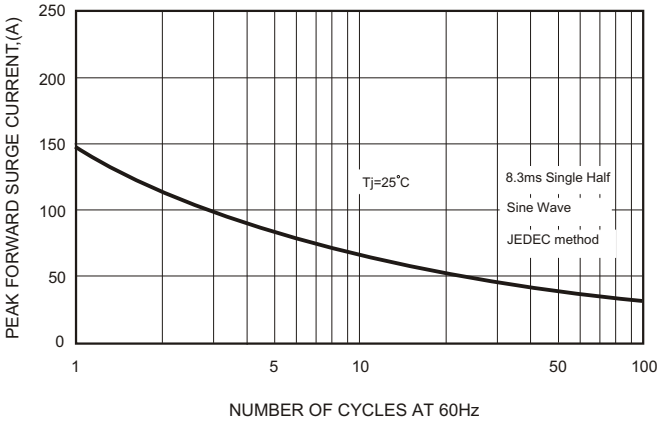


FIG.3-TYPICAL FORWARD CHARACTERISTICS

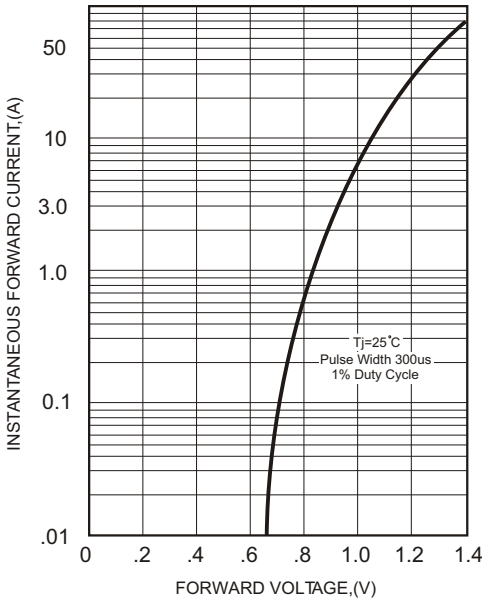


FIG.4-TYPICAL REVERSE CHARACTERISTICS

