KBJ25005 THRU KBJ2510

SINGLE PHASE 25.0 AMP BRIDGE RECTIFIERS

VOLTAGE RANGE

50 to 1000 Volts

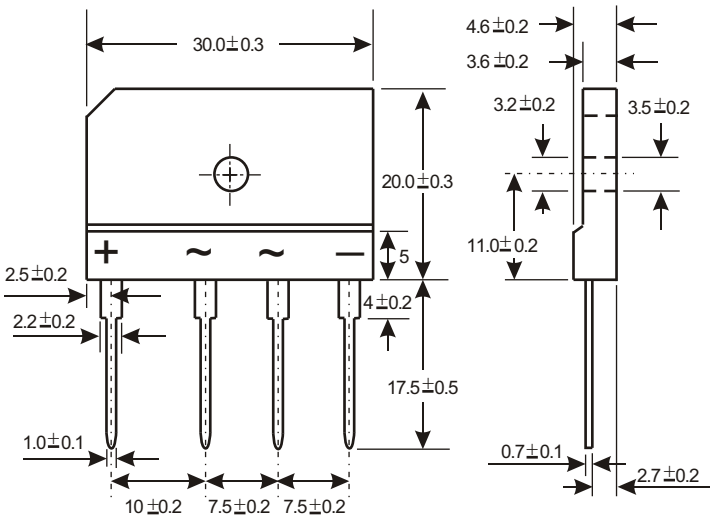
CURRENT

25.0 Amperes

FEATURES

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

KBJ



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

TYPE NUMBER	KBJ25005	KBJ2501	KBJ2502	KBJ2504	KBJ2506	KBJ2508	KBJ2510	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 2)	25.0							A
.375"(9.5mm) Lead Length at Tc=100˚C (Without heatsink)	4.2							A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	350							A
Maximum Forward Voltage Drop per Bridge Element at 12.5.A D.C.	1.05							V
Maximum DC Reverse Current Ta=25˚C	10							μA
at Rated DC Blocking Voltage Ta=125˚C	500							μA
Typical Junction Capacitance (Note 1)	85							PF
Typical Thermal Resistance R_{JC} (Note 2)	0.6							˚C/W
Operating Temperature Range, T_J	-55 — +150							˚C
Storage Temperature Range, T_{STG}	-55 — +150							˚C

NOTES:

1. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.
2. Thermal Resistance from Junction to Case with device mounted on 300mm x 300mm x 1.6mm Cu Plate Heatsink.

RATING AND CHARACTERISTIC CURVES (KBJ25005 THRU KBJ2510)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

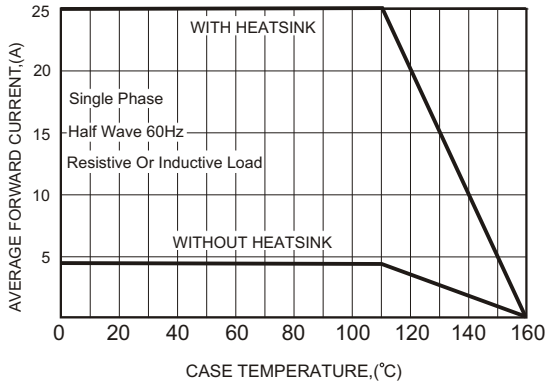


FIG.2-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

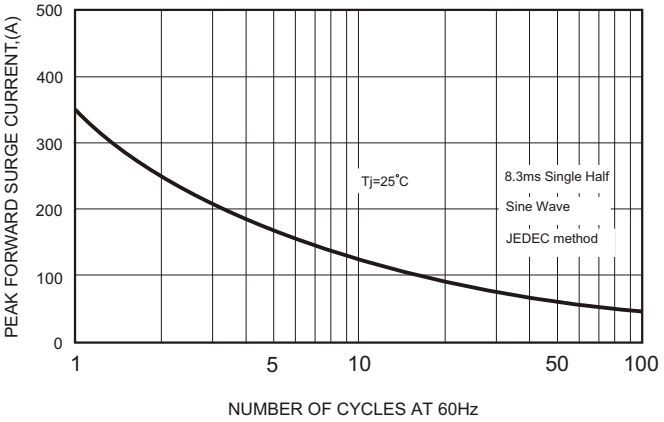


FIG.3-TYPICAL FORWARD CHARACTERISTICS

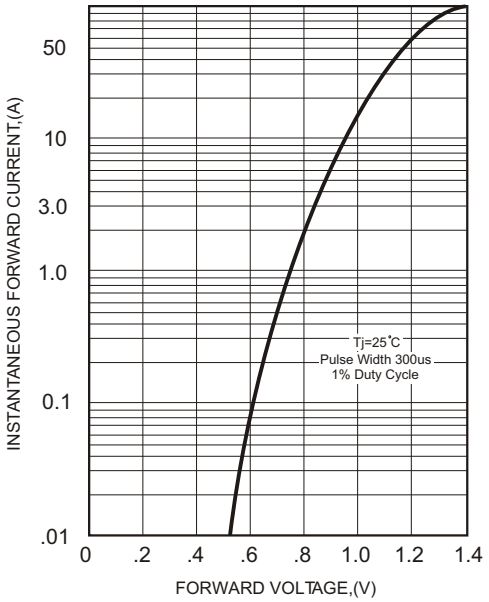


FIG.4-TYPICAL REVERSE CHARACTERISTICS