KBJ401 THRU KBJ407

SINGLE PHASE 4.0 AMP BRIDGE RECTIFIERS

GW

FEATURES

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

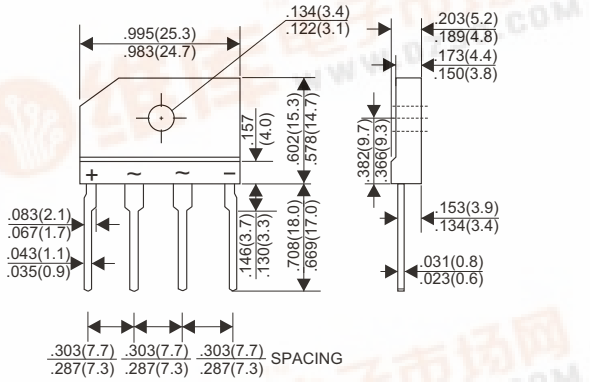
VOLTAGE RANGE

50 to 1000 Volts

CURRENT

4.0 Amperes

KBJ



Dimensions in inches and (millimeters)

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	KBJ401	KBJ402	KBJ403	KBJ404	KBJ405	KBJ406	KBJ407	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)	4.0							
Rectified Current at Tc=110°C (Without heatsink)	2.4							A
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 2.0A D.C.	1.0							V
Maximum DC Reverse Current Ta=25°C	5.0							A
at Rated DC Blocking Voltage Ta=100°C	500							A
Typical Thermal Resistance $R_{\theta JC}$ (Note 2)	5.5							°C/W
Typical Thermal Resistance $R_{\theta JL}$ (Note 3)	6.0							°C/W
Operating Temperature Range, T_J	-55 — +150							°C
Storage Temperature Range, T_{STG}	-55 — +150							°C

NOTES

1. Device mounted on 50mm x 50mm x 1.6mm Cu Plate Heatsink.
2. Thermal Resistance from Junction to Case with device mounted on 50mm x 50mm x 1.6mm Cu Plate Heatsink.
3. Thermal Resistance from Junction to Lead without Heatsink.

RATING AND CHARACTERISTIC CURVES (KBJ401 THRU KBJ407)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

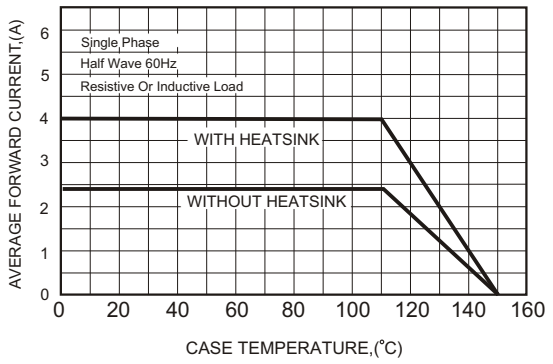


FIG.2-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

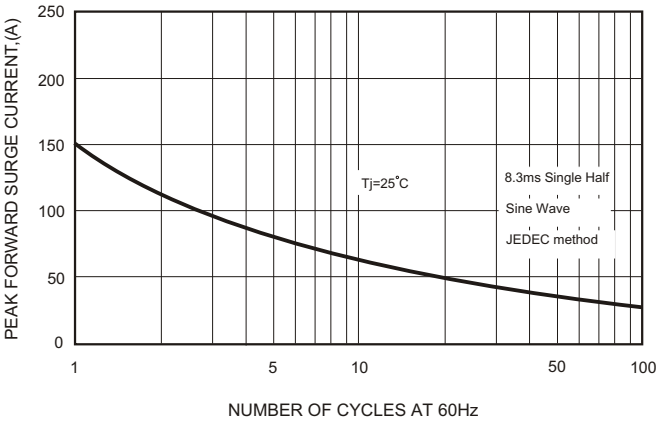


FIG.3-TYPICAL FORWARD CHARACTERISTICS

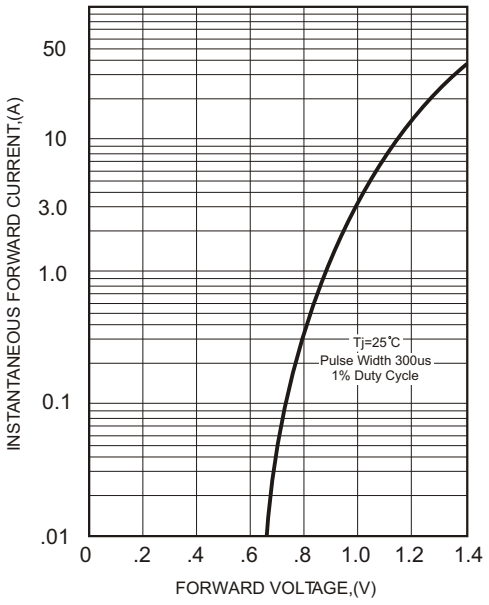


FIG.4-TYPICAL REVERSE CHARACTERISTICS