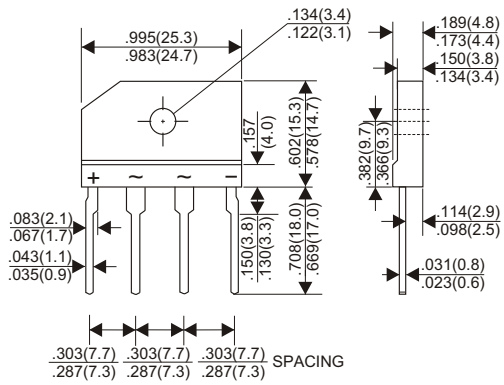
KBJ401-KBJ407

SINGLE PHASE BRIDGE RECTIFIERS

VOLTAGE RANGE: 50 - 1000V
CURRENT: 4.0 A

KBJ



Dimensions in inches and (millimeters)

Features

- Ideal for printed circuit board
- Low forward voltage
- Low leakage current

Mechanical Data

- Case: KBJ
- Mounting position: Any

RoHS COMPLIANT

Maximum Ratings and Electrical Characteristics T_A = 25°C unless otherwise specified

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Characteristic	KBJ401	KBJ402	KBJ403	KBJ404	KBJ405	KBJ406	KBJ407	Unit
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) Rectified Current at Tc=100°C (Without heatsink)	4.0							A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	120							A
Maximum Forward Voltage Drop per Bridge Element at 4.0A D.C.	1.1							V
Maximum DC Reverse Current Ta=25°C	5.0							μA
at Rated DC Blocking Voltage Ta=100°C	500							μA
Typical Thermal Resistance $R\theta_{JC}$ (Note 2)	5.5							°C/W
Typical Junction Capacitance (Note 3)	45							PF
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. Measured at 1MHz and applied Reverse Voltage of 4.0V D.C.

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

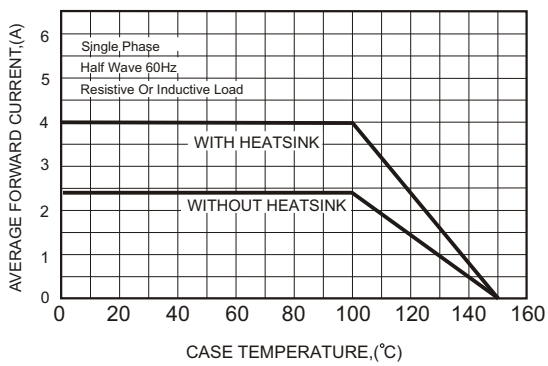


FIG.2-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

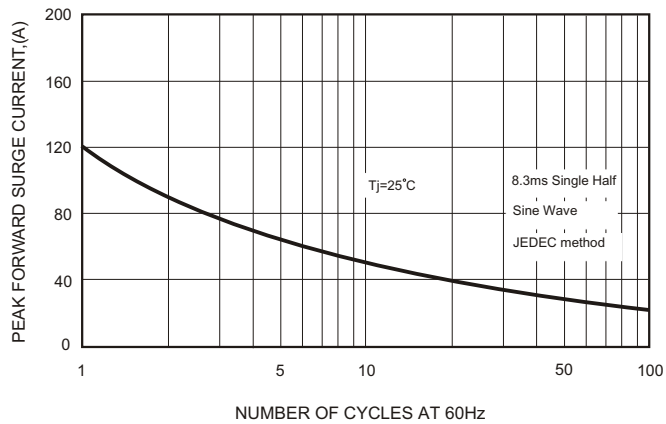


FIG.3-TYPICAL FORWARD CHARACTERISTICS

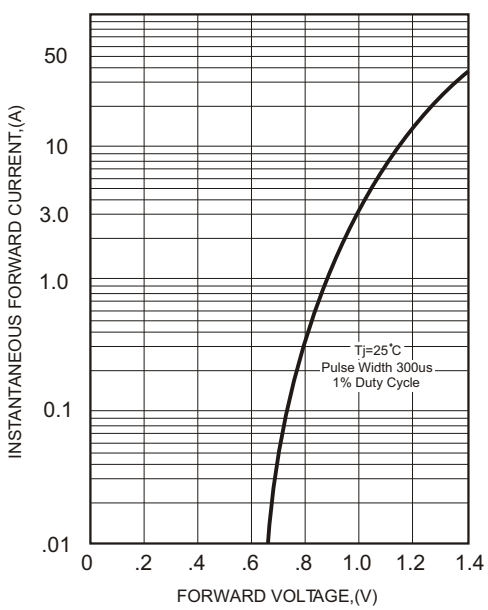


FIG.4-TYPICAL REVERSE CHARACTERISTICS