



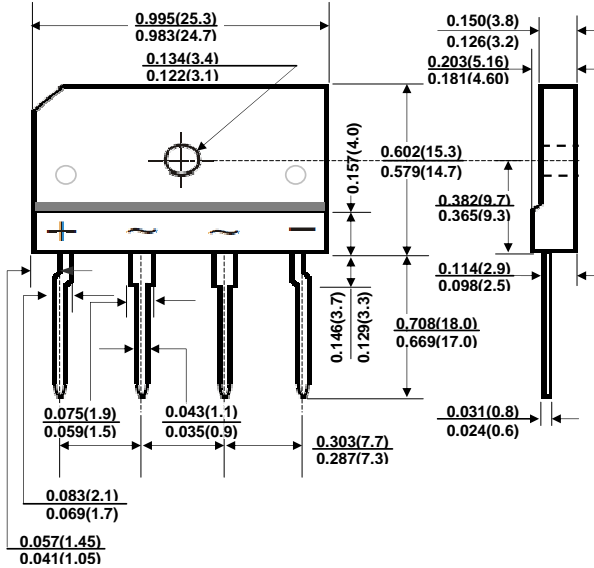
# KBJ4005 THRU KBJ410

## Single Phase 4.0 AMPS. Glass Passivated Bridge Rectifiers

Reverse Voltage - 50 to 1000 Volts Forward Current - 4.0 Ampere

### KBJ-4

### FEATURES



- ◆ Rating to 1000V PRV
- ◆ Ideal for printed circuit board
- ◆ Low forward voltage drop high current capability
- ◆ Reliable low cost construction utilizing molded plastic technique results in inexpensive product
- ◆ The plastic material has UL flammability

### MECHANICAL DATA

**Case:** Molded plastic

**Terminals:** Solderable per MIL-STD-750 · Method 2026

**Lead:** solder plated

**Polarity:** As marked

### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

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

PARAMETER	SYMBOLS	KBJ 4005	KBJ 401	KBJ 402	KBJ 404	KBJ 406	KBJ 408	KBJ 410	UNITS
Maximum repetitive peak reverse voltage	$V_{RRM}$	50	100	200	400	600	800	1000	V
Maximum RMS voltage	$V_{RMS}$	35	70	140	280	420	560	700	V
Minimum Reverse Breakdown Voltage at = 500 $\mu$ A	$V_{DC}$	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current @TC=115°C	$I_{(AV)}$	4							A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method )	$I_{FSM}$	120							A
Maximum Instantaneous Forward Voltage @ 4.0A	$V_F$	1.05							V
I <sup>2</sup> t Rating for fusing(t<8.3ms)	$I^2t$	32							A <sup>2</sup> S
Dielectric Strength	$V_{dis}$	2							KV
Maximum DC Reverse Current @ TA=25°C rated DC blocking voltage per leg TA = 125°C	$I_R$	10 250							$\mu$ A
Typical Thermal Resistance (Note)	$R_{\theta JC}$ $R_{\theta JL}$ $R_{\theta JA}$	Max.5.5 Max.6 Max.30							°C/W
Mounting Torque	$T_{OR}$	0.8							N·m
Operating Temperature Range	$T_J$	-55 to +150							°C
Storage Temperature Range	$T_{STG}$	-55 to +150							°C

- Note:**
1. Device Mounted on 100x100x1.6mm Thick Al Plate Heatsink.
  2. Device Mounted on P.C.B. without Heatsink



# KBJ4005 THRU KBJ410

## RATINGS AND CHARACTERISTIC CURVES KBJ4005 THRU KBJ410

FIG. 1-MAXIMUM NONO-REPETITIVE FORWARD SURGE CURRENT PER BRIDGE ELEMENT

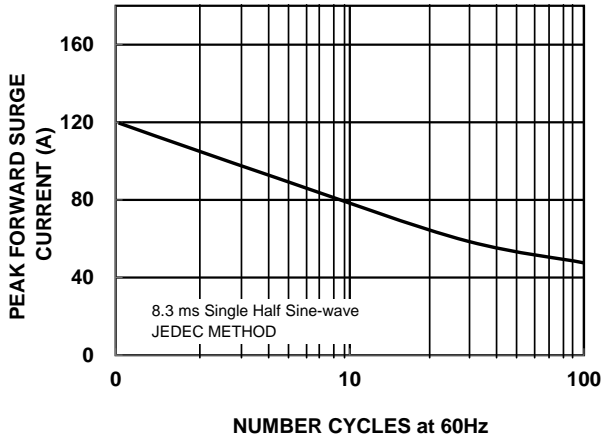


FIG. 2 MAXIMUM FORWARD CURRENT DERATING CURVE

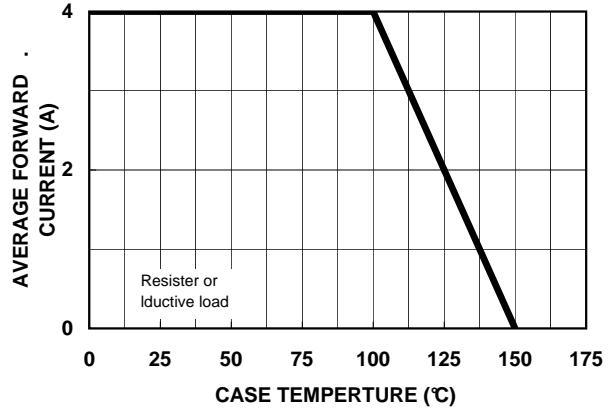


FIG. 3-TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT

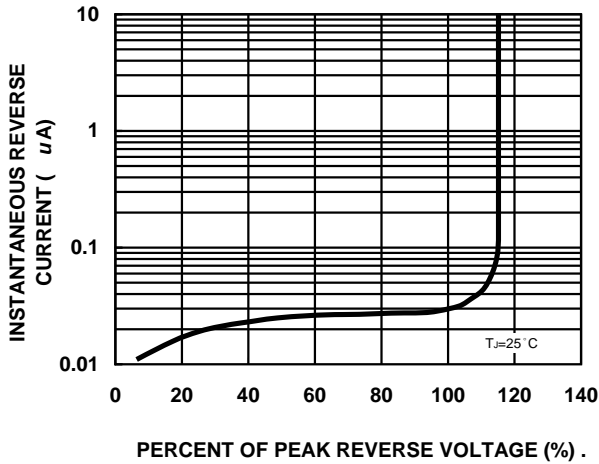


FIG. 4-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER BRIDGE ELEMENT

