4.0Amp Bridge Rectifiers

FEATURES：

- High efficiency
- Ideal for automated placement
- High surge current capability
- RoHS compliant.

TYPICAL APPLICATIONS：

General purpose use in AC/DC bridge full wave rectification for power supply, lighting ballast, battery charger, home appliances, office equipment, and telecommunication applications.

MECHANICAL DATA：

- Package：KBJ
  Molding compound meets UL 94 V-0 flammability rating
- Terminals：Tin plated leads, solderable per J-STD-002 and JESD22-B102
- Polarity：As marking on body

MAXIMUM RATINGS (Ratings at 25 ℃ ambient temperature unless otherwise specified)

Characteristic	Symbol	KBJ 4005	KBJ 401	KBJ 402	KBJ 404	KBJ 406	KBJ 408	KBJ 410	Unit
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
Maximum DC blocking voltage	V_{DC}	50	100	200	400	600	800	1000	V
Average Forward Current @Half-sine wave, Resistance load With heatsink Tc =108℃	I_O	4							A
Average Forward Current @Half-sine wave, Resistance load Without heatsink Ta =25℃		2.3							A
Forward Surge Current (Non-repetitive)@60HZ sine wave, 1 cycle, Ta=25℃	I_{FSM}	120							A
Current squared time @1ms≤t≤8.3ms Ta=25℃，Rating of per diode	I^2t	59.7							A^2s
Maximum instantaneous forward voltage at 2.0A	V_{FM}	1.05							V

Maximum DC reverse current at rated DC blocking voltage (Ta=25 ℃/100 ℃)	I_{RRM}	10 / 300	uA
Typical thermal resistance	$R_{\theta JA}$	30	℃/W
Operating junction and storage temperature range	T_J, T_{STG}	-55~+150	℃

RATINGS AND CHARACTERISTICS CURVES

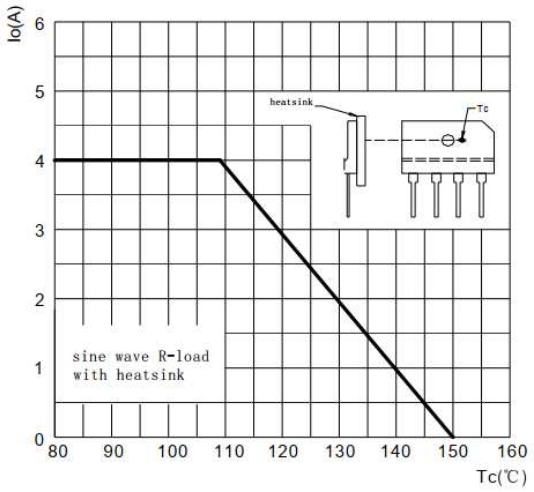


Figure 1. Typical Io-Tc Curve

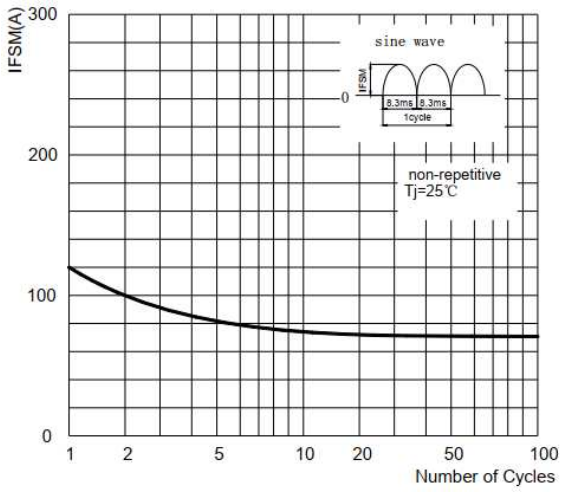


Figure 2. Typical Forward Surge Current Capability

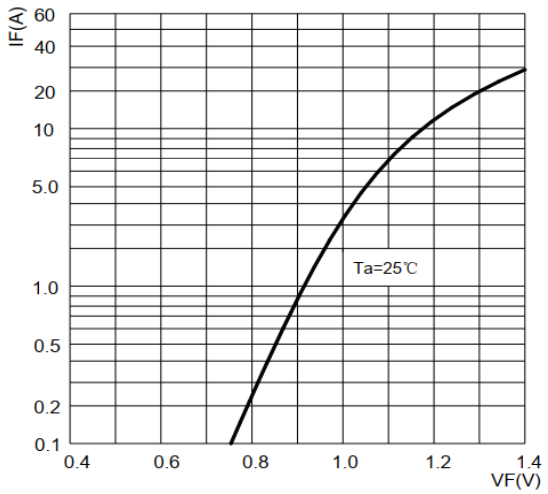


Figure 3. Typical Forward Voltage

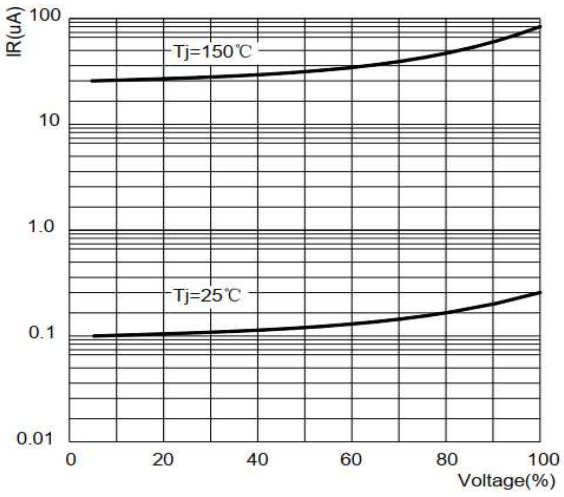
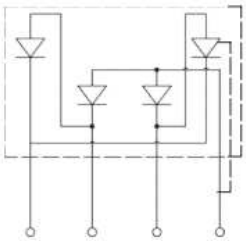
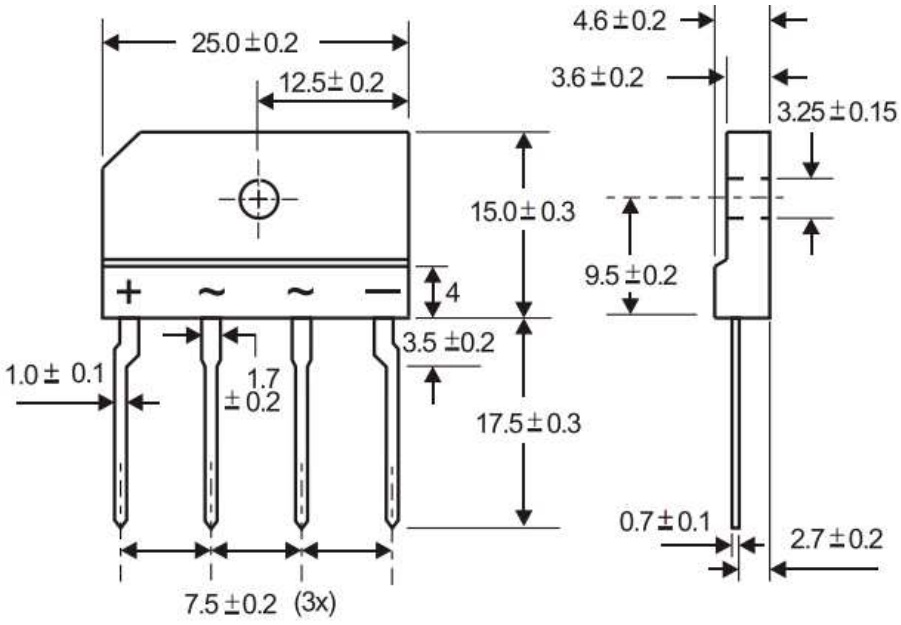


Figure 4. Typical Reverse Characteristics

• Circuit diagram



• Package outlines : Dimensions in millimeters



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