

### Features

- Surge overload rating -170 amperes peak
- Ideal for printed circuit board
- Reliable low cost construction utilizing molded plastic technique
- Plastic material has U/L flammability classification 94V-0

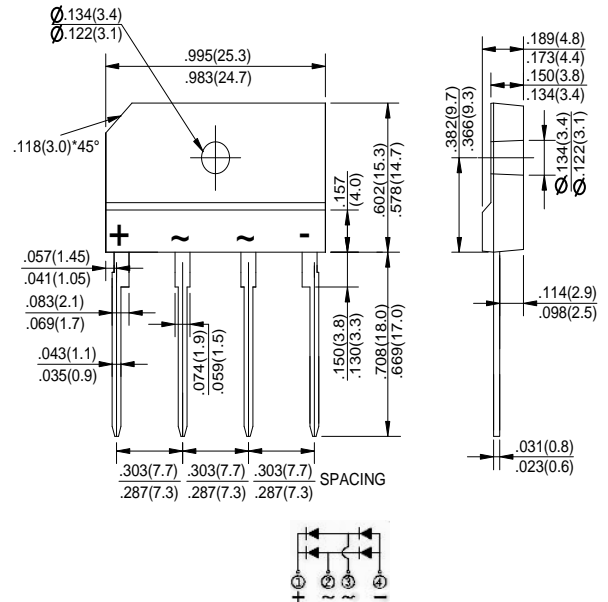
### Mechanical data

**Case** : JEDEC KBJ Molded plastic body

**Terminals** : Solder plated, solderable per MIL-STD-750, Method 2026

**Polarity** : Polarity symbol marking on body

**Mounting Position** : Any



Dimensions in inches and (millimeters)

### 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	KBJ6005	KBJ601	KBJ602	KBJ604	KBJ606	KBJ608	BJ610	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
Maximum DC blocking voltage	$V_{DC}$	50	100	200	400	600	800	1000	V
Maximum average forward (with heatsink NOTE 2) Rectified current @ $T_c = 100^\circ\text{C}$ (without heatsink)	$I_{AV}$	6.0 2.8							A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	170							A
Rating for Fusing ( $t < 8.3\text{ms}$ )	$I^2t$	120							$\text{A}^2\text{s}$
Maximum forward voltage at 3.0A DC	$V_F$	1.0							V
Maximum forward voltage at 6.0A DC		1.1							
Maximum DC reverse current $T_A = 25^\circ\text{C}$ at rated DC blocking voltage $T_A = 125^\circ\text{C}$	$I_R$	10							$\mu\text{A}$
		0.5							$\text{mA}$
Typical Junction Capacitance (Note 1)	$C_J$	55							$\text{pF}$
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	1.8							$^\circ\text{C/W}$
Operating junction temperature range	$T_J$	-55 to +150							$^\circ\text{C}$
storage temperature range	$T_{STG}$	-55 to +150							$^\circ\text{C}$

- NOTES: 1. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.  
 2. Device mounted on 75mm\*75mm\*1.6mm cu plate heatsink.  
 3. The typical data above is for reference only.



Rating and characteristic curves

