



## KBJ15005 thru KBJ1510

### 15 A Single-Phase Silicon Bridge Rectifier

Rectifier Reverse Voltage 50 to 1000V



#### Features

- This series is UL listed under the Recognized Component Index, file number E142814
- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- High case dielectric strength of 1500VRMS  
Ideal for printed circuit boards
- High surge current capability

#### Mechanical Data

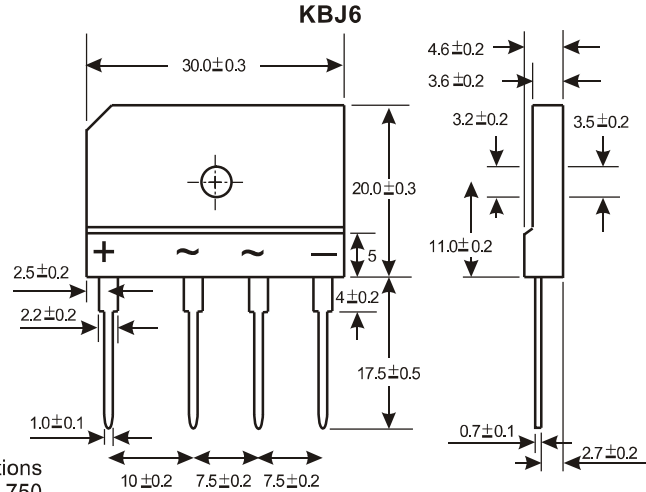
Case : Molded plastic body over passivated junctions  
 Terminals : Plated leads solderable per MIL-STD-750,  
 Method 2026

Polarity : Polarity symbols molded on body

Mounting Position : Any(3)

Mounting Torque : 5 in-lbs max.

Weight : 0.26 ounce, 7.0 grams (approx)



Dimensions in millimeters(1mm =0.0394")

#### Maximum Ratings & Thermal Characteristics

Rating at 25°C ambient temperature unless otherwise specified, Resistive or Inductive load, 60 Hz.

For Capacitive load derate current by 20%.

Parameter	Symbol	KBJ 15005	KBJ 1501	KBJ 1502	KBJ 1504	KBJ 1506	KBJ 1508	KBJ 1510	unit
Maximum repetitive peak reverse voltage	VRRM	50	100	200	400	600	800	1000	V
Maximum RMS bridge input voltage	VRMS	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	VDC	50	100	200	400	600	800	1000	V
Maximum average forward (with heatsink note1 ) rectified current at Tc=100°C (without heatsink)	IF(AV)					15.0			A
Peak forward surge current single sine-wave superimposed on rated load (JEDEC Method)	IFSM					240			A
Rating for fusing ( t<8.3ms)	I <sup>2</sup> t					240			A <sup>2</sup> sec
Typical thermal resistance per element (note 1)	RthJC					0.8			°C / W
Operating junction and storage temperature range	TJ, TSTG					-55 to + 150			°C

#### Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified, Resistive or Inductive load, 60Hz.

For Capacitive load derate by 20 %.

Parameter	Symbol	KBJ 15005	KBJ 1501	KBJ 1502	KBJ 1504	KBJ 1506	KBJ 1508	KBJ 1510	Unit
Maximum instantaneous forward voltage drop per leg at 7.5 A	VF					1.05			V
Maximum DC reverse current at rated TA =25°C DC blocking voltage per element TA =125°C	IR					10.0			μA
						500			

Notes: (1) Device mounted on 300mm x 300mm x 1.6mm copper plate heatsink.

**Rating and Characteristic Curves** (  $T_A=25^{\circ}\text{C}$  Unless otherwise noted )  
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