

CURRENT 25 Ampere
 VOLTAGE RANG 50 to 1000 Volts

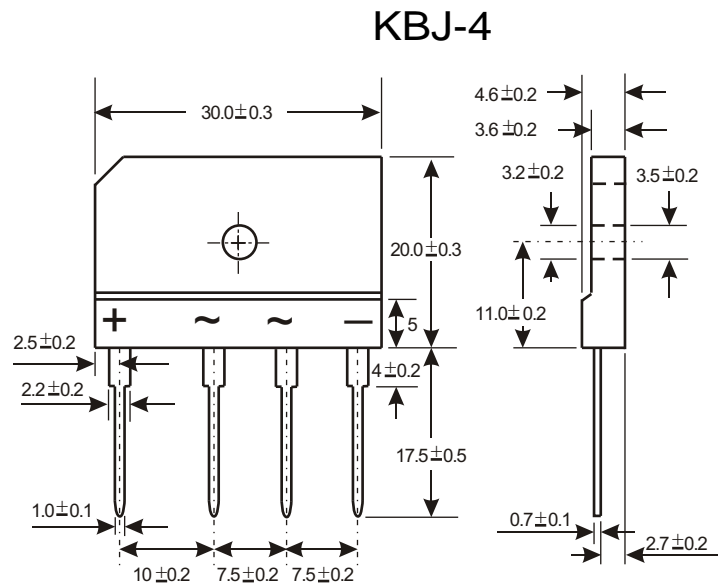
KBJ25005 THRU KBJ2510

Features

- This series is SGS listed under the Recognized Component Index, file number SZXEC1902259902
- Plastic package has Underwriters Laboratory Flammability Classification 94V-0 RMS
- High case dielectric strength of 1500V 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 25005	KBJ 2501	KBJ 2502	KBJ 2504	KBJ 2506	KBJ 2508	KBJ 2510	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)	25.0				4.2				A
Peak forward surge current single sine-wave superimposed on rated load (JEDEC Method)	IFSM	350								A
Rating for fusing (t<8.3ms)	I ² t	510								A ² sec
Typical thermal resistance per element(note 1)	RthJC	1.0								°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 25005	KBJ 2501	KBJ 2502	KBJ 2504	KBJ 2506	KBJ 2508	KBJ 2510	Unit	
Maximum instantaneous forward voltage drop per leg at 12.5 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				500				μA

Notes: (1) Device mounted on 250mm x 250mm x 20mm aluminum plate heatsink.

CURRENT 25 Ampere
 VOLTAGE RANG 50 to 1000 Volts

KBJ25005 THRU KBJ2510

Rating and Characteristic Curves (TA=25°C Unless otherwise noted)

FIG. 1- DERATING CURVE
 OUTPUT RECTIFIED CURRENT

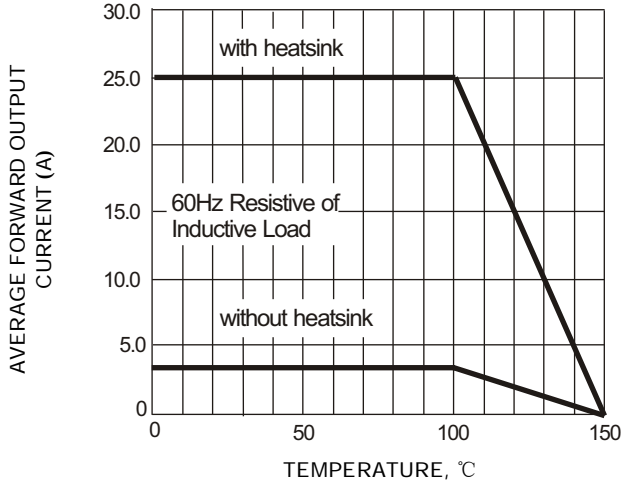


FIG. 2- MAXIMUM NON-REPETITIVE PEAK
 FORWARD SURGE CURRENT PER LEG

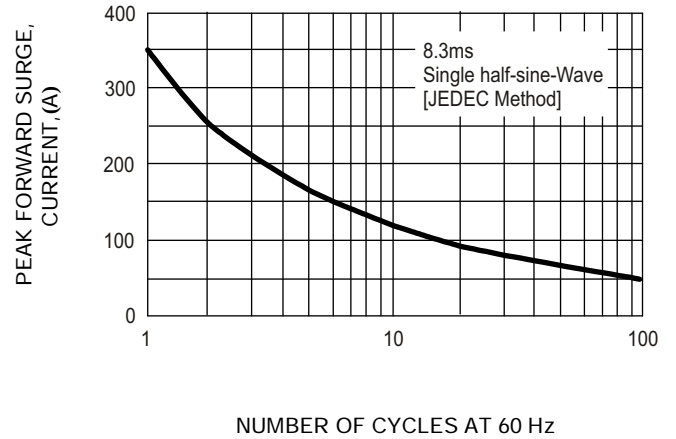


FIG. 3- TYPICAL FORWARD
 CHARACTERISTICS PER LEG

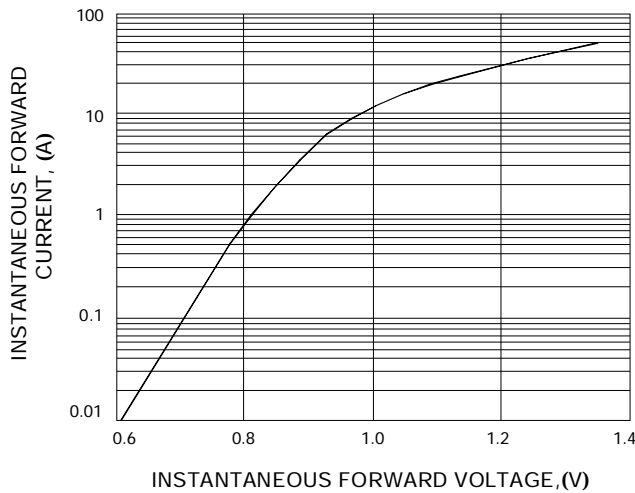


FIG. 4- TYPICAL REVERSE CHARACTERISTICS
 PER LEG

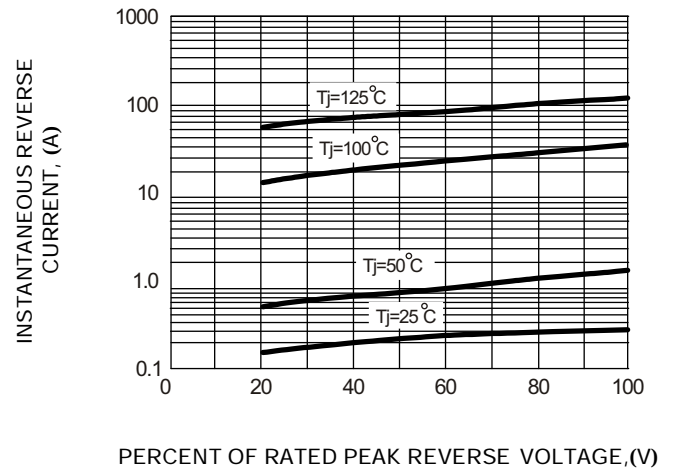


FIG. 5- TYPICAL JUNCTION CAPACITANCE
 PER LEG

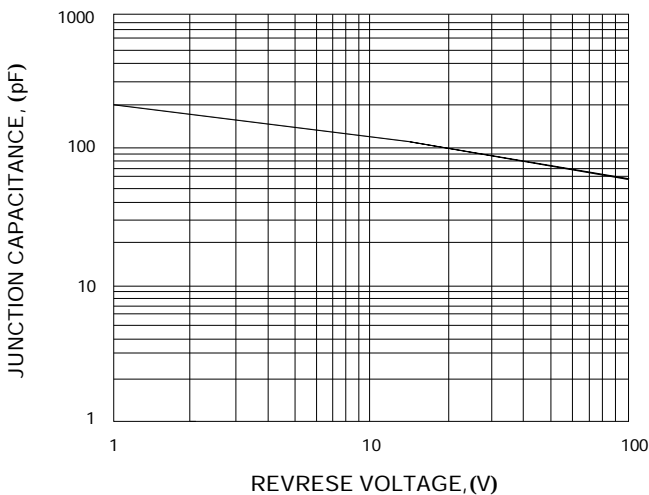


FIG. 6- TYPICAL TRANSIENT THERMAL
 IMPEDANCE

