

KBJ2506P

SINGLE PHASE 25.0AMPS.GLASS PASSIVATED BRIDGE RECTIFIERS

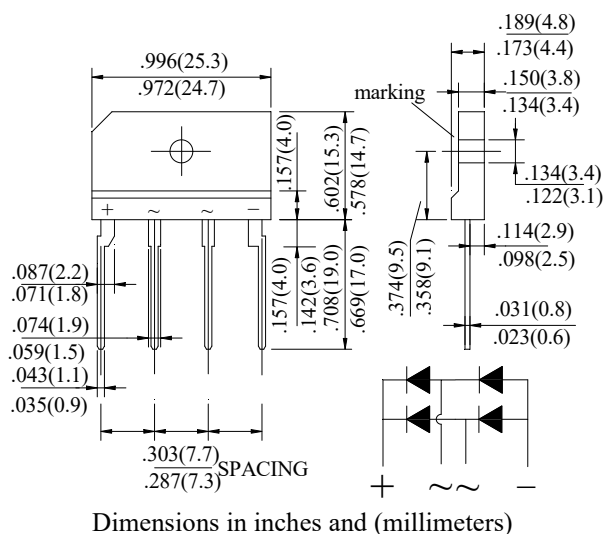
FEATURE

- . Glass passivated chip junctions
- . High case dielectric strength
- . Low Reverse Leakage Current
- . High surge current capability
- . Ideal for Printed Circuit Board Applications

MECHANICAL DATA

- . Case: KBJ
- . Case Material: Molded Plastic.
UL Flammability Classification Rating 94V-0
- . Terminals: Pure tin plated, Lead free.
Leads solderable per MIL-STD-750, Method 2026.
- . Polarity: Molded on Body
- . Mounting: Through Hole for #6 Screw
- . Mounting Torque: 5.0 in-lbs Maximum
- . Weight: 4.3grams

KBJ



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, derate current by 20%

Type Number	SYM BOL	KBJ2506P			units
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	600			V
Maximum RMS Voltage	V_{RMS}	420			V
Maximum DC blocking Voltage	V_{DC}	600			V
Maximum Average Forward (with heatsink Note2) Rectified Current @ T _c =100°C(without heatsink)	$I_{F(AV)}$	25.0 3.5			A
Peak Forward Surge Current @ T _J =25°C 8.3ms single half sine-wave @ T _J =125°C	I_{FSM}	300 240			A
Peak Forward Surge Current @ T _J =25°C 1.0ms single half sine-wave @ T _J =125°C	I_{FSM}	600 480			
Maximum Forward Voltage Drop per element @12.5 A DC	V_F	Min 0.8	Typ 0.85	Max 0.92	V
Maximum DC Reverse Current @T _J =25°C at rated DC blocking voltage @T _J =125°C	I_R	5.0 500.0			μA
Reverse Recovery Time (Note 1)	T_{rr}	Min 100	Typ 250	Max 500	nS
I ² t Rating for Fusing (t < 8.3ms)	I^2t	373			A ² Sec
Typical Junction Capacitance (Note 2)	C_J	280			pF
Typical Thermal Resistance (Note 3)	$R_{(JC)}$	1.5			°C/W
Storage Temperature	T_{STG}	-55 to +150			°C
Operating Junction Temperature	T_J	-55 to +150			°C

Note:

1. Conditions: $I_F=0.5A$, $I_R=1.0A$, $I_{RR}=0.25A$
2. Measured at 1.0 MHz and applied reverse voltage of 4.0Vdc
3. Device mounted on 150mm x 150mm x 1.6mm Cu Plate Heatsink.

Rating and Characteristic Curves

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

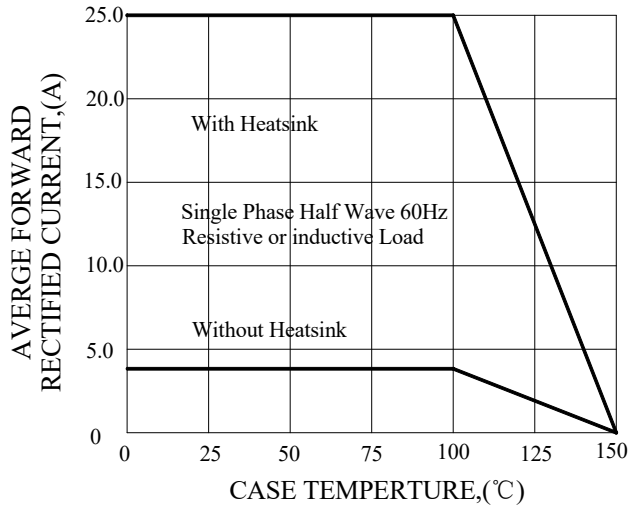


FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

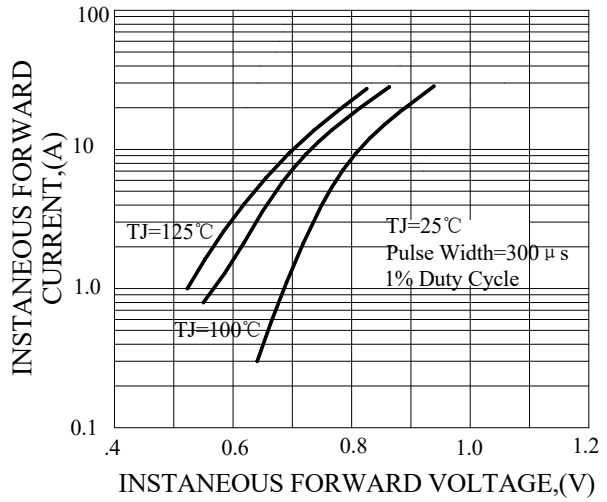


FIG.3-MAXIMUN NON-REPETITIVE FORWARD SURGE CURRENT

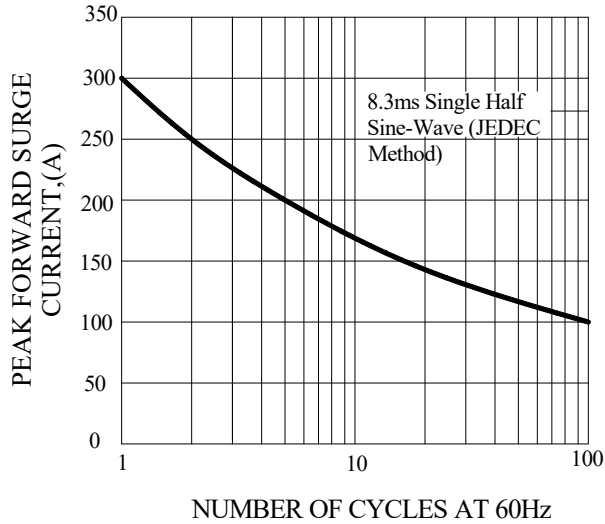


FIG.4-TYPICAL JUNCTION CAPACITANCE

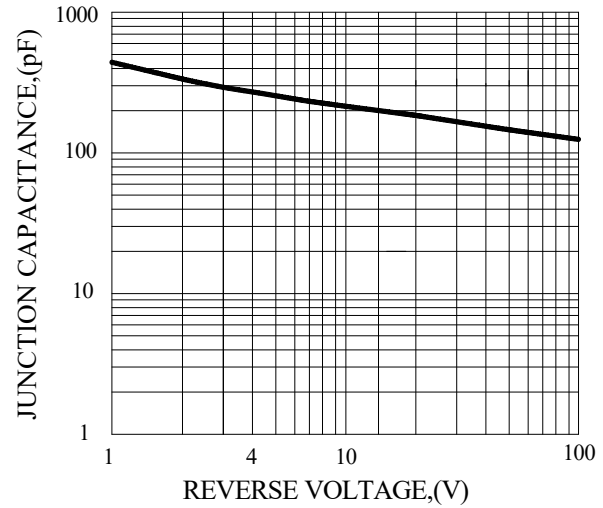
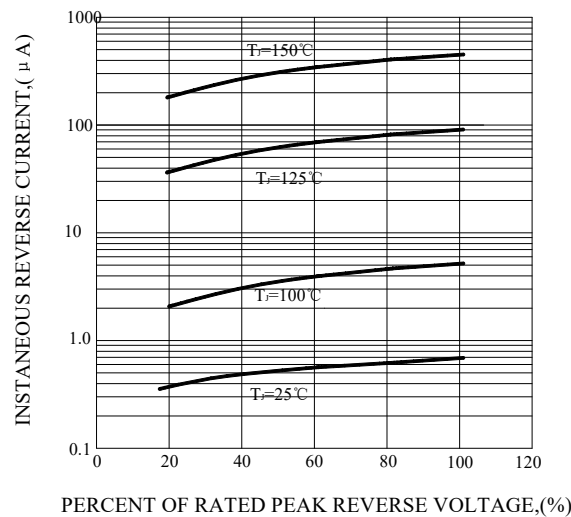
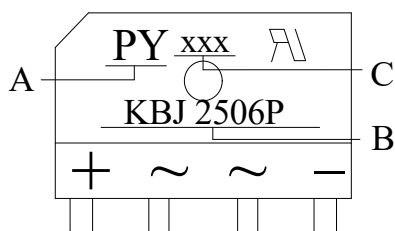


FIG.5-TYPICAL REVERSE CHARACTERISTICS



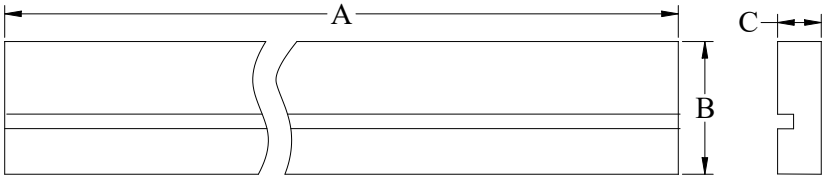
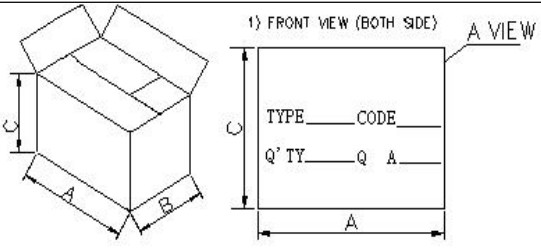
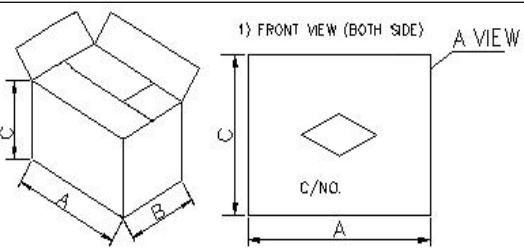
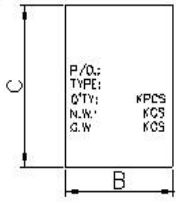
Marking and packaging illustration

1、Marking



SYMBOL	Explanation
A	Trademark
B	Product Name
C	Date code

2、Packaging

			
Tube			
			
Inside Box	Carton		

OUTLINE	A (mm)	B (mm)	C (mm)
Tube	430±1	42±1	8.2±1
Inner box	540±3	90±3	100±3
Carton	550±5	190±5	310±5
COUNT	TUBE (PCS)	BOX (PCS)	CARTON (PCS)
KBJ	20	400	2400