



YEA SHIN TECHNOLOGY CO., LTD

KBJ10A THRU KBJ10M

**TECHNICAL SPECIFICATIONS OF
SINGLE-PHASE SILICON BRIDGE RECTIFIER**



VOLTAGE RANGE – 50 to 1000 Volts

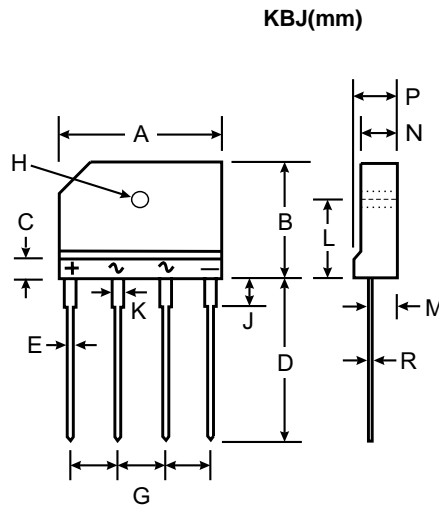
CURRENT – 10.0 Amperes

FEATURES

- Ideal for printed circuit board
- Surge overload rating: 170 Amperes peak
- High temperature soldering : 260°C / 10 seconds at terminals
- Pb free product at available : 99% Sn above meet RoHS environment substance directive request

MECHANICAL DATA

- Case : Molded plastic
- Epoxy : UL 94-V-0 rate flame retardant
- Terminal : MIL-STD-202E, Method 208 guaranteed
- Polarity : Symbols molded or marked on body
- Mounting position : Any
- Weight : 4.6 grams



KBJ		
Dim	Min	Max
A	24.80	25.20
B	14.70	15.30
C	400 Nominal	
D	17.20	17.80
E	0.90	1.10
G	7.30	7.70
H	3.10	3.40
J	3.30	3.70
K	1.90	2.10
L	9.30	9.70
M	2.50	2.90
N	3.40	3.80
P	4.40	4.80
R	0.60	0.80
All Dimensions in mm		

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified.
Single phase, half wave, 60 Hz, resistive or inductive load.
For capacitive load, derate current by 20%

	SYMBOL	KBJ10A	KBJ10B	KBJ10D	KBJ10G	KBJ10J	KBJ10K	KBJ10M	UNITS
Maximum Recurrent Peak Reverse Voltage	VRRM	50	100	200	400	600	800	1000	Volts
Maximum RMS Bridge Input Voltage	VRMS	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage	VDC	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Output Current at Tc=100	Io	10.0							Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC Method)	IFSM	170							Amps
Maximum Forward Voltage Drop per element at 5.0A DC	VF	1.1							Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage per element	IR	10							uAmps
I ² t Rating for Fusing (t<8.3ms)	I ² t	120							A ² S
Typical Junction Capacitance (Note 1)	CJ	45							PF
Typical Junction Capacitance (Note 2)	R JA	25							/W
Operating Temperature Range	TJ	-55 to +150							
Storage Temperature Range	TSTG	-55 to +150							

NOTES : 1. Measured at 1 MHz and applied reverse voltage of 4.0 volts
2. Thermal Resistance from Junction to Case per element Unit mounted on 300x300x1.6mm Aluminum plate heat-sinks.

DEVICE CHARACTERISTICS

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FIG. 1 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

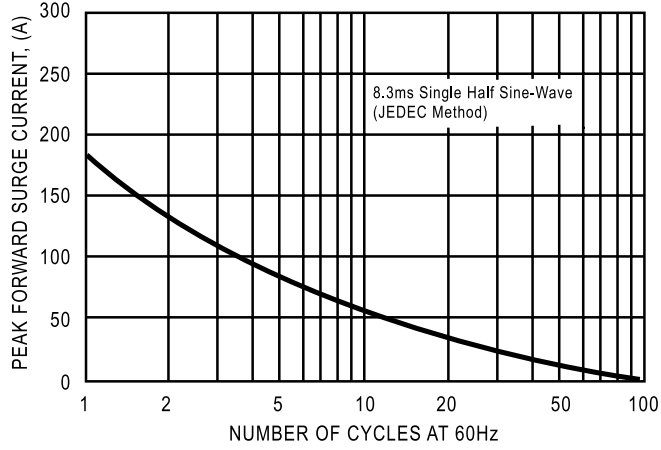


FIG. 2 - TYPICAL FORWARD CURRENT DERATING CURVE

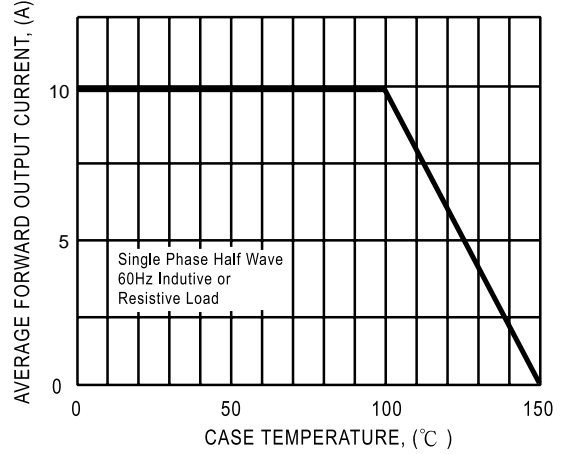


FIG. 3- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

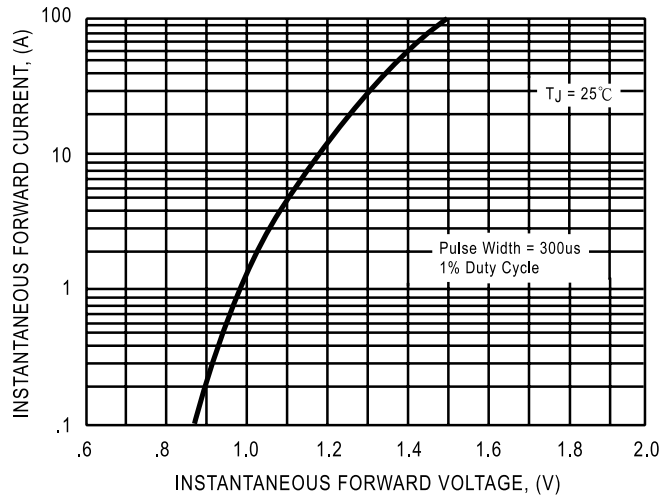


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

