



E502650

Features

- Halogen Free. "Green" Device (Note 1)
- Glass Passivated Chip Junction
- High Surge Forward Current Capability
- Epoxy Meets UL 94 V-0 Flammability Rating
- Lead Free Finish/RoHS Compliant (Note 2) ("P" Suffix Designates RoHS Compliant. See Ordering Information)

Maximum Ratings @ 25°C (Unless Otherwise Specified)

Parameter	Symbol	Value							Unit
		KBJA 10005	KBJA 1001	KBJA 1002	KBJA 1004	KBJA 1006	KBJA 1008	KBJA 1010	
Peak Repetitive Reverse Voltage	V _{RRM}	50	100	200	400	600	800	1000	V
Working Peak Reverse Voltage	V _{RWM}								
DC Blocking Voltage	V _R								
RMS Reverse Voltage	V _{RMS}	35	70	140	280	420	560	700	V
Average Rectified Forward Current @ T _C =95°C	I _{F(AV)}	10							A
Non-Repetitive Peak Surge Current @ 8.3ms Half Sine Wave	I _{FSM}	150							A
Non-Repetitive Peak Surge Current @ 1ms Square Wave		300							
I ² t Rating for Fusing @1ms≤t≤8.3ms	I ² t	93							A ² s
Dielectric strength @Terminals to Case, AC 1 Minute	V _{dis}	2							KV

Marking Code

Part Number	Marking Code
KBJA10005	KBJA10005
KBJA1001	KBJA1001
KBJA1002	KBJA1002
KBJA1004	KBJA1004
KBJA1006	KBJA1006
KBJA1008	KBJA1008
KBJA1010	KBJA1010

Internal Structure

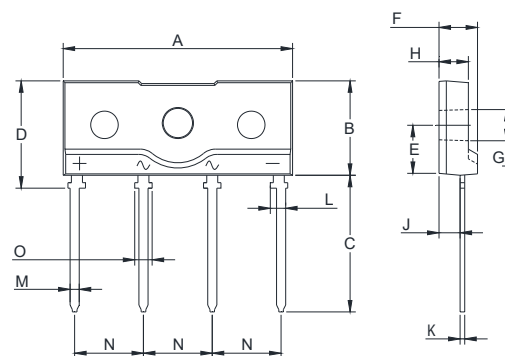
Simplified Outline	Graphic Symbol
<p>XXXXXXX: Marking Code</p>	

Note:

1. Halogen free "Green" products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.
2. High temperature solder exemption applied, see EU directive annex 7a.

10 Amp Bridge Rectifier 50 to 1000 Volts

JB



DIMENSIONS

DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.972	0.996	24.70	25.30	
B	0.394	0.417	10.00	10.60	
C	0.575	0.598	14.60	15.20	
D	0.449	0.472	11.40	12.00	
E	0.213	0.236	5.40	6.00	
F	0.154	0.177	3.90	4.50	
G	0.122	0.134	3.10	3.40	
H	0.114	0.138	2.90	3.90	
J	0.079	0.102	2.00	2.60	
K	0.012	0.024	0.40	0.60	
L	-	0.069	-	1.75	
M	0.035	0.043	0.90	1.10	
N	0.287	0.303	7.30	7.70	
O	0.083	0.091	2.10	2.30	

Thermal characteristics

Symbol	Parameter	Conditions	Min	Typ	Max	Unit
T _J	Operating Junction Temperature Range		-55		150	°C
T _{stg}	Storage Temperature Range		-55		150	°C
Rth(J-C)	Thermal Resistance from Junction to Case	Note 1		2.8		°C/W
Rth(J-A)	Thermal Resistance from Junction to Ambient	Without Heatsink		28		°C/W

Note:
1.Device mounted on 75mm x 45mm x 5.5mm Aluminum Plate Heatsink.

Mechanical Data

Recommended Mounting Torque: 0.5 N•m

Electrical Characteristics @ 25°C Unless Otherwise Specified(Per Diode)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Forward Voltage	V _F	I _F =5A;T _J =25°C			1.0	V
Reverse Current	I _R	at Rated V _R ;T _J =25°C at Rated V _R ;T _J =125°C			5 100	μA
Junction Capacitance	C _J	V _R =4V;f=1MHz;T _J =25°C		50		pF

Curve Characteristics

Fig. 1 - Forward Current Derating Curve

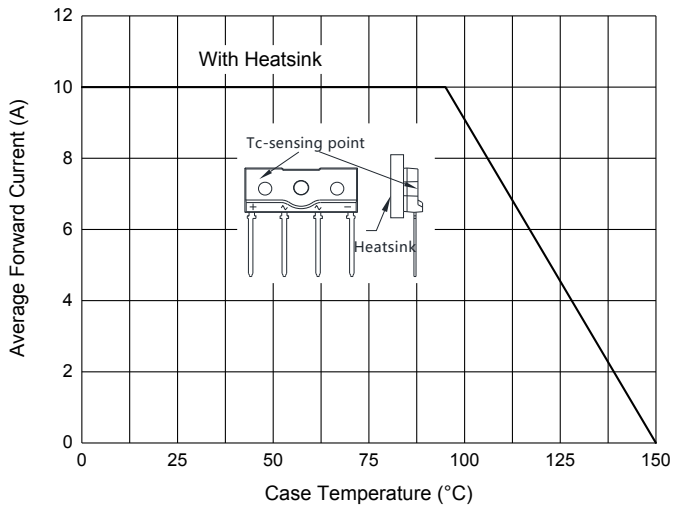


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

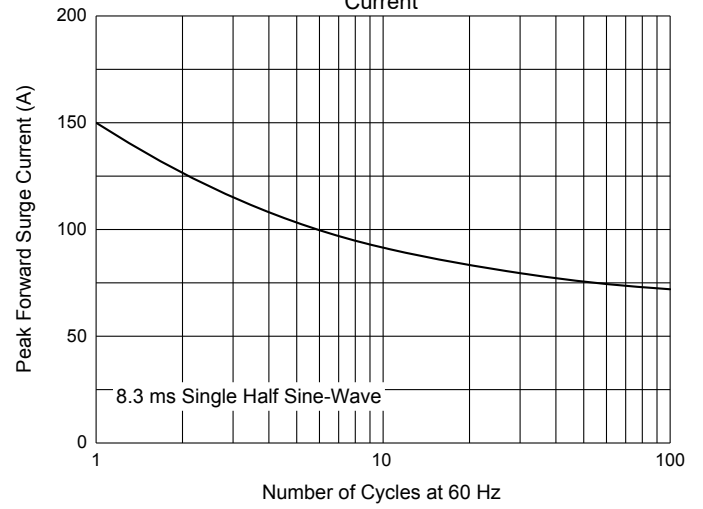


Fig. 3 - Typical Forward Characteristics

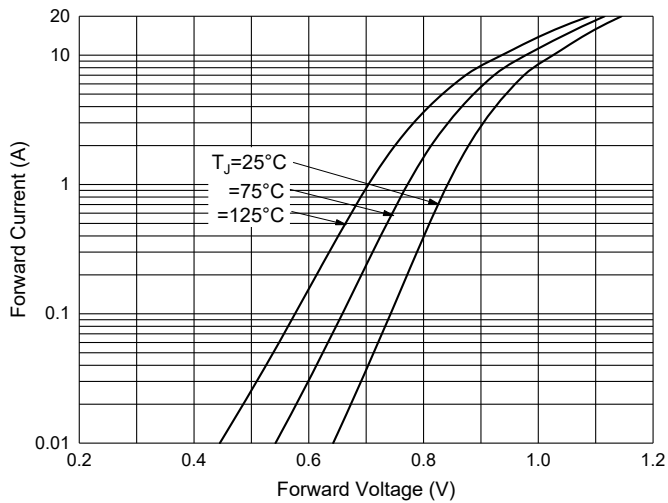


Fig. 4 - Typical Reverse Leakage Characteristics

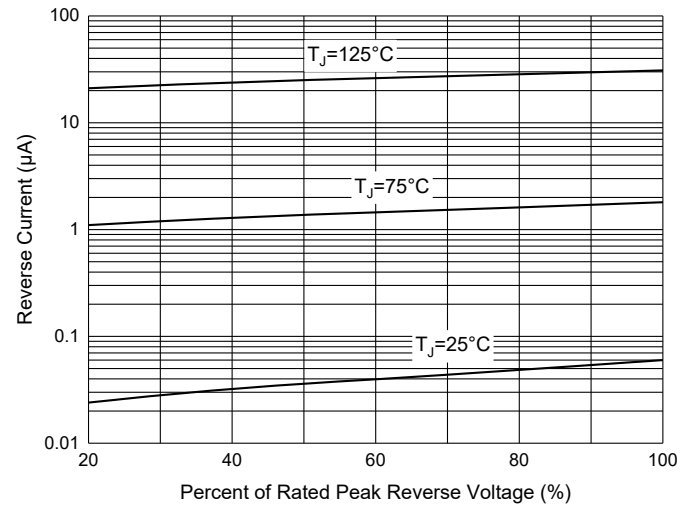
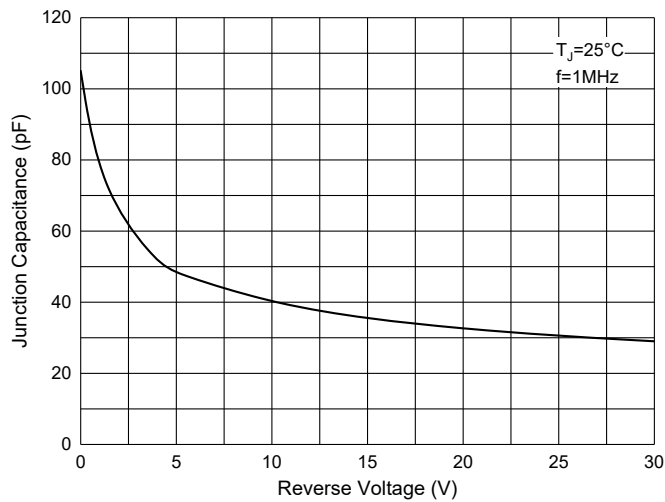


Fig. 5 - Typical Capacitance Characteristics



Ordering Information

Device	Packing
Part Number-BP	Bulk:20pcs/Tube,900pcs/Box,1800pcs/Carton

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