



KBJ2006G-KBJ2008G

20A STANDARD RECOVERY BRIDGE RECTIFIER

Product Summary

V _{RRM} (V)	I _F (A)	V _F Max (V) @ I _F = 10A	I _R Max (μA)
600, 800	20	1.1	5

Mechanical Data

- Package: KBJ
- Package Material: Plastic Material, UL Flammability Classification 94V-0
- Terminals: Finish Matte Tin Plated Leads, Solderable per MIL-STD-202, Method 208 (3)
- Polarity Indicator: As Marked on The Body
- Weight: 4.6 grams (Approximate)
- Mounting Position: Any

Features

- Glass Passivated Die Construction
- Rating to 1000V PRV
- Ideal for Printed Circuit Board
- Reliable Low Cost Construction Utilizing Molded Plastic Technique
- UL Recognized File # E94661
- Lead-Free Finish; RoHS Compliant (Notes 1 & 2)
- Halogen and Antimony Free. "Green" Device (Note 3)
- For automotive applications requiring specific change control (i.e. parts qualified to AEC-Q100/101/200, PPAP capable, and manufactured in IATF 16949 certified facilities), please contact us or your local Diodes representative.

https://www.diodes.com/quality/product-definitions/





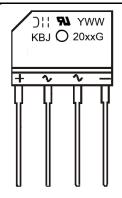
Ordering Information (Note 4)

Part Number	Qualification	Package	Packing	
Part Number	Qualification		Qty.	Carrier
KBJ2006G-TU	Commercial	KBJ	20pcs	Tube
KBJ2008G-TU	Commercial	KBJ	20pcs	Tube

Notes:

- 1. EU Directive 2002/95/EC (RoHS), 2011/65/EU (RoHS 2) & 2015/863/EU (RoHS 3) compliant. All applicable RoHS exemptions applied.
- 2. See https://www.diodes.com/quality/lead-free/ for more information about Diodes Incorporated's definitions of Halogen- and Antimony-free, "Green" and Lead-free.
- 3. Halogen- and Antimony-free "Green" products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.
- 4. For packaging details, go to our website at https://www.diodes.com/design/support/packaging/diodes-packaging/

Marking Information



KBJ20xxG = Product Type Marking Code

O'! = Manufacturer's Code Marking

YWW = Date Code Marking

Y = Last Digit of Year (ex: 1 = 2021)

WW = Week Code (01 to 53)



Maximum Ratings (@ $T_A = +25$ °C, unless otherwise specified.)

Characteristic	Symbol	KBJ2006G	KBJ2008G	Unit
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	600	800	V
Maximum DC Blocking Voltage	VDC	600	800	V
Average Rectified Output Current With Heatsink @Tc = +110°C Without Heatsink	I _{F(AV)}	2 3.	0.0	А
Peak Forward Surge Current 8.3ms Single Half Sine-Wave T _J = +25°C	IFSM	20	00	А
I^2 t Rating for Fusing (t = 8.3ms)	l ² t	16	66	A ² s
Mounting Torque (Recommended Torque: 0.5 N.m)	TOR	0.	.8	N.m
Operating Temperature Range	TJ	-55 to	+150	°C
Storage Temperature Range	T _{STG}	-55 to	+150	°C

Electrical Characteristics (@TA = +25°C, unless otherwise specified.)

Characteristic	Test Condition	Symbol	Max	Unit
Forward Voltage	I _F = 10A T _J = +25°C	VF	1.1	٧
Leakage Current	V_R at Rated $T_J = +25^{\circ}C$ $T_J = +125^{\circ}C$	IR	5.0 500	μΑ
Typical Junction Capacitance (Note 5)		CJ	70	pF

Thermal Characteristics

Characteristic	Symbol	Тур.	Unit
Typical Thermal Resistance (Note 6)	R _θ JC	0.8	°C/W

Notes:

^{5.} Measured at 1.0MHz and applied reverse voltage of 4.0V DC.

^{6.} Device mounted on 250mm*250mm*20mm aluminum plate heatsink, $T_A = +25$ °C.





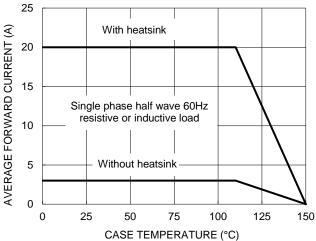


Figure 1. Forward Current Derating Curve

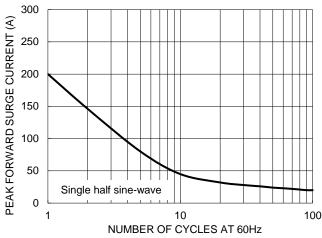
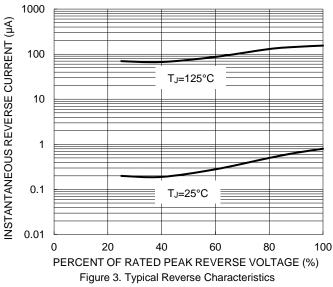


Figure 2. Maximum Non-repetitive Surge Current



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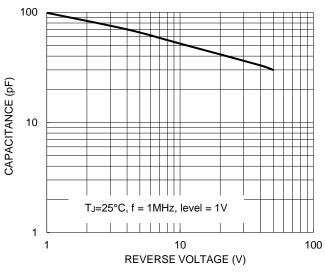


Figure 4. Typical Junction Capacitance

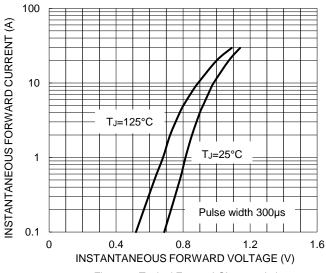


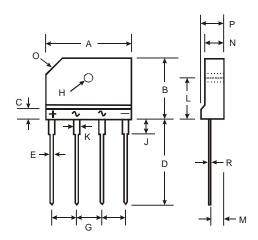
Figure 5. Typical Forward Characteristics



Package Outline Dimensions

Please see http://www.diodes.com/package-outlines.html for the latest version.

KBJ



KBJ				
Dim	Min	Max		
Α	24.80	25.20		
В	14.70	15.30		
С	3.90	4.10		
D	17.20	17.80		
Е	0.90	1.10		
G	7.30	7.70		
Н	3.10∅	3.40∅		
J	3.30	3.70		
K	1.50	1.90		
L	9.30	9.70		
M	2.50	2.90		
N	3.40	3.80		
0	3.0 x 45°			
Р	4.40	4.80		
R	0.60	0.80		
All Dimensions in mm				