

# **Bridge Rectifiers**

### **Features**

- UL recognition, file #E230084
- Thin single in-line package
- High surge current capability
- Solder dip 275 °C max. 7 s, per JESD 22-B106

## **Typical Applications**

General purpose use in AC/DC bridge full wave rectification for switching power supply, home appliances, office equipment, industrial automation applications.

### **Mechanical Data**

• Package: 2KBJ

Molding compound meets UL 94 V-0 flammability

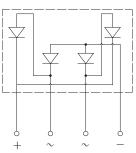
rating, RoHS-compliant

• Terminals: Tin plated leads, solderable per

J-STD-002 and JESD22-B102
• Polarity: As marked on body







# ■Maximum Ratings (Ta=25°C Unless otherwise specified)

= <b>.</b>									
PARAMETER	SYMBOL	UNIT	GBL4005	GBL401	GBL402	GBL404	GBL406	GBL408	GBL410
Device marking code			GBL4005	GBL401	GBL402	GBL404	GBL406	GBL408	GBL410
Repetitive peak reverse voltage	VRRM	V	50	100	200	400	600	800	1000
Average Rectified Output Current @60Hz sine wave, R-load, Ta =25°C	lo	Α	4.0						
Surge(non-repetitive)forward current @60Hz half-sine wave, 1 cycle, Tj=25℃	IFSM	А	135						
Current squared time @1ms≤t≤8.3ms Tj=25°C,rating of per diode	l <sup>2</sup> t	A <sup>2</sup> S	75						
Storage temperature	Tstg	$^{\circ}$	-55 ~+150						
Junction temperature	Tj	$^{\circ}$ C	-55 ~+150						

### **■Electrical Characteristics** (T<sub>a</sub>=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	GBL4005	GBL401	GBL402	GBL404	GBL406	GBL408	GBL410
Maximum instantaneous forward voltage drop per diode	VF	V	IFM=2A 1.00							
Maximum DC reverse current at rated DC blocking voltage per diode	IRRM	μA	VRM=VRRM	5						



# GBL4005 - GBL410

**■Thermal Characteristics** (T<sub>a</sub>=25°C Unless otherwise specified)

	PARAMETER	SYMBOL	UNIT	GBL4005	GBL401	GBL402	GBL404	GBL406	GBL408	GBL410
Thermal	Between junction and ambient	RøJ-A	сw	47						
Resistance	Between junction and case,	R <sub>0</sub> J-C	0,,,,	10						

**■**Ordering Information (Example)

PREFERED P/N	PACKAGE CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
GBL4005-GBL410	B1	Approximate 2.19	22	1320	5280	Tube
GBL4005-GBL410	A1	Approximate 2.19	250	250	6000	Paper Box

# **■** Characteristics(Typical)

60 40

20

10

5.0

1.0

0.5

0.2

0.1 \_ 0.4

0.6

8.0

Instantaneous Forward Voltage (V)

Instantaneous Forward Current(A)

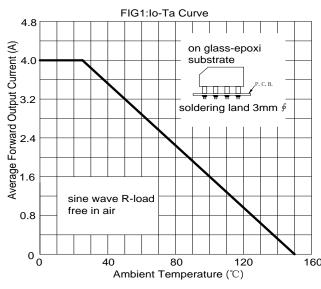
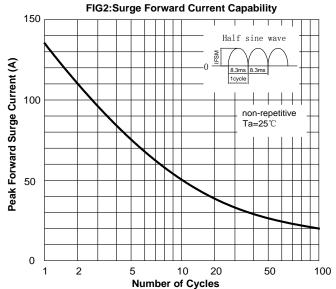


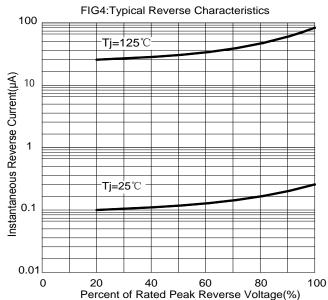
FIG3:Instantaneous Forward Voltage

Ta=25℃



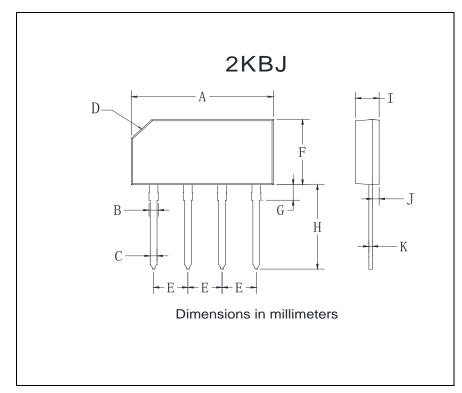
1.2







#### **■ Outline Dimensions**



2KBJ						
Dim	Min	Max				
Α	19.2	21.2				
В	1.2	1.8				
С	1.0	1.2				
D	Typ: 3.0					
Е	4.9	5.1				
F	10.5	11.5				
G	2.0	3.0				
Н	13.0	15.0				
I	3.0	4.0				
J	0.9	1.1				
K	0.4	0.6				

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