

■ **FEATURES**

- UL recognition, file #E230084
- Glass passivated chip junction
- 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** ($T_a=25^{\circ}\text{C}$ Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	GBL4005	GBL401	GBL402	GBL404	GBL406	GBL408	GBL410
Device marking code			GBL4005	GBL401	GBL402	GBL404	GBL406	GBL408	GBL410
Maximum Repetitive Peak Reverse Voltage	VRRM	V	50	100	200	400	600	800	1000
Maximum RMS Voltage	VRMS	V	35	70	140	280	420	560	700
Maximum DC blocking Voltage	VDC	V	50	100	200	400	600	800	1000
Average Rectified Output Current @60Hz sine wave, R-load, $T_a=25^{\circ}\text{C}$	I_O	A	4.0						
Forward Surge Current (Non-repetitive) @60Hz Half-sine wave, 1 cycle, $T_j=25^{\circ}\text{C}$	I_{FSM}	A	135						
Forward Surge Current (Non-repetitive) @1ms, square wave, 1 cycle, $T_j=25^{\circ}\text{C}$			250						
Current squared time @1ms $\leq t \leq 8.3\text{ms}$ $T_j=25^{\circ}\text{C}$, rating of per diode	I^2t	A ² S	62.5						
Dielectric strength @ terminals to case, AC 1 minute	Vdis	KV	2						
Storage temperature	T_{stg}	°C	-55 ~ +150						
Junction temperature	T_j	°C	-55 ~ +150						

■ **ELECTRICAL CHARACTERISTICS** ($T_a=25^{\circ}\text{C}$ Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	GBL4005	GBL401	GBL402	GBL404	GBL406	GBL408	GBL410
Maximum instantaneous forward voltage drop per diode	V _F	V	$I_{FM}=2.0\text{A}$	1.0						
Maximum DC reverse current at rated DC blocking voltage per diode	I_R	μA	$T_j=25^{\circ}\text{C}$	5						
			$T_j=125^{\circ}\text{C}$	100						
Typical junction capacitance	C_j	pF	Measured at 1MHz and Applied Reverse Voltage of 4.0 V.D.C	38						

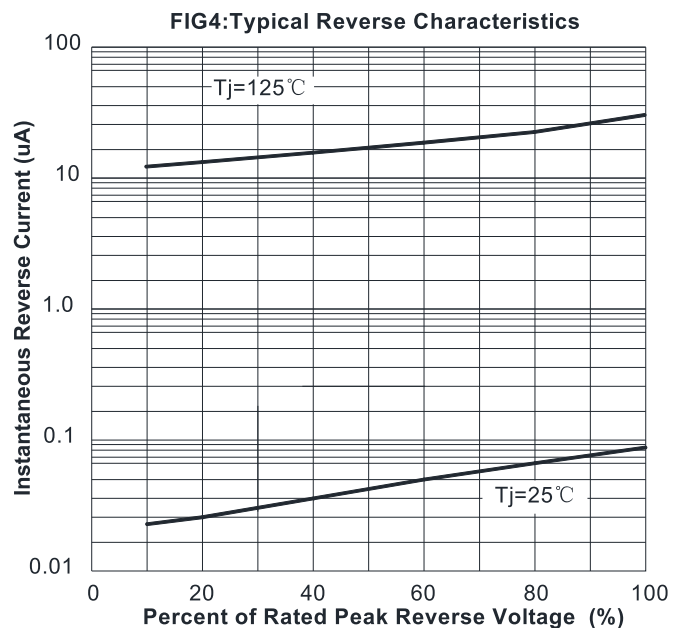
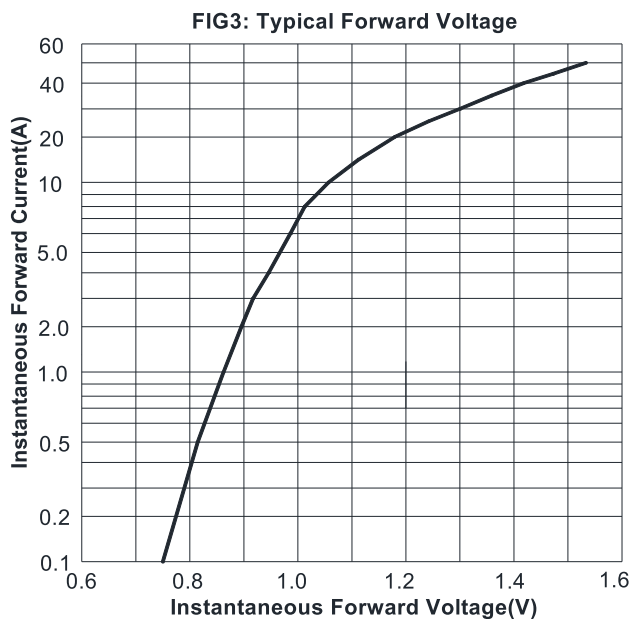
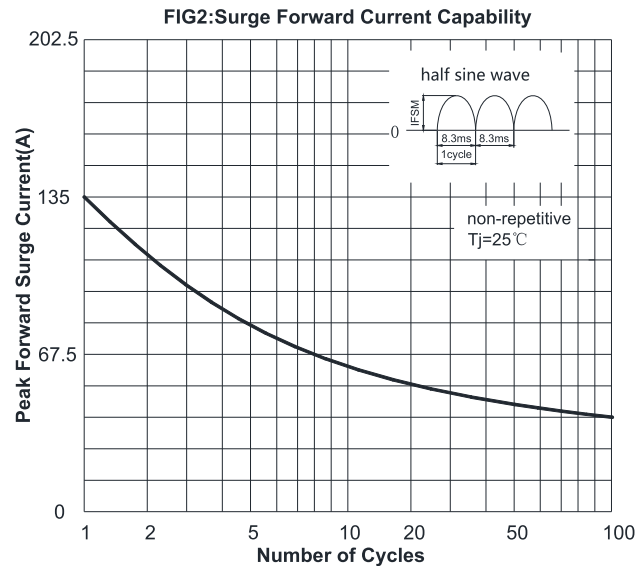
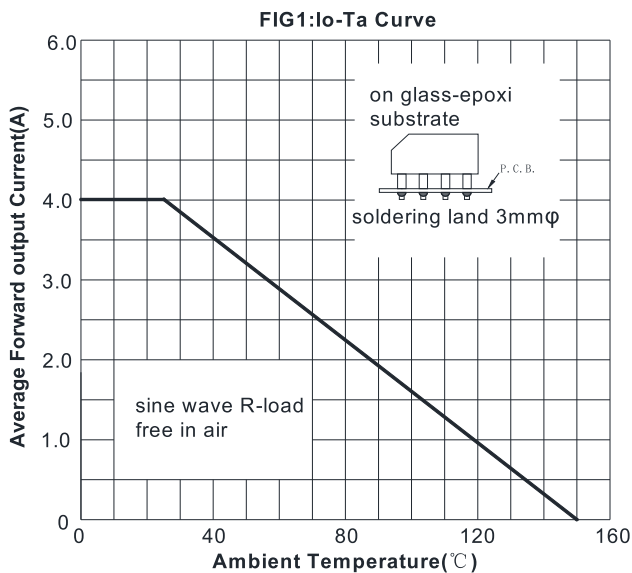
■ **THERMAL CHARACTERISTICS** ($T_a=25^{\circ}\text{C}$ Unless otherwise specified)

PARAMETER		SYMBOL	UNIT	GBL4005	GBL401	GBL402	GBL404	GBL406	GBL408	GBL410
Thermal Resistance	Between junction and ambient	$R_{\theta J-A}$	$^{\circ}\text{C}/\text{W}$	47						
	Between junction and case	$R_{\theta J-C}$		10						

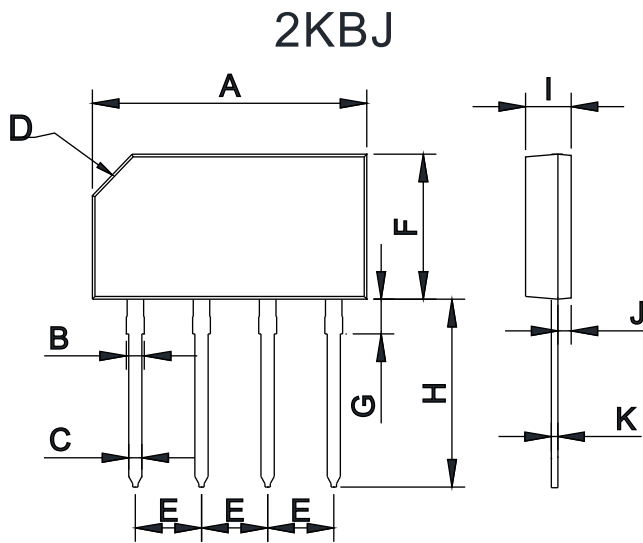
■ **PACKAGING INFORMATION**

PREFERRED 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

■ **CHARACTERISTICS (TYPICAL)**



■ **OUTLINE DIMENSIONS**



Dimensions in millimeters

2KBJ		
Dim	Min	Max
A	19.2	21.2
B	1.2	1.8
C	1.0	1.2
D	Typ: 3.0	
E	4.9	5.1
F	10.5	11.5
G	2.0	3.0
H	13.0	15.0
I	3.0	4.0
J	0.9	1.1
K	0.4	0.6