

■ FEATURES

- UL recognition, file #E230084
- Glass passivated chip junction
- Ideal for printed circuit boards
- 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 monitor, TV, printer, power supply, switching mode power supply, adapter, audio equipment, and home appliances applications.

■ MECHANICAL DATA

- **Package:** GBP
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)

PARAMETER	SYMBOL	UNIT	GBP3005A	GBP301A	GBP302A	GBP304A	GBP306A	GBP308A	GBP310A
Device marking code			GBP3005A	GBP301A	GBP302A	GBP304A	GBP306A	GBP308A	GBP310A
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, Tc =120°C	IO	A	3.0						
Forward Surge Current (Non-repetitive) @60Hz Half-sine wave, 1 cycle, Tj=25°C	IFSM	A	110						
Forward Surge Current (Non-repetitive) @1ms, square wave, 1 cycle, Tj=25°C			220						
Current squared time @1ms≤t≤8.3ms Tj=25°C, Rating of per diode	I ² t	A ² s	50						
Dielectric strength @ terminals to case, AC 1 minute	Vdis	KV	2						
Storage temperature	Tstg	°C	-55 ~ +150						
Junction temperature	Tj	°C	-55 ~ +150						

■ ELECTRICAL CHARACTERISTICS (Ta=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	GBP3005A	GBP301A	GBP302A	GBP304A	GBP306A	GBP308A	GBP310A
Maximum instantaneous forward voltage drop per diode	VF	V	IFM=1.5A	1.0						
Maximum DC reverse current at rated DC blocking voltage per diode	IR	µA	Tj=25°C	5						
			Tj=125°C	100						
Typical junction capacitance	Cj	pF	Measured at 1MHz and Applied Reverse Voltage of 4.0 V.D.C	35						

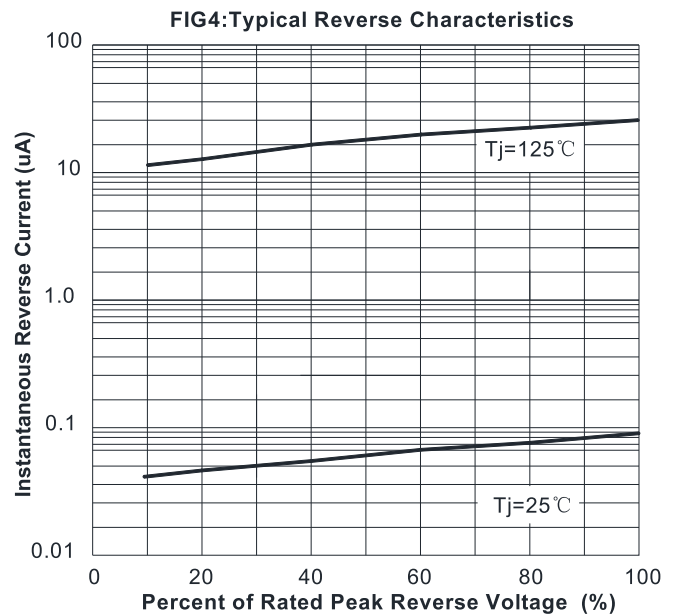
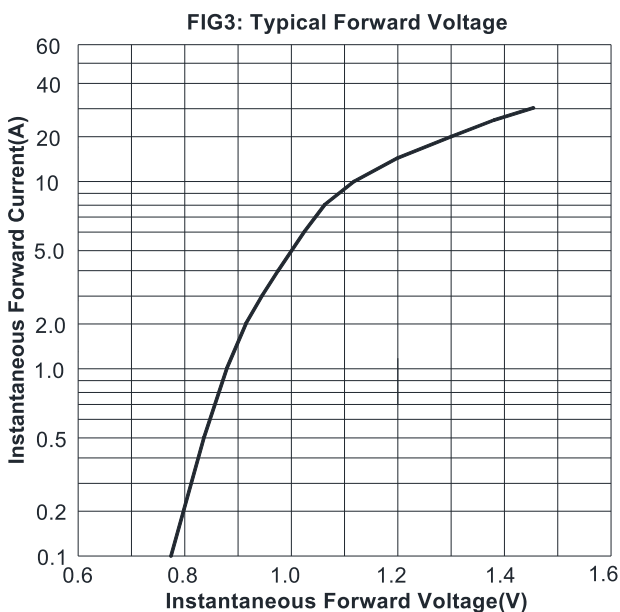
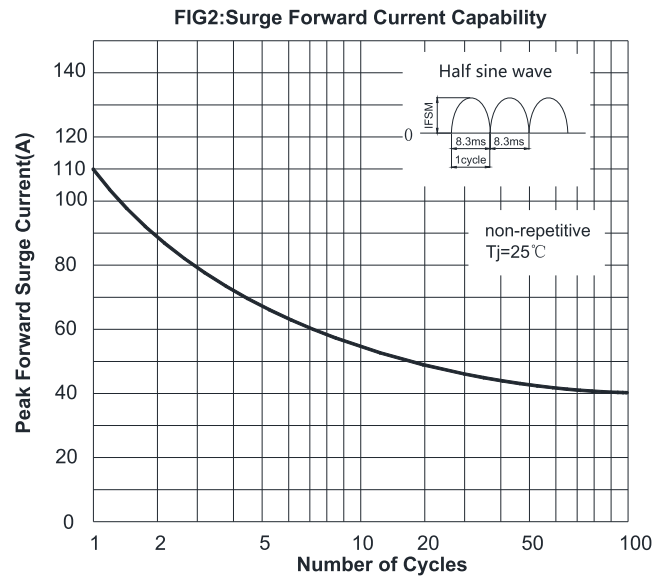
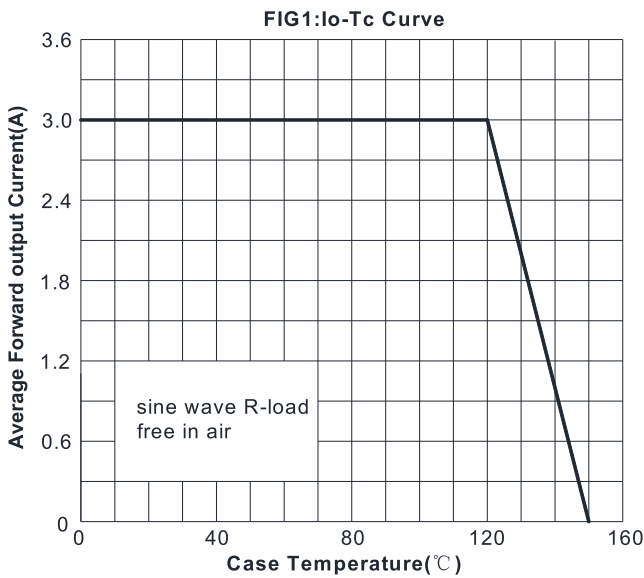
■ **THERMAL CHARACTERISTICS** ($T_a=25^\circ\text{C}$ Unless otherwise specified)

PARAMETER		SYMBOL	UNIT	GBP3005A	GBP301A	GBP302A	GBP304A	GBP306A	GBP308A	GBP310A
Thermal Resistance	Between junction and ambient	$R_{\theta J-A}$	$^\circ\text{C/W}$	45						
	Between junction and Case	$R_{\theta J-C}$		5						

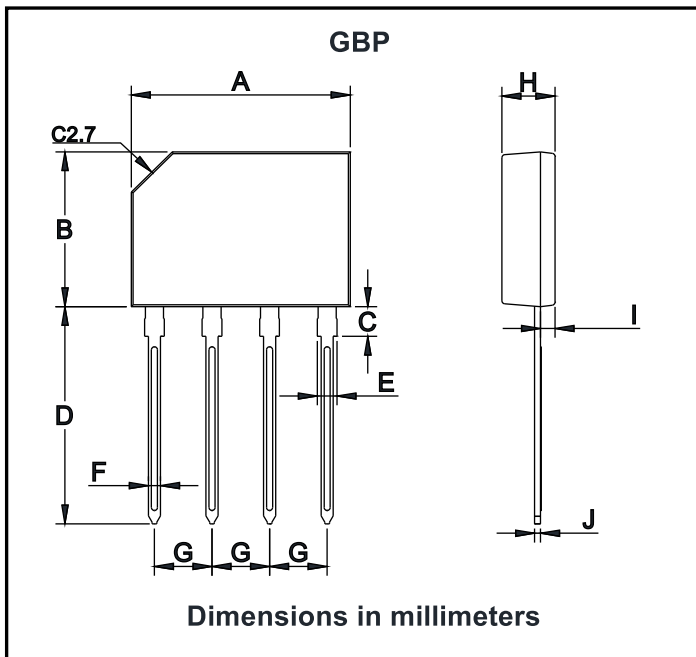
■ **PACKAGING INFORMATION**

PREFERRED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
GBP3005A THRU GBP310A	B1	1.4	35	2100	4200	TUBE

■ **CHARACTERISTICS (TYPICAL)**



■ **OUTLINE DIMENSIONS**



GBP		
Dim	Min	Max
A	14.25	14.75
B	10.10	10.60
C	1.80	2.20
D	14.25	14.73
E	1.22	1.42
F	0.76	0.86
G	3.70	3.90
H	3.35	3.65
I	0.80	1.10
J	0.35	0.55