



Bridge Rectifiers

Features

- UL recognition, file #E230084
- Universal 3-way terminals snap-on wire wrap-around or PCB mounting
- Glass passivated chip junction
- High surge current capability
- Low thermal resistance
- Solder dip 275 °C max. 7 s, per JESD 22-B106

Typical Applications

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

Mechanical Data

- Package:** GBPC GBPC-W
- Molding compound meets UL 94 V-0 flammability rating, RoHS-compliant
- Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22-B102
- Suffix letter "W" added to indicate wire leads(e.g. GBP@ n

		UNIT	GBPC15005	GBPC1501	GBPC1502	GBPC1504	GBPC1506	GBPC1508	GBPC1510
Device marking code			GBPC15005	GBPC1501	GBPC1502	GBPC1504	GBPC1506	GBPC1508	GBPC1510
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

Forward Surge Current (Non-repetitive) @1ms, square wave, 1 cycle, Tj=25							600		
Current squared time @1ms t 8.3ms Tj=25, Rating of per diode	I ² t	A ² S					374		
Storage temperature	Tstg						-55 ~ +150		
Junction temperature	Tj						-55 ~ +150		
Dielectric strength @ Terminals to case, AC 1 minute		V							



GBPC15005(W) THRU GBPC1510(W)

Electrical Characteristics $T_a=25$ Unless otherwise specified

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	GBPC15005	GBPC1501	GBPC1502	GBPC1504	GBPC1506	GBPC1508	GBPC1510
Maximum instantaneous forward voltage drop per diode	VF	V	$I_{FM}=7.5A$							1.1
Maximum DC reverse current at rated DC blocking voltage per diode	IR	μA	$T_j=25$							5
			$T_j=125$							100
Typical junction capacitance	Cj	pF	Measured at 1MHz and Applied Reverse Voltage of 4.0 V.D.C							107

Thermal Characteristics $T_a=25$ Unless otherwise specified

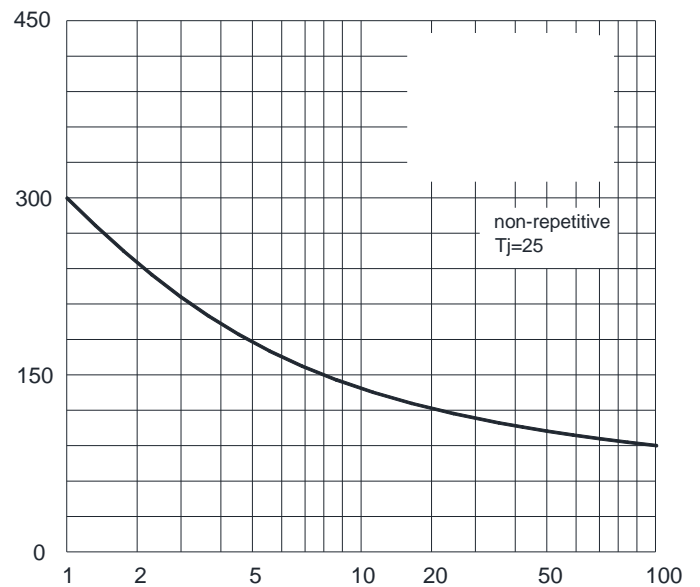
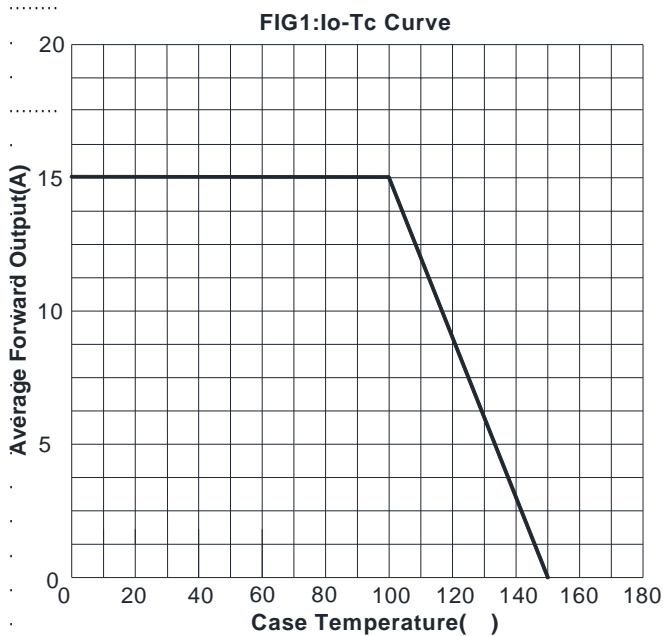
PARAMETER	SYMBOL	UNIT	GBPC15005	GBPC1501	GBPC1502	GBPC1504	GBPC1506	GBPC1508	GBPC1510
Thermal Resistance Between junction and case, With heatsink	R J-C	$^{\circ}W$							1.5

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

Ordering Information (Example)

PREFERRED P/N	PACKAGE CODE	UNIT WEIGHT (g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
GBPC15005 ~ GBPC1510	A1	Approximate 13.8	50	50	500	Paper Box
GBPC15005W ~ GBPC1510W	A1	Approximate 13	50	50	500	Paper Box

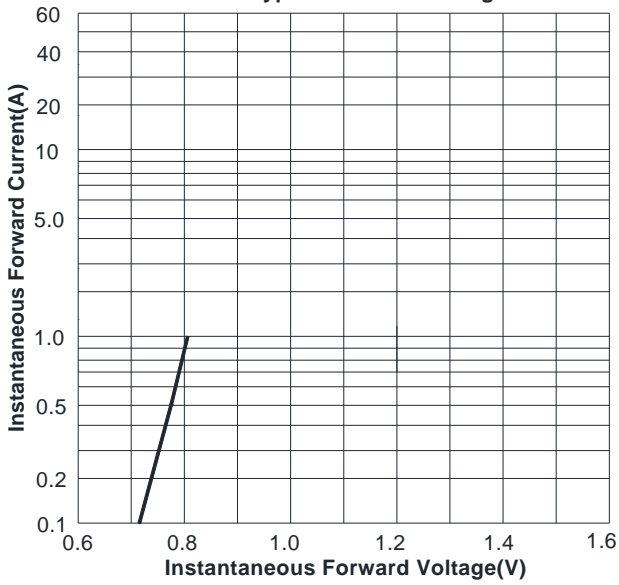
Characteristics (Typical)





GBPC15005(W) THRU GBPC1510(W)

FIG3: Typical Forward Voltage



Outline Dimensions

GBPC-W		
Dim	Min	Max
A	28.2	28.8
B	17.1	19.1
C	10.4	12.4
D	0.95	1.05
E	7.6	8.2
F	30	/
G	4.5	5.5

GBPC		
Dim	Min	Max
A	28.2	28.8
B	15.3	17.3
C	17.1	19.1
D	13.2	15.2
E	0.75	0.85
F	6.2	6.4
G	2.4	2.6
H	7.6	8.2
I	19	/
J	4.5	5.5

