

## **GBPC15PS SERIES**

### 15A GLASS PASSIVATED SINGLE PHASE BRIDGE RECTIFIER



### **Features**

- Glass Passivated Die Construction
- Low Reverse Leakage Current
- Low Power Loss, High Efficiency
- Heatsink Integrated Epoxy Case for Maximum Heat Dissipation
- Low Thermal Resistance
- High Surge Current Capability
- Recognized File # E157705

В

D

KBPC-PS						
Dim	Min	Max				
Α	28.40 28.70					
В	— 10.16					
С	21.00	22.50				
D	9.00	10.00				
E	_	25.40				
G	5.08Ø Nominal					
Н	6.35 Typical					
J	0.71	0.91				
K	2.5Ø Typical					
All Dimension in mm						

### **Mechanical Data**

- Case: Epoxy Case with Heatsink Internally Mounted in the Bridge Encapsulation
- Terminals: Plated Faston Lugs
- Polarity: As Marked on Case
- Mounting: Through Hole with #10 Screw
- Mounting Torque: 2.0 N.m Max.Weight: 20 grams (approx.)
- Marking: Type Number
- Lead Free: For RoHS / Lead Free Version,
   Add "-LF" Suffix to Part Number, See Page 4

### Maximum Ratings and Electrical Characteristics @TA=25°C unless otherwise specified

Single Phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Characteristic	Symbol	Symbol GBPC15								Unit		
Characteristic	Syllibol	00PS	01PS	02PS	04PS	06PS	08PS	10PS	12PS	14PS	16PS	Onit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	VRRM VRWM VR	50	100	200	400	600	800	1000	1200	1400	1600	V
RMS Reverse Voltage	VR(RMS)	35	70	140	280	420	560	700	840	980	1120	V
Average Rectified Output Current @T <sub>C</sub> = 55°C	lo	15				Α						
Non-Repetitive Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method)	İFSM	300					А					
Forward Voltage per leg @I <sub>F</sub> = 7.5A	VFM	1.1				V						
Peak Reverse Current $@T_C = 25^{\circ}C$ At Rated DC Blocking Voltage $@T_C = 125^{\circ}C$	lгм	10 500				μΑ						
I <sup>2</sup> t Rating for Fusing (t < 8.3ms)	l <sup>2</sup> t	375			A <sup>2</sup> s							
Typical Junction Capacitance (Note 1)	C1	200			pF							
Typical Thermal Resistance (Note 2)	R JC	1.9			°C/W							
RMS Isolation Voltage, t = 1min	Viso	2500			V							
Operating and Storage Temperature Range	TJ, TSTG	G -55 to +150			°C							

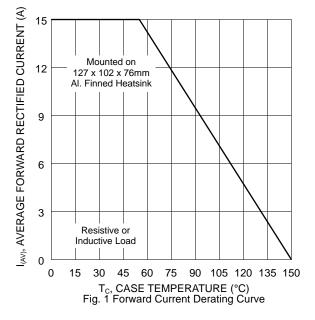
Note: 1. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.

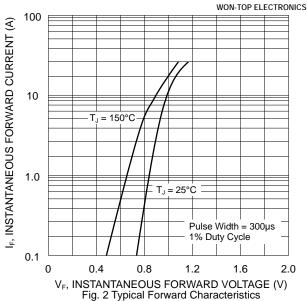
2. Thermal resistance junction to case, mounted on 127 x 102 x 76mm Al. heatsink.

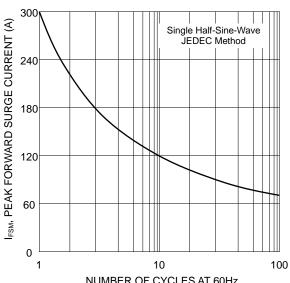
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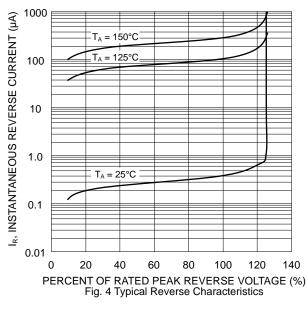
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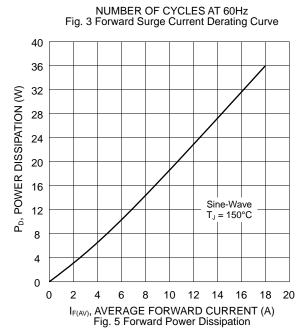


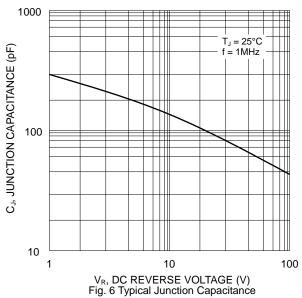
















### **MARKING INFORMATION**

AC ## 71 + GBPC15xxPS

GBPC15xxPS = Device Number

xx = 00, 01, 02, 04, 06, 08, 10, 12, 14 or 16

Polarity = As Marked on Body

### **PACKAGING INFORMATION**

### **BULK**

Case Style	Inner Box Size L x W x H (mm)	Quantity (PCS)	Carton Size L x W x H (mm)	Quantity (PCS)	Approx. Gross Weight (KG)
KBPC-PS	195 x 195 x 40	50	405 x 205 x 240	500	12.0

Note: 1. Paper box, white or brown color.

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### **ORDERING INFORMATION**

Product No.	Package Type	Shipping Quantity
GBPC15xxPS	Square Bridge	50 Units/Box

- Shipping quantity given is for minimum packing quantity only. For minimum order quantity, please consult the Sales Department.
- To order RoHS / Lead Free version (with Lead Free finish), add "-LF" suffix to part number above. For example, GBPC1500PS-LF.

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**WARNING**: DO NOT USE IN LIFE SUPPORT EQUIPMENT. WTE power semiconductor products are not authorized for use as critical components in life support devices or systems without the express written approval.

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