WON-TOP ELECTRONICS

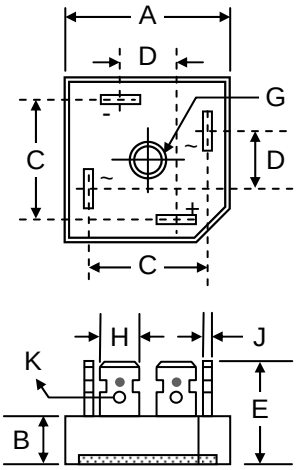
GBPC25PS SERIES

25A GLASS PASSIVATED SINGLE PHASE BRIDGE RECTIFIER

RoHS Pb

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



KBPC-PS		
Dim	**Min**	**Max**
A	28.40	28.70
B	—	10.16
C	21.00	22.50
D	9.00	10.00
E	—	25.40
G	5.08Ø Nominal	
H	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 @T_A=25°C unless otherwise specified

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

Characteristic	Symbol	GBPC25										Unit
		00PS	01PS	02PS	04PS	06PS	08PS	10PS	12PS	14PS	16PS	
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	50	100	200	400	600	800	1000	1200	1400	1600	V
RMS Reverse Voltage	$V_{R(RMS)}$	35	70	140	280	420	560	700	840	980	1120	V
Average Rectified Output Current @T_C = 55°C	I_O	25										A
Non-Repetitive Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	300										A
Forward Voltage per leg @I_F = 12.5A	V_{FM}	1.1										V
Peak Reverse Current @T_C = 25°C At Rated DC Blocking Voltage @T_C = 125°C	I_{RM}	10 500										μA
I^2t Rating for Fusing (t < 8.3ms)	I^2t	375										A^2s
Typical Junction Capacitance (Note 1)	C_J	200										pF
Typical Thermal Resistance (Note 2)	$R_{\theta JC}$	1.9										°C/W
RMS Isolation Voltage, t = 1min	V_{ISO}	2500										V
Operating and Storage Temperature Range	T_J, T_{STG}	-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 152 x 124mm Al. heatsink.

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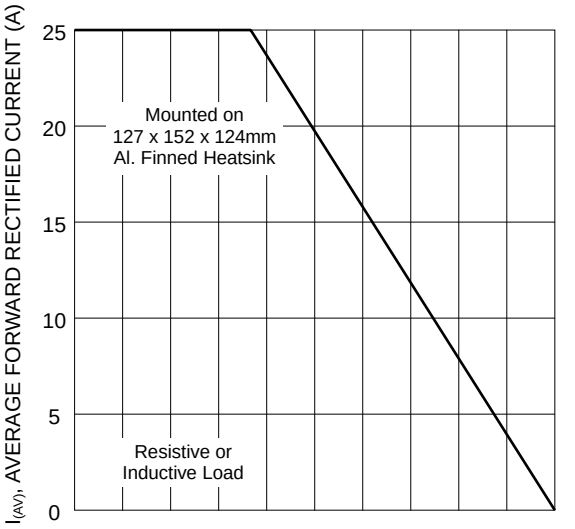


Fig. 1 Forward Current Derating Curve

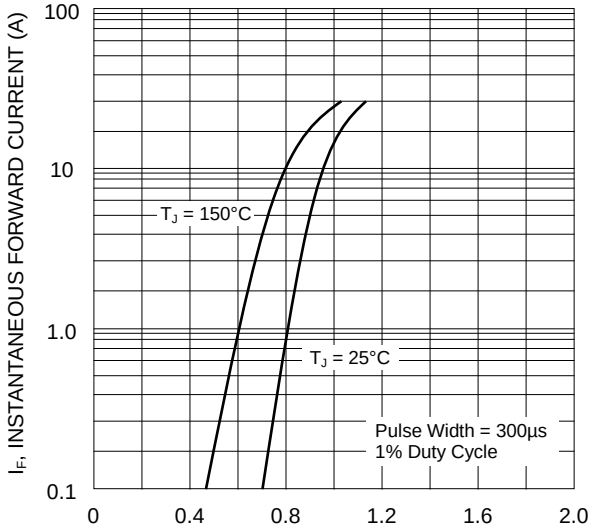


Fig. 2 Typical Forward Characteristics

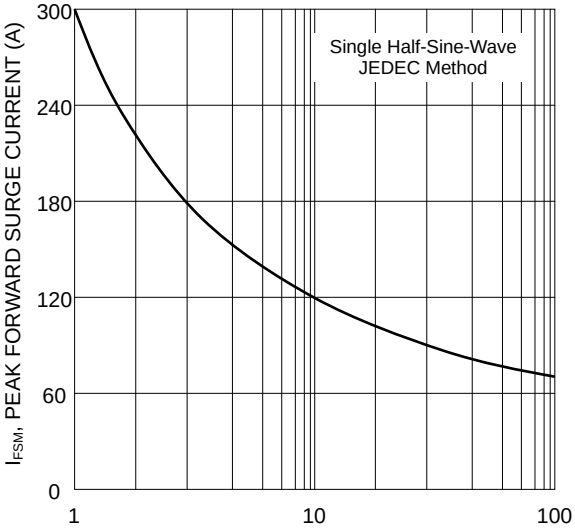


Fig. 3 Forward Surge Current Derating Curve

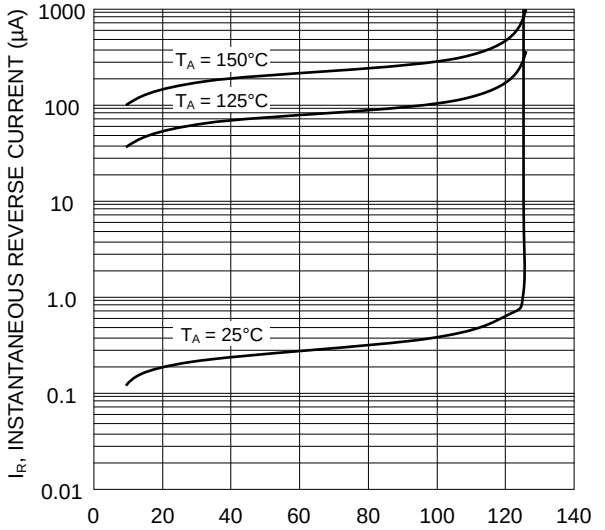


Fig. 4 Typical Reverse Characteristics

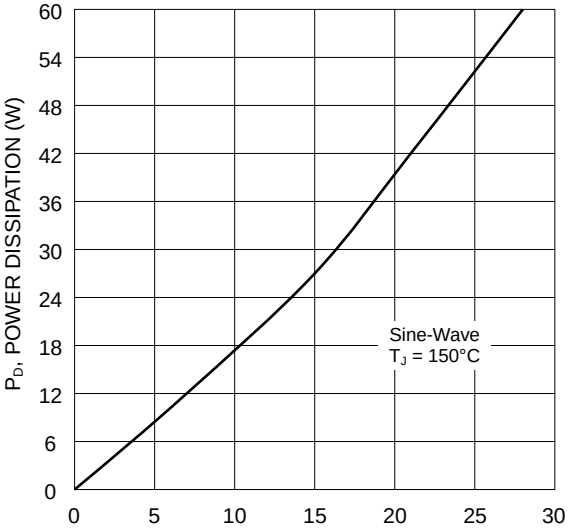


Fig. 5 Forward Power Dissipation

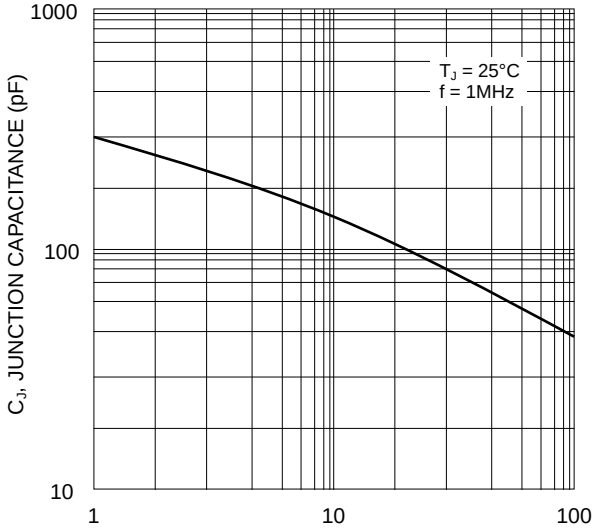
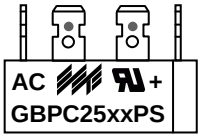


Fig. 6 Typical Junction Capacitance

MARKING INFORMATION



GBPC25xxPS	= 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
GBPC25xxPS	Square Bridge	50 Units/Box

1. Shipping quantity given is for minimum packing quantity only. For minimum order quantity, please consult the Sales Department.
2. **To order RoHS / Lead Free version (with Lead Free finish), add "-LF" suffix to part number above. For example, GBPC2500PS-LF**.

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We power your everyday.