4GBJ15005 THRU 4GBJ1510

Glass Passivated Bridge Rectifiers

Reverse Voltage - 50 to 1000 Volts Forward Current - 15 Amperes

Features

- Glass passivated chip
- Low forward voltage drop
- Ideal for printed circuit board
- High surge current capability
- •Meet UL flammability classification 94V-0

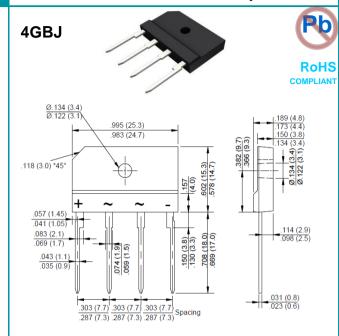
Mechanical Data

- Polarity: Symbol marked on body
- Mounting position: Any

Note: Products with logo are made by HY Electronic (Cayman) Limited.

Applications

 General purpose use in AC/DC bridge full wave rectification, for SMPS, lighting ballaster, adapter, etc.



Package Outline Dimensions in Inches (Millimeters)

Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

Characteristics	Symbol	4GBJ	4GBJ	4GBJ	4GBJ	4GBJ	4GBJ	4GBJ	Unit
	Symbol	15005	1501	1502	1504	1506	1508	1510	
Maximum Repetitive Peak Reverse Voltage	Vrrm	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	VRMS	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	Vdc	50	100	200	400	600	800	1000	V
Maximum Average Forward (with heatsink Note 2)	I(AV)	15.0							А
Rectified Current @ Tc=100°C (without heatsink)	I(AV)	3.2							
Peak Forward Surge Current, 8.3mS Single Half Sine-Wave,	IFSM	240							А
Superimposed on Rated Load (JEDEC Method)	IFSIVI								
I ² t Rating for Fusing (t<8.3mS)	l ² t	240							A ² s
Peak Forward Voltage per Diode at 7.5A DC	VF	1.1							V
Maximum DC Reverse Current at Rated @TJ=25℃	l _R	5.0							μА
DC Blocking Voltage per Diode @TJ=125℃	IK	500							
Operating Junction Temperature Range	TJ	-55 to +150							$^{\circ}$
Storage Temperature Range	Тѕтс	-55 to +150							$^{\circ}$
	-	-							

Notes: 1. Measured at 1.0 MHz and applied reverse voltage of 4.0V DC.

3. The typical data above is for reference only

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Fig. 1 - Forward Current Derating Curve

15

With heatsink

9

Without heatsink

0

50

300
8.3mS Single Half-Sine-Wave
(JEDEC METOD)

150
100
50
1 100
100

Fig. 2 - Maximum Non-Repetitive Surge Current

Fig. 3 - Typical Reverse Characteristics

Case Temperature (°C)

100

150

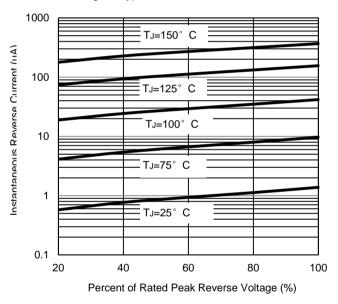
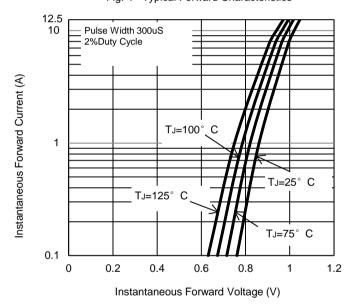


Fig. 4 - Typical Forward Characteristics

Number of Cycles at 60Hz





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