

GBU15005 THRU GBU1510

Glass Passivated Bridge Rectifiers			Reverse Voltage - 50 to 1000 Volts Forward Current - 15 Amperes							
Features		GBL	J						Pb	
 Glass passivated chip 				11.1)						
● Low forward voltage drop			.430	(10.9)		.126(3.2)*		9(3.53) 9(3.37)	RoHS	
Ideal for printed circuit board			-	.874(22.2		CHAMFE	R	· · · ·	OMPLIAN	
High surge current capability		1	_		154(3.9)					
 Meet UL flammability classification 94V-0 		.752(19.1) .720(18.3)			146(3.5)	.232(5.9)				
Mechanical Data		.091(2.4 .067(1.7		\bigcirc		.40	01(10.2) 92(9.80)			
 Polarity: Symbol marked on body 										
Mounting position: Any Applications		.680(17.2	<u></u>				106(2.7) 091(2.3) 022(.56)	_ _		
 General purpose use in AC/DC bridge full wave rectification, 			.19 (5.	0 .190 3) (5.3)	.190 (5.3)		018(.46)			
for SMPS, lighting ballaster, adapter, etc.		$\overline{(4.8)} \overline{(4.8)} \overline{(4.8)}$								
		Pa	ckage (Dutline [Dimensi	ons in l	nches (Millimete	ers)	
Rating at 25°C ambient temperature unless otherwise specified. Single phase, half wave, 60Hz, resistive or inductive load.										
	Symbol	GBU	GBU	GBU	GBU	GBU	GBU	GBU	Unit	
Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%. Characteristics	Symbol	GBU 15005	GBU 1501	GBU 1502	GBU 1504	GBU 1506	GBU 1508	GBU 1510		
Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%. Characteristics Maximum Repetitive Peak Reverse Voltage	Symbol VRRM	15005 50						1510 1000	Unit V	
Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%. Characteristics		15005	1501	1502	1504	1506	1508	1510		
Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%. Characteristics Maximum Repetitive Peak Reverse Voltage	Vrrm	15005 50	1501 100	1502 200	1504 400	1506 600	1508 800	1510 1000	V	
Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%. Characteristics Maximum Repetitive Peak Reverse Voltage Maximum RMS Voltage	VRRM VRMS VDC	15005 50 35	1501 100 70	1502 200 140	1504 400 280 400 15.0	1506 600 420	1508 800 560	1510 1000 700	V V V	
Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%. Characteristics Maximum Repetitive Peak Reverse Voltage Maximum RMS Voltage Maximum DC Blocking Voltage	VRRM VRMS	15005 50 35	1501 100 70	1502 200 140	1504 400 280 400	1506 600 420	1508 800 560	1510 1000 700	V	
Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%. Characteristics Maximum Repetitive Peak Reverse Voltage Maximum RMS Voltage Maximum DC Blocking Voltage Maximum Average Forward Rectified Current (with heatsink Note 2) '@ TC=100°C (without heatsink) Peak Forward Surge Current, 8.3mS Single Half Sine-Wave,	VRRM VRMS VDC	15005 50 35	1501 100 70	1502 200 140	1504 400 280 400 15.0	1506 600 420	1508 800 560	1510 1000 700	V V V	
Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%. Characteristics Maximum Repetitive Peak Reverse Voltage Maximum RMS Voltage Maximum DC Blocking Voltage Maximum Average Forward Rectified Current (with heatsink Note 2) '@ TC=100°C (without heatsink) Peak Forward Surge Current, 8.3mS Single Half Sine-Wave, Superimposed on Rated Load (JEDEC Method)	VRRM VRMS VDC I(AV) IFSM	15005 50 35	1501 100 70	1502 200 140	1504 400 280 400 15.0 3.2	1506 600 420	1508 800 560	1510 1000 700	V V V A A	
Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%. Characteristics Maximum Repetitive Peak Reverse Voltage Maximum RMS Voltage Maximum DC Blocking Voltage Maximum Average Forward Rectified Current (with heatsink Note 2) '@ TC=100°C (without heatsink)	VRRM VRMS VDC I(AV)	15005 50 35	1501 100 70	1502 200 140	1504 400 280 400 15.0 3.2 240	1506 600 420	1508 800 560	1510 1000 700	V V V A	
Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%. Characteristics Maximum Repetitive Peak Reverse Voltage Maximum RMS Voltage Maximum DC Blocking Voltage Maximum Average Forward Rectified Current (with heatsink Note 2) '@ TC=100°C (without heatsink) Peak Forward Surge Current, 8.3mS Single Half Sine-Wave, Superimposed on Rated Load (JEDEC Method) I ² t Rating for Fusing (t<8.3mS) Peak Forward Voltage per Diode at 7.5A DC	VRRM VRMS VDC I(AV) IFSM I ² t VF	15005 50 35	1501 100 70	1502 200 140	1504 400 280 400 15.0 3.2 240 239	1506 600 420	1508 800 560	1510 1000 700	V V V A A A A ² s V	
Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%. Characteristics Maximum Repetitive Peak Reverse Voltage Maximum RMS Voltage Maximum DC Blocking Voltage Maximum Average Forward Rectified Current (with heatsink Note 2) '@ TC=100°C (without heatsink) Peak Forward Surge Current, 8.3mS Single Half Sine-Wave, Superimposed on Rated Load (JEDEC Method) I ² t Rating for Fusing (t<8.3mS) Peak Forward Voltage per Diode at 7.5A DC Maximum DC Reverse Current at Rated @TJ=25°C	VRRM VRMS VDC I(AV) IFSM I ² t	15005 50 35	1501 100 70	1502 200 140	1504 400 280 400 15.0 3.2 240 239 1.0	1506 600 420	1508 800 560	1510 1000 700	V V V A A A	
Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%. Characteristics Maximum Repetitive Peak Reverse Voltage Maximum RMS Voltage Maximum DC Blocking Voltage Maximum Average Forward Rectified Current (with heatsink Note 2) '@ TC=100°C (without heatsink) Peak Forward Surge Current, 8.3mS Single Half Sine-Wave, Superimposed on Rated Load (JEDEC Method) I ² t Rating for Fusing (t<8.3mS) Peak Forward Voltage per Diode at 7.5A DC	VRRM VRMS VDC I(AV) IFSM I ² t VF	15005 50 35	1501 100 70	1502 200 140	1504 400 280 400 15.0 3.2 240 239 1.0 5.0	1506 600 420	1508 800 560	1510 1000 700	V V V A A A A ² s V	
Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%. Characteristics Maximum Repetitive Peak Reverse Voltage Maximum RMS Voltage Maximum DC Blocking Voltage Maximum Average Forward Rectified Current (with heatsink Note 2) '@ TC=100°C (without heatsink) Peak Forward Surge Current, 8.3mS Single Half Sine-Wave, Superimposed on Rated Load (JEDEC Method) I ² t Rating for Fusing (t<8.3mS) Peak Forward Voltage per Diode at 7.5A DC Maximum DC Reverse Current at Rated @TJ=25°C DC Blocking Voltage per Diode @TJ=125°C	VRRM VRMS VDC I(AV) IFSM I ² t VF IR	15005 50 35	1501 100 70	1502 200 140	1504 400 280 400 15.0 3.2 240 239 1.0 5.0 500	1506 600 420	1508 800 560	1510 1000 700	V V A A A ² s V μΑ	
Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%. Characteristics Maximum Repetitive Peak Reverse Voltage Maximum RMS Voltage Maximum DC Blocking Voltage Maximum Average Forward Rectified Current (with heatsink Note 2) '@ TC=100°C (without heatsink) Peak Forward Surge Current, 8.3mS Single Half Sine-Wave, Superimposed on Rated Load (JEDEC Method) I ² t Rating for Fusing (t<8.3mS) Peak Forward Voltage per Diode at 7.5A DC Maximum DC Reverse Current at Rated @TJ=25°C DC Blocking Voltage per Diode @TJ=125°C Typical Junction Capacitance per Diode (Note1)	VRRM VRMS VDC I(AV) IFSM I ² t VF IR R CJ	15005 50 35	1501 100 70	1502 200 140	1504 400 280 400 15.0 3.2 240 239 1.0 5.0 500 70	1506 600 420	1508 800 560	1510 1000 700	V V A A A ² s V μΑ	
Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%. Characteristics Maximum Repetitive Peak Reverse Voltage Maximum RMS Voltage Maximum DC Blocking Voltage Maximum Average Forward Rectified Current (with heatsink Note 2) '@ TC=100°C (without heatsink) Peak Forward Surge Current, 8.3mS Single Half Sine-Wave, Superimposed on Rated Load (JEDEC Method) I ² t Rating for Fusing (t<8.3mS) Peak Forward Voltage per Diode at 7.5A DC Maximum DC Reverse Current at Rated @TJ=25°C DC Blocking Voltage per Diode @TJ=125°C Typical Junction Capacitance per Diode (Note1) Typical Thermal Resistance to Ambient (Note2)	VRRM VRMS VDC I(AV) IFSM I ² t VF IR IR CJ R0JA	15005 50 35	1501 100 70	1502 200 140	1504 400 280 400 15.0 3.2 240 239 1.0 5.0 500 70 8	1506 600 420	1508 800 560	1510 1000 700	V V A A A ² s V μA pF	
Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%. Characteristics Maximum Repetitive Peak Reverse Voltage Maximum RMS Voltage Maximum DC Blocking Voltage Maximum Average Forward Rectified Current (with heatsink Note 2) '@ TC=100°C (without heatsink) Peak Forward Surge Current, 8.3mS Single Half Sine-Wave, Superimposed on Rated Load (JEDEC Method) I ² t Rating for Fusing (t<8.3mS) Peak Forward Voltage per Diode at 7.5A DC Maximum DC Reverse Current at Rated @TJ=25°C DC Blocking Voltage per Diode @TJ=125°C Typical Junction Capacitance per Diode (Note1) Typical Thermal Resistance to Ambient (Note2) Typical Thermal Resistance to case (Note2)	VRRM VRMS VDC I(AV) IFSM I ² t VF IR IR RØJA RØJA	15005 50 35	1501 100 70	1502 200 140 200	1504 400 280 400 15.0 3.2 240 239 1.0 5.0 500 70 8 8 2	1506 600 420 600	1508 800 560	1510 1000 700	V V A A A ² s V μA pF	

2.Device mounted on 100mm*100mm*1.6mm Cu plate heatsink.

3. The typical data above is for reference only

Rating and Characteristic Curves GBU15005 THRU GBU1510

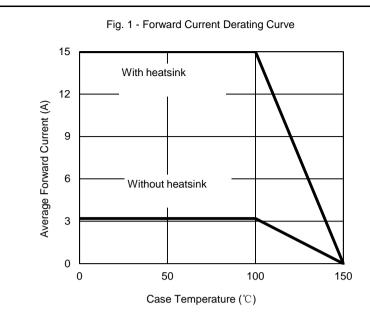
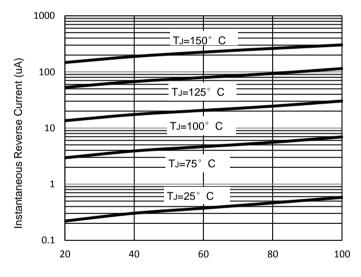


Fig. 3 - Typical Reverse Characteristics



Percent of Rated Peak Reverse Voltage (%)

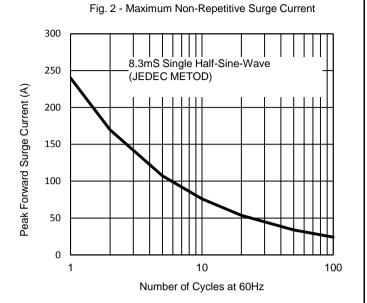
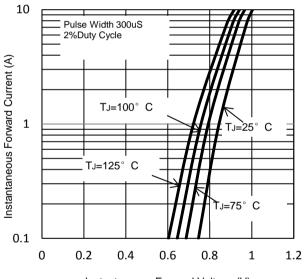


Fig. 4 - Typical Forward Characteristics



Instantaneous Forward Voltage (V)

The curve above is for reference only.

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