

GBJ15005 THRU GBJ1510

Glass Passivated Bridge Rectifiers		Reverse Voltage - 50 to 1000 Volts Forward Current - 15 Amperes							
Features Glass passivated chip Low forward voltage drop 		GB.	J	5	1			c	RoHS OMPLIANT
 High surge current capability Meet UL flammability classification 94V-0 		с	.118(3.0) X45°	<u>1.193(3)</u> 1.169(2)	0.3) 9.7)		.189(.173(4.8) 4.4) <u>.150(3.8)</u> .134(3.4)	
Mechanical Data			Y			700/20.2		i .	
 Polarity: Symbol marked on body 			0) -	0	.776(19.7	<u>)</u> 441(11.2)		
Mounting position: Any		$\begin{array}{c ccccccccccccccccccccccccccccccccccc$					-		
Applications				.303	.303		L I	031(0.7)	
 General purpose use in AC/DC bridge full wave rectification, 				.287 (7.3)	287			.024(0.6)	
for SMPS, lighting ballaster, adapter, etc.			<u>.40</u> .3	0 <u>2(10.2)</u> 86(9.8)					
		Pa	ckage C	Dutline I	Dimens	ions in I	nches ((Millimet	ers)
Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.									
Characteristics	Symbol	GBJ	GB.I	0.0.1					
Maximum Repetitive Peak Reverse Voltage		15005	1501	GBJ 1502	GBJ 1504	GBJ 1506	GBJ 1508	GBJ 1510	Unit
	Vrrm	15005 50	1501 100	GBJ 1502 200	GBJ 1504 400	GBJ 1506 600	GBJ 1508 800	GBJ 1510 1000	Unit V
Maximum RMS Voltage	Vrrm Vrms	15005 50 35	1501 100 70	GBJ 1502 200 140	GBJ 1504 400 280	GBJ 1506 600 420	GBJ 1508 800 560	GBJ 1510 1000 700	Unit V V
Maximum RMS Voltage Maximum DC Blocking Voltage	VRRM VRMS VDC	15005 50 35 50	1501 100 70 100	GBJ 1502 200 140 200	GBJ 1504 400 280 400	GBJ 1506 600 420 600	GBJ 1508 800 560 800	GBJ 1510 1000 700 1000	Unit V V V
Maximum RMS Voltage Maximum DC Blocking Voltage Maximum Average Forward (with heatsink Note 2)	VRRM VRMS VDC	15005 50 35 50	1501 100 70 100	GBJ 1502 200 140 200	GBJ 1504 400 280 400 15.0	GBJ 1506 600 420 600	GBJ 1508 800 560 800	GBJ 1510 1000 700 1000	Unit V V V
Maximum RMS Voltage Maximum DC Blocking Voltage Maximum Average Forward (with heatsink Note 2) Rectified Current @ Tc=100°C (without heatsink)	VRRM VRMS VDC I(AV)	15005 50 35 50	1501 100 70 100	GBJ 1502 200 140 200	GBJ 1504 400 280 400 15.0 3.2	GBJ 1506 600 420 600	GBJ 1508 800 560 800	GBJ 1510 1000 700 1000	Unit V V V A
Maximum RMS Voltage Maximum DC Blocking Voltage Maximum Average Forward (with heatsink Note 2) Rectified Current @ Tc=100°C (without heatsink) Peak Forward Surge Current, 8.3mS Single Half Sine-Wave,	VRRM VRMS VDC I(AV)	15005 50 35 50	1501 100 70 100	GBJ 1502 200 140 200	GBJ 1504 400 280 400 15.0 3.2 240	GBJ 1506 600 420 600	GBJ 1508 800 560 800	GBJ 1510 1000 700 1000	Unit V V V A
Maximum RMS Voltage Maximum DC Blocking Voltage Maximum Average Forward (with heatsink Note 2) Rectified Current @ 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 50	1501 100 70 100	GBJ 1502 200 140 200	GBJ 1504 400 280 400 15.0 3.2 240	GBJ 1506 600 420 600	GBJ 1508 800 560 800	GBJ 1510 1000 700 1000	Unit V V V A A
Maximum RMS Voltage Maximum DC Blocking Voltage Maximum Average Forward (with heatsink Note 2) Rectified Current @ 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)	VRRM VRMS VDC I(AV) IFSM I ² t	15005 50 35 50	1501 100 70 100	GBJ 1502 200 140 200	GBJ 1504 400 280 400 15.0 3.2 240 239	GBJ 1506 600 420 600	GBJ 1508 800 560 800	GBJ 1510 1000 700 1000	Unit V V V A A A ² s
Maximum RMS Voltage Maximum DC Blocking Voltage Maximum Average Forward (with heatsink Note 2) Rectified Current @ 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)	VRRM VRMS VDC I(AV) IFSM I ² t VF	15005 50 35 50	1501 100 70 100	GBJ 1502 200 140 200	GBJ 1504 400 280 400 15.0 3.2 240 239 1.1	GBJ 1506 600 420 600	GBJ 1508 800 560 800	GBJ 1510 1000 700 1000	Unit V V A A A A ² s V
Maximum RMS Voltage Maximum DC Blocking Voltage Maximum Average Forward (with heatsink Note 2) Rectified Current @ 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)	VRRM VRMS VDC I(AV) IFSM I ² t VF IR	15005 50 35 50	1501 100 70 100	GBJ 1502 200 140 200	GBJ 1504 400 280 400 15.0 3.2 240 239 1.1 5.0	GBJ 1506 600 420 600	GBJ 1508 800 560 800	GBJ 1510 1000 700 1000	Unit V V A A A A ² s V
Maximum RMS Voltage Maximum DC Blocking Voltage Maximum Average Forward (with heatsink Note 2) Rectified Current @ 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 50	1501 100 70 100	GBJ 1502 200 140 200	GBJ 1504 400 280 400 15.0 3.2 240 239 1.1 5.0 500	GBJ 1506 600 420 600	GBJ 1508 800 560 800	GBJ 1510 1000 700 1000	Unit V V A A A A ² s V µA
Maximum RMS Voltage Maximum DC Blocking Voltage Maximum Average Forward (with heatsink Note 2) Rectified Current @ 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 CJ	15005 50 35 50	1501 100 70 100	GBJ 1502 200 140 200	GBJ 1504 400 280 400 15.0 3.2 240 239 1.1 5.0 500 60	GBJ 1506 600 420 600	GBJ 1508 800 560 800	GBJ 1510 1000 700 1000	Unit V V A A A A ² s V µA pF
Maximum RMS Voltage Maximum DC Blocking Voltage Maximum Average Forward (with heatsink Note 2) Rectified Current @ 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 CJ RØJA	15005 50 35 50	1501 100 70 100	GBJ 1502 200 140 200	GBJ 1504 400 280 400 15.0 3.2 240 239 1.1 5.0 500 60 23.0	GBJ 1506 600 420 600	GBJ 1508 800 560 800	GBJ 1510 700 1000	Unit V V A A A A ² s V µA pF
Maximum RMS Voltage Maximum DC Blocking Voltage Maximum Average Forward (with heatsink Note 2) Rectified Current @ 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 CJ RØJA RØJC	15005 50 35 50	1501 100 70 100	GBJ 1502 200 140 200	GBJ 1504 400 280 400 15.0 3.2 240 239 1.1 5.0 60 23.0 4.2	GBJ 1506 600 420 600	GBJ 1508 800 560 800	GBJ 1510 700 1000	Unit V V A A A A A ² s V µA pF
Maximum RMS Voltage Maximum DC Blocking Voltage Maximum Average Forward (with heatsink Note 2) Rectified Current @ 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) Typical Thermal Resistance to lead (Note2)	VRRM VRMS VDC I(AV) IFSM I ² t VF IR IR CJ R0JA R0JC R0JL	15005 50 35 50	1501 100 70 100	GBJ 1502 200 140 200	GBJ 1504 400 280 400 280 400 280 400 280 400 280 400 3.2 240 239 1.1 5.0 60 23.0 4.2 5.0	GBJ 1506 600 420 600	GBJ 1508 800 560 800	GBJ 1510 700 1000	Unit V V A A A ² s V μA pF
Maximum RMS Voltage Maximum DC Blocking Voltage Maximum Average Forward (with heatsink Note 2) Rectified Current @ 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) Typical Thermal Resistance to lead (Note2) Operating Junction Temperature Range	VRRM VRMS VDC I(AV) IFSM I ² t VF IR IR CJ RØJA RØJA RØJL TJ	15005 50 35 50	1501 100 70 100	GBJ 1502 200 140 200	GBJ 1504 400 280 400 15.0 3.2 240 239 1.1 5.0 60 23.0 4.2 5.0 55 to +115	GBJ 1506 600 420 600	GBJ 1508 800 560 800	GBJ 1510 700 1000	Unit V V A A A A ² s V μA pF °C/W

2.Device mounted on 300mm*300mm*1.6mm Cu plate heatsink.

3. The typical data above is for reference only

Rating and Characteristic Curves GBJ15005 THRU GBJ1510

