

GBJ0802 thru GBJ0812

Feature

- Glass passivated die construction
- Ideal for printed circuit boards
- High surge current capability
- High temperature soldering guaranteed: 265°C /10 seconds, 0.375" (9.5mm) lead length, 5lbs. (2.3kg) tension

Mechanical Data

- Case: Molded plastic case
- Terminals: Plated leads solderable per MIL-STD-750, Method 2026
- Polarity: Marked on Body
- Mounting Position: Any

Maximum value

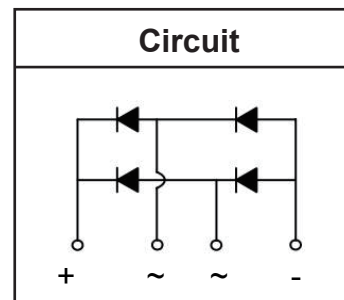
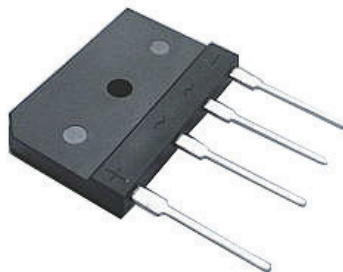
Symbol	Parameter	Rating						Unit
		GBJ0802	GBJ0804	GBJ0806	GBJ0808	GBJ0810	GBJ0812	
VRRM	Reverse peak repetitive voltage	200	400	600	800	1000	1200	V
VRSM	Reverse peak non-repetitive voltage	300	500	700	900	1100	1300	V

Maximum Ratings and Thermal Characteristics (TA = 25°C unless otherwise noted)

Symbol	Conditions	Rating	Unit
Id	Average forward output current sine wave ,R-load Tc =100°C	8	A
IFSM	Peak forward surge current single half sine-wave superimposed on rated load (JEDEC Method) 50Hz Tj=25°C	160	A
I ² t	Rating for fusing (t=1~10ms)	160	A ² S
Viso	A.C.50/60Hz;R.M.S.;1min	2000	V
Tj,Tstg	Operating Junction and storage temperature range	-40 to +150	°C
Ms	Mounting Torque (Recommended torque:0.65 N·m)	0.8	N·m
Wt	Approximate Weight	7	g

Electrical characteristics

Symbol	Conditions	Value	Unit
VFM	Maximum Forward Voltage per leg IFM =5A, Tj=25°C	1.0	V
IRRM	Maximum reverse current at rated blocking voltage per leg Tj=150°C	0.5	mA
Rth(j-c)	Maximum thermal resistance per (Junction to case)	per diode	8
		total	2



GBJ0802 thru GBJ0812

Performance Curves

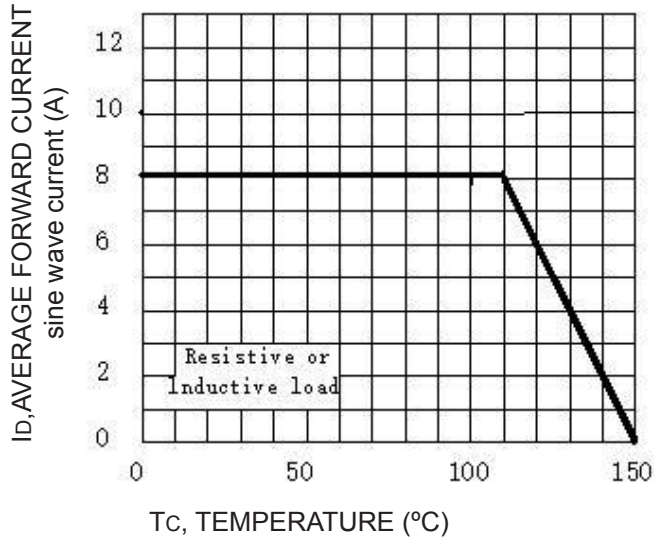


Fig.1 Forward Current Derating Curve

I_F , INSTANTANEOUS FORWARD CURRENT (A)

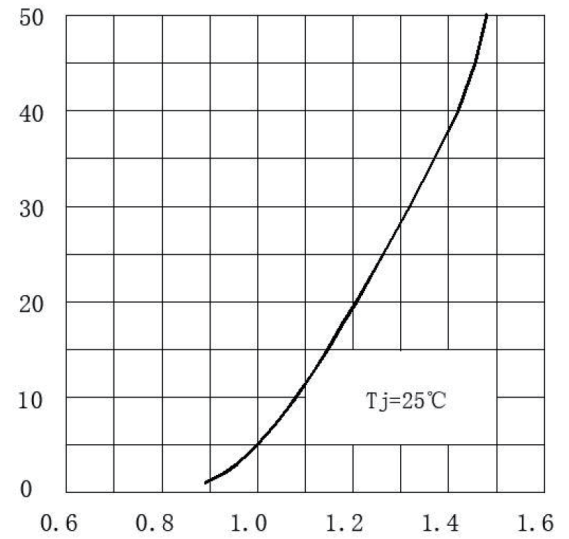


Fig.2 Maximum Forward Characteristics, per element

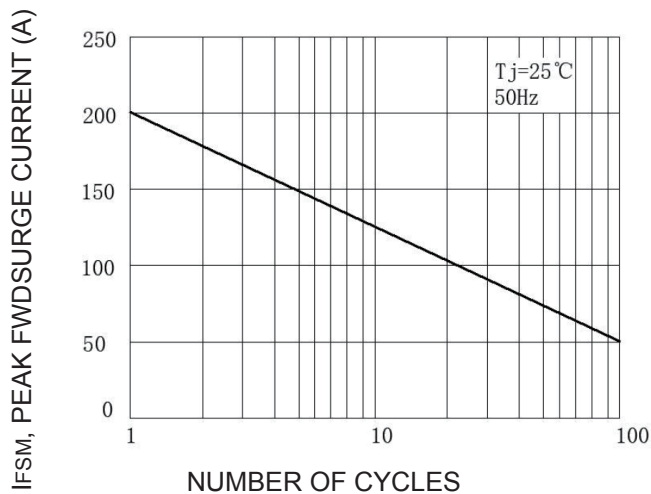
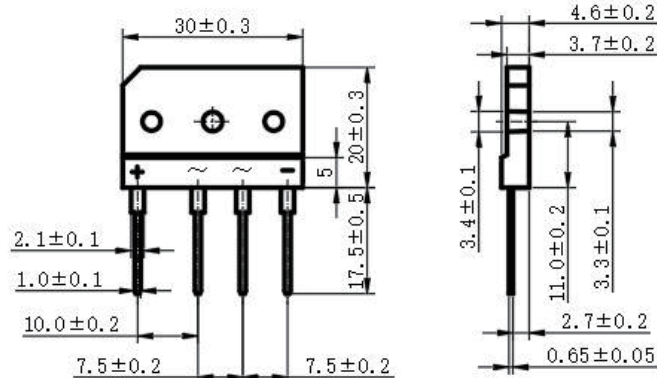


Fig.3 Max Non-Repetitive Surge Current

Outline



Dimensions in inches (mm)

Greegoo Electric Co., Ltd

Add: Jinye Mansion, Lvzhuang, Liushi, Yueqing, Zhejiang, 325604 P.R. China

Tel: +86 577 62776000 Fax: +86 577 62776006

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GBJ1002 thru GBJ1012

Feature

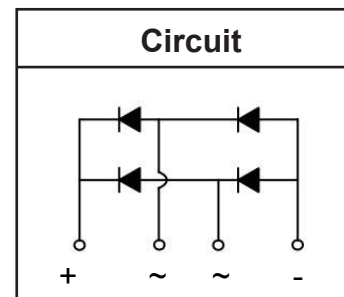
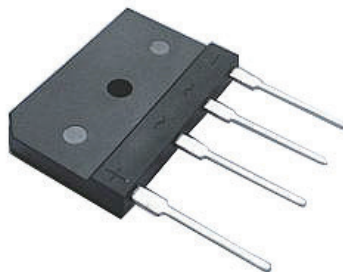
- Glass passivated die construction
- Ideal for printed circuit boards
- High surge current capability
- High temperature soldering guaranteed: 265°C /10 seconds, 0.375" (9.5mm) lead length, 5lbs. (2.3kg) tension

Mechanical Data

- Case: Molded plastic case
- Terminals: Plated leads solderable per MIL-STD-750, Method 2026
- Polarity: Marked on Body
- Mounting Position: Any

Maximum value

Symbol	Parameter	Rating						Unit
		GBJ1002	GBJ1004	GBJ1006	GBJ1008	GBJ1010	GBJ1012	
VRRM	Reverse peak repetitive voltage	200	400	600	800	1000	1200	V
VRSM	Reverse peak non-repetitive voltage	300	500	700	900	1100	1300	V



Maximum Ratings and Thermal Characteristics (TA = 25°C unless otherwise noted)

Symbol	Conditions	Rating	Unit
Id	Average forward output current sine wave ,R-load Tc =100°C	10	A
IFSM	Peak forward surge current single half sine-wave superimposed on rated load (JEDEC Method) 50Hz Tj=25°C	200	A
I ² t	Rating for fusing (t=1~10ms)	200	A ² S
Viso	A.C.50/60Hz;R.M.S.;1min	2000	V
Tj,Tstg	Operating Junction and storage temperature range	-40 to +150	°C
Ms	Mounting Torque (Recommended torque:0.65 N·m)	0.8	N·m
Wt	Approximate Weight	7	g

Electrical characteristics

Symbol	Conditions	Value	Unit
VFM	Maximum Forward Voltage per leg IFM =5A, Tj=25°C	1.0	V
IRRM	Maximum reverse current at rated blocking voltage per leg Tj=150°C	0.5	mA
Rth(j-c)	Maximum thermal resistance per (Junction to case)	per diode	8
		total	2

GBJ1002 thru GBJ1012

Performance Curves

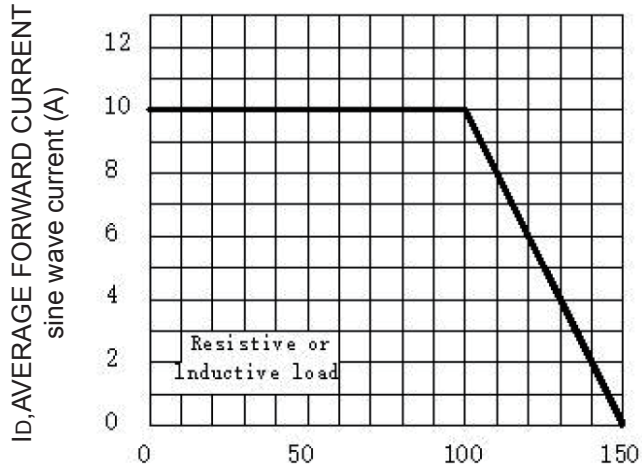


Fig.1 Forward Current Derating Curve

I_F , INSTANTANEOUS FORWARD CURRENT (A)

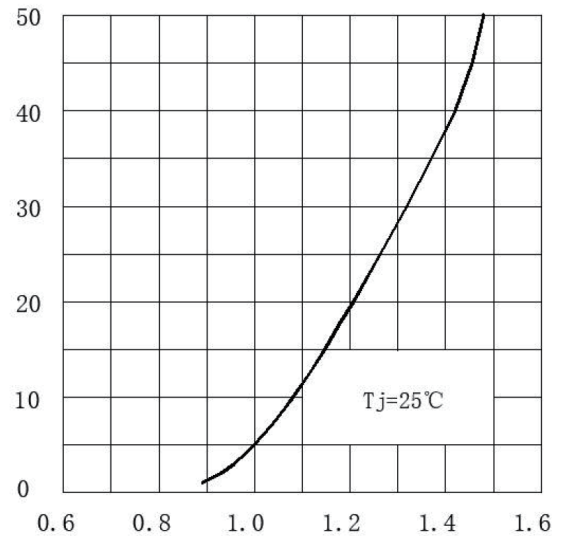


Fig.2 Maximum Forward Characteristics, per element

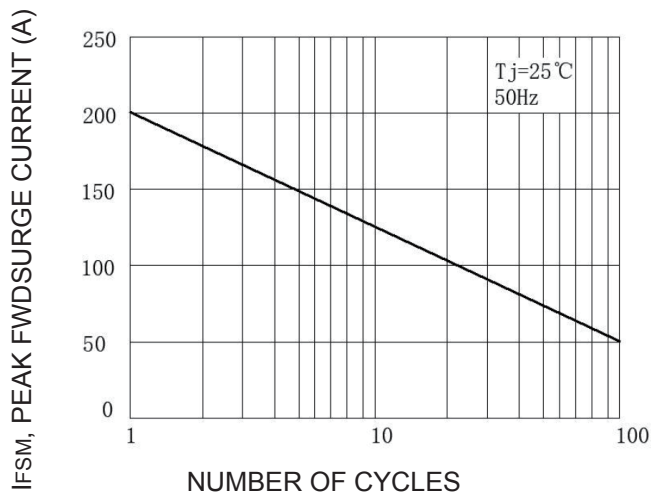
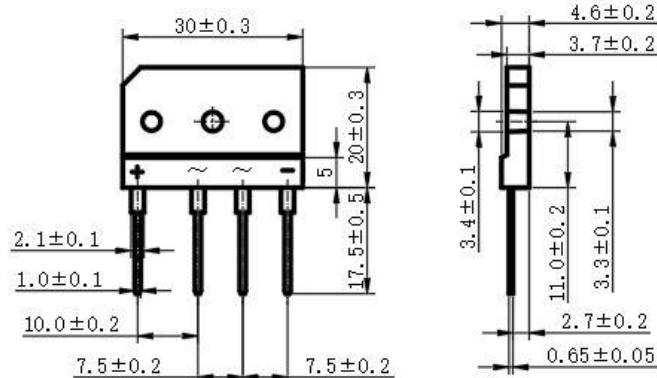


Fig.3 Max Non-Repetitive Surge Current

Outline



Dimensions in inches (mm)

Greegoo Electric Co., Ltd

Add: Jinye Mansion, Lvzhuang, Liushi, Yueqing, Zhejiang, 325604 P.R. China

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GBJ1502 thru GBJ1512

Feature

- Glass passivated die construction
- Ideal for printed circuit boards
- High surge current capability
- High temperature soldering guaranteed: 265°C /10 seconds, 0.375" (9.5mm) lead length, 5lbs. (2.3kg) tension

Mechanical Data

- Case: Molded plastic case
- Terminals: Plated leads solderable per MIL-STD-750, Method 2026
- Polarity: Marked on Body
- Mounting Position: Any

Maximum value

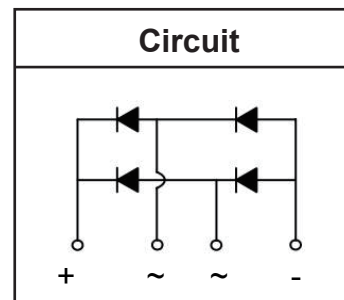
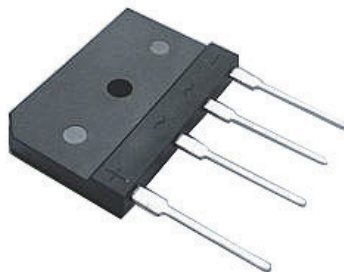
Symbol	Parameter	Rating						Unit
		GBJ1502	GBJ1504	GBJ1506	GBJ1508	GBJ1510	GBJ1512	
VRRM	Reverse peak repetitive voltage	200	400	600	800	1000	1200	V
VRSM	Reverse peak non-repetitive voltage	300	500	700	900	1100	1300	V

Maximum Ratings and Thermal Characteristics (TA = 25°C unless otherwise noted)

Symbol	Conditions	Rating	Unit
Id	Average forward output current sine wave ,R-load Tc =100°C	15	A
IFSM	Peak forward surge current single half sine-wave superimposed on rated load (JEDEC Method) 50Hz Tj=25°C	250	A
I ² t	Rating for fusing (t=1~10ms)	312	A ² S
Viso	A.C.50/60Hz;R.M.S.;1min	2000	V
Tj,Tstg	Operating Junction and storage temperature range	-40 to +150	°C
Ms	Mounting Torque (Recommended torque:0.65 N·m)	0.8	N·m
Wt	Approximate Weight	7	g

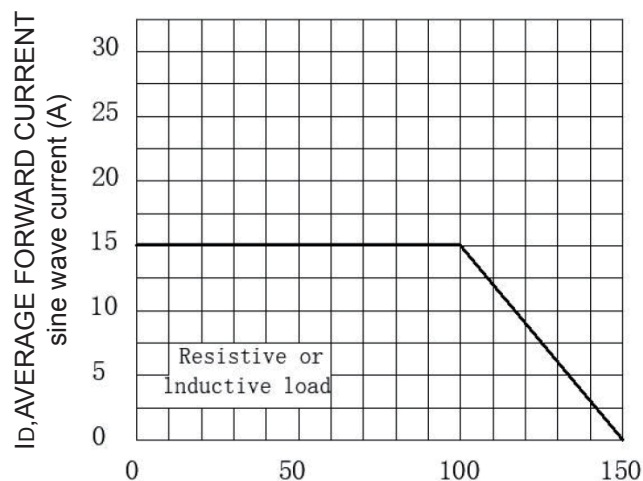
Electrical characteristics

Symbol	Conditions	Value	Unit
VFM	Maximum Forward Voltage per leg IFM =7.5A, Tj=25°C	1.0	V
IRRM	Maximum reverse current at rated blocking voltage per leg Tj=150°C	0.5	mA
Rth(j-c)	Maximum thermal resistance per (Junction to case)	per diode	6
		total	1.5

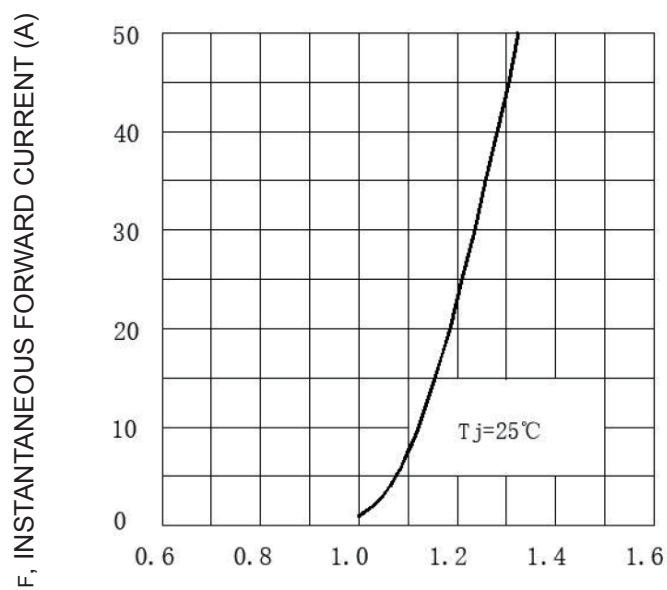


GBJ1502 thru GBJ1512

Performance Curves



T_C, TEMPERATURE (°C)
Fig.1 Forward Current Derating Curve



VF, INSTANTANEOUS FWD VOLTAGE (V)
Fig.2 Maximum Forward Characteristics, per element

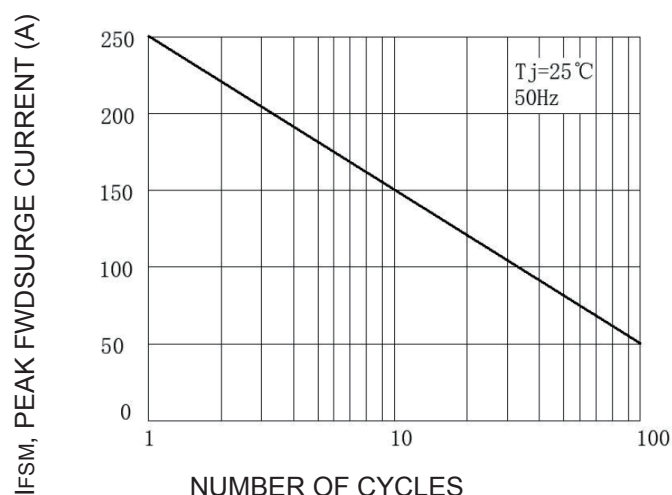
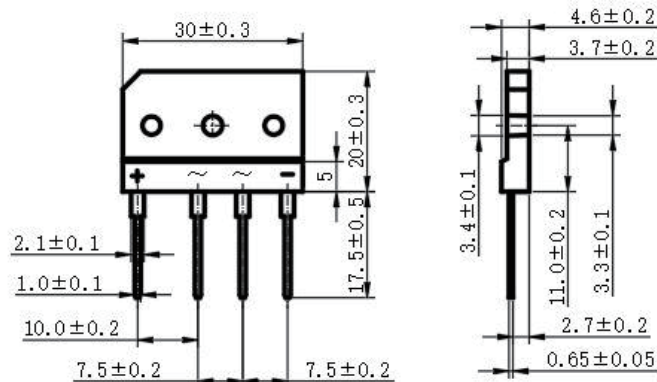


Fig.3 Max Non-Repetitive Surge Current

Outline



Dimensions in inches (mm)

Greegoo Electric Co.,Ltd

Add:Jinye Mansion, Lvzhuang, Liushi, Yueqing, Zhejiang, 325604 P.R. China

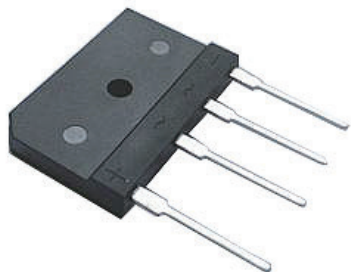
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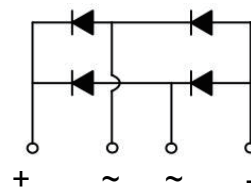
GBJ2502 thru GBJ2512

Feature

- Glass passivated die construction
- Ideal for printed circuit boards
- High surge current capability
- High temperature soldering guaranteed:
265°C /10 seconds, 0.375" (9.5mm)
lead length, 5lbs. (2.3kg) tension



Circuit



Mechanical Data

- Case: Molded plastic case
- Terminals: Plated leads solderable per
MIL-STD-750, Method 2026
- Polarity: Marked on Body
- Mounting Position: Any

Maximum value

Symbol	Parameter	Rating						Unit
		GBJ2502	GBJ2504	GBJ2506	GBJ2508	GBJ2510	GBJ2512	
VRRM	Reverse peak repetitive voltage	200	400	600	800	1000	1200	V
VRSM	Reverse peak non-repetitive voltage	300	500	700	900	1100	1300	V

Maximum Ratings and Thermal Characteristics (TA = 25°C unless otherwise noted)

Symbol	Conditions	Rating	Unit
Id	Average forward output current sine wave ,R-load Tc =100°C	25	A
IFSM	Peak forward surge current single half sine-wave superimposed on rated load (JEDEC Method) 50Hz Tj=25°C	280	A
I ² t	Rating for fusing (t=1~10ms)	392	A ² S
Viso	A.C.50/60Hz;R.M.S.;1min	2000	V
Tj,Tstg	Operating Junction and storage temperature range	-40 to +150	°C
Ms	Mounting Torque (Recommended torque:0.65 N·m)	0.8	N·m
Wt	Approximate Weight	7	g

Electrical characteristics

Symbol	Conditions	Value	Unit
VFM	Maximum Forward Voltage per leg IFM =10A, Tj=25°C	1.1	V
IRRM	Maximum reverse current at rated blocking voltage per leg Tj=150°C	0.5	mA
Rth(j-c)	Maximum thermal resistance per (Junction to case)	per diode	6
		total	1.5

GBJ2502 thru GBJ2512

Performance Curves

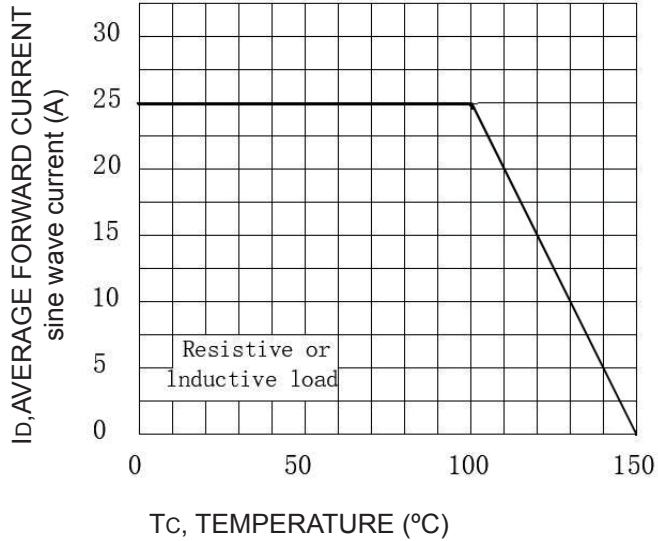


Fig.1 Forward Current Derating Curve

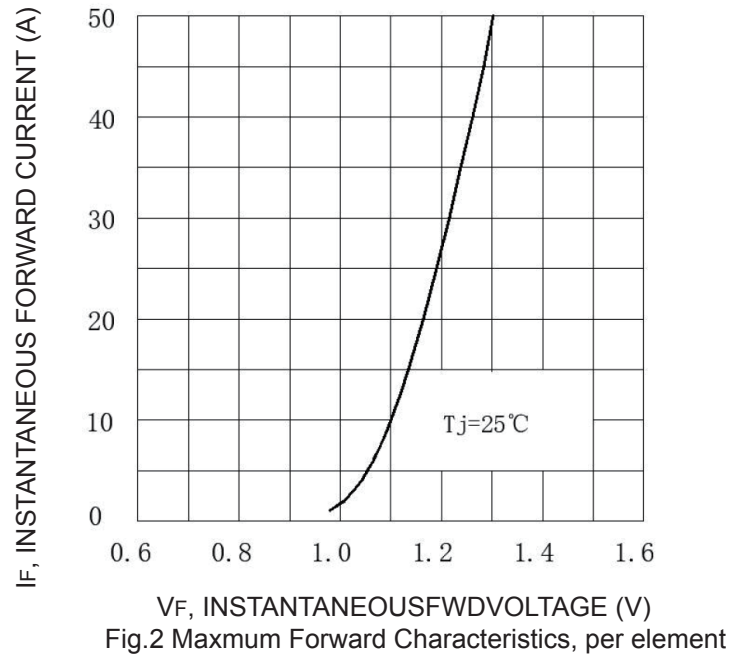


Fig.2 Maximum Forward Characteristics, per element

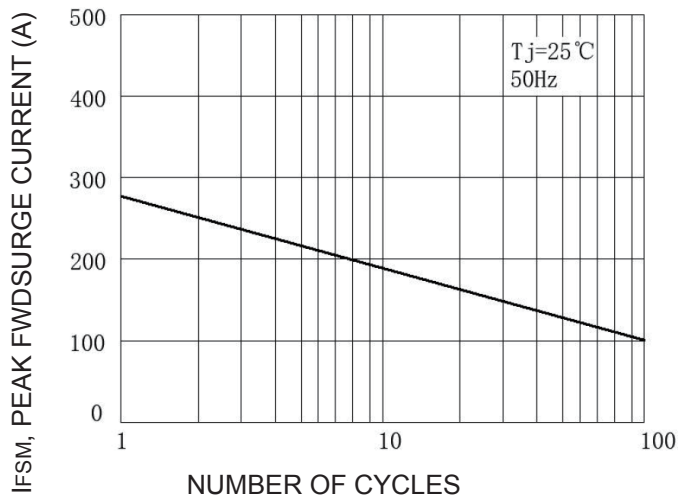
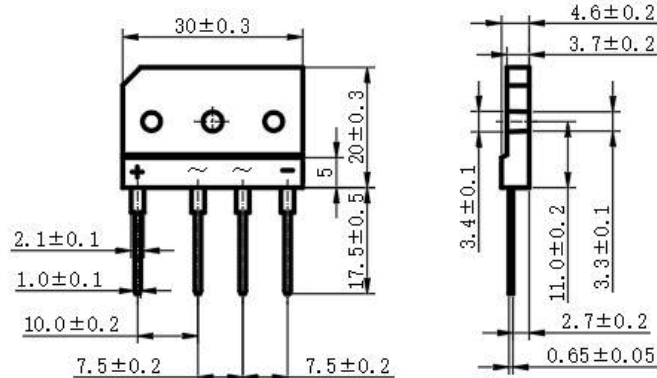


Fig.3 Max Non-Repetitive Surge Current

Outline



Dimensions in inches (mm)

GBJ3502 thru GBJ3512

Feature

- Glass passivated die construction
- Ideal for printed circuit boards
- High surge current capability
- High temperature soldering guaranteed: 265°C /10 seconds, 0.375" (9.5mm) lead length, 5lbs. (2.3kg) tension

Mechanical Data

- Case: Molded plastic case
- Terminals: Plated leads solderable per MIL-STD-750, Method 2026
- Polarity: Marked on Body
- Mounting Position: Any

Maximum value

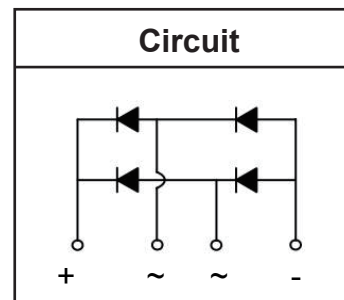
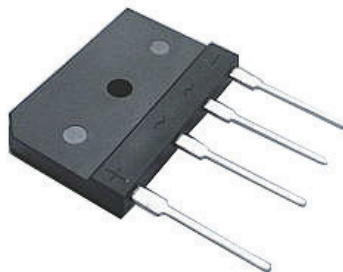
Symbol	Parameter	Rating						Unit
		GBJ3502	GBJ3504	GBJ3506	GBJ3508	GBJ3510	GBJ3512	
VRRM	Reverse peak repetitive voltage	200	400	600	800	1000	1200	V
VRSM	Reverse peak non-repetitive voltage	300	500	700	900	1100	1300	V

Maximum Ratings and Thermal Characteristics (TA = 25°C unless otherwise noted)

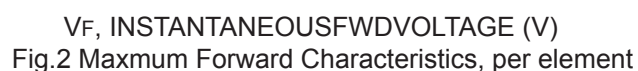
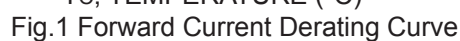
Symbol	Conditions	Rating	Unit
Id	Average forward output current sine wave ,R-load Tc =100°C	35	A
IFSM	Peak forward surge current single half sine-wave superimposed on rated load (JEDEC Method) 50Hz Tj=25°C	400	A
I ² t	Rating for fusing (t=1~10ms)	800	A ² S
Viso	A.C.50/60Hz;R.M.S.;1min	2000	V
Tj,Tstg	Operating Junction and storage temperature range	-40 to +150	°C
Ms	Mounting Torque (Recommended torque:0.65 N·m)	0.8	N·m
Wt	Approximate Weight	7	g

Electrical characteristics

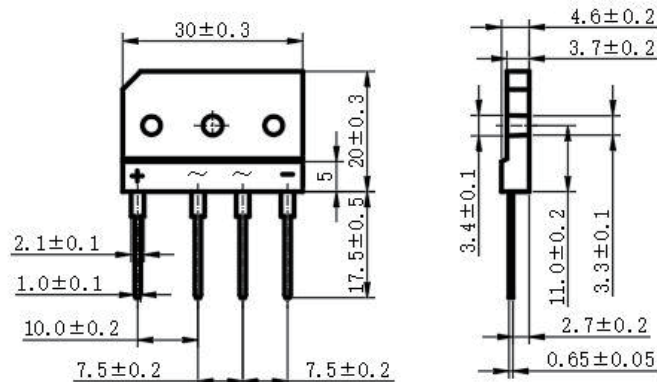
Symbol	Conditions	Value	Unit
VFM	Maximum Forward Voltage per leg IFM =17.5A, Tj=25°C	1.1	V
IRRM	Maximum reverse current at rated blocking voltage per leg Tj=150°C	0.5	mA
Rth(j-c)	Maximum thermal resistance per (Junction to case)	per diode	4
		total	1.0



Performance Curves



Outline



Dimensions in inches (mm)