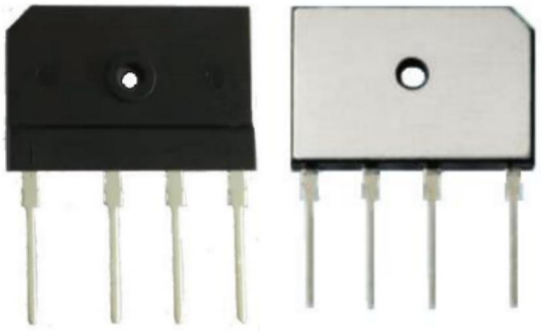
GBJH2506 THRU GBJH2512

25.0A Glass Passivated Single Phase Bridge Rectifiers - 600 - 1200V

Features

- Low forward voltage drop
- High surge current capability
- Reliable low cost construction utilizing molded plastic technique results in inexpensive product
- Glass passivated die construction
- Suffix "-H" indicates Halogen free parts, ex. GBJH2512-H.



HGBJ

Mechanical data

- Epoxy:UL94-V0 rated flame retardant
- Case : Molded plastic, HGBJ
- Terminals : Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity : marked on body
- Mounting Position : Any

Maximum ratings and Electrical Characteristics (AT T_A=25°C unless otherwise noted)

PARAMETER	CONDITIONS	SYMBOL	MIN.	TYP.	MAX.	UNIT
Maximum average forward rectified current	T_C=90°C	$I_{F(AV)}$			25.0	A
Forward surge current	8.3ms single half sine-wave (JEDEC methode)	I_{FSM}			350	A
Reverse current	V_R = V_{RRM} T_A = 25°C	I_R			5.0	μA
	V_R = V_{RRM} T_A = 125°C				500	
Rating for fusing	t < 8.3 ms	I^2t			508	A^2s
Typical Junction capacitance Per Element	Measured at 1.0MHz and applied reverse voltage of 4.0V DC	C_J		75		pF
Typical thermal resistance	Junction to case, With heatsink	$R_{\theta JC}$		0.71		°C/W
Storage temperature		T_{STG}	-55		+150	°C

SYMBOLS	V_{RRM} *1 (V)	V_{RMS} *2 (V)	V_R *3 (V)	V_F *4 (V)	Operating temperature T_J, (°C)
GBJH2506	600	420	600	1.1	-55 to +150
GBJH2508	800	560	800		
GBJH2510	1000	700	1000		
GBJH2512	1200	840	1200		

*1 Repetitive peak reverse voltage

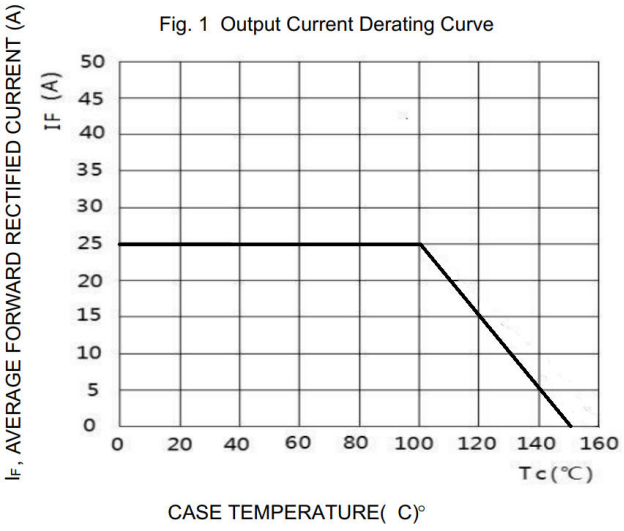
*2 RMS voltage

*3 Continuous reverse voltage

*4 Maximum forward voltage@IF=12.5A

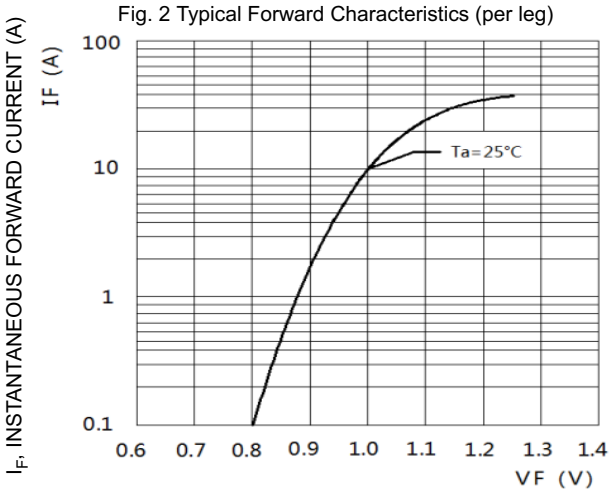
Rating and characteristic curves

Fig. 1 Output Current Derating Curve



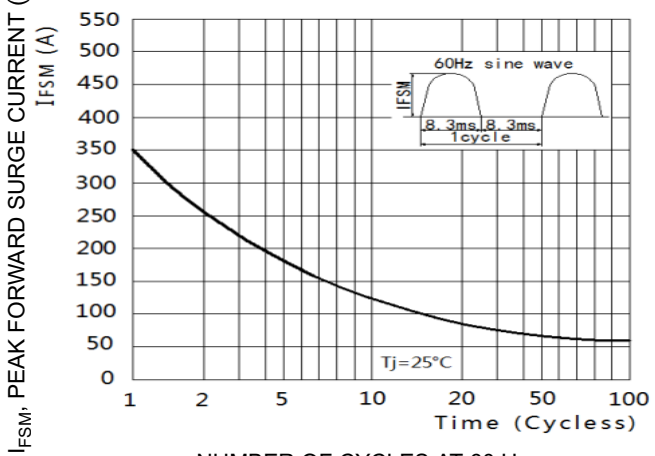
CASE TEMPERATURE(C)°

Fig. 2 Typical Forward Characteristics (per leg)



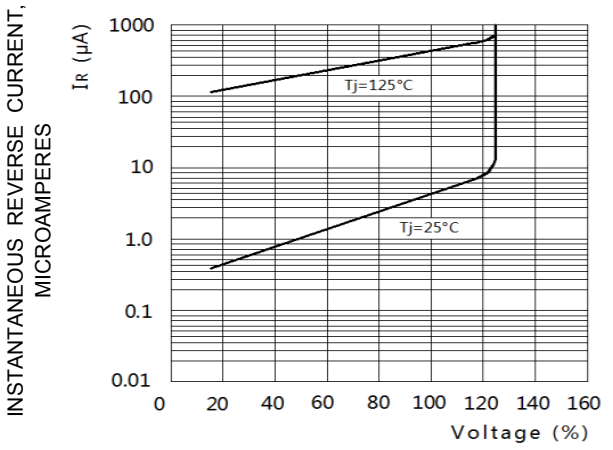
V_F, INSTANTANEOUS FORWARD VOLTAGE (V)

Fig. 3 Maximum Peak Forward Surge Current (per leg)



NUMBER OF CYCLES AT 60 Hz

Fig. 4 TYPICAL REVERSE CHARACTERISTICS



PERCENT OF RATED PEAK REVERSE VOLTAGE

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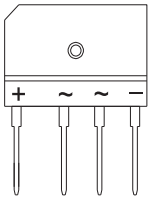
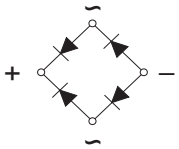
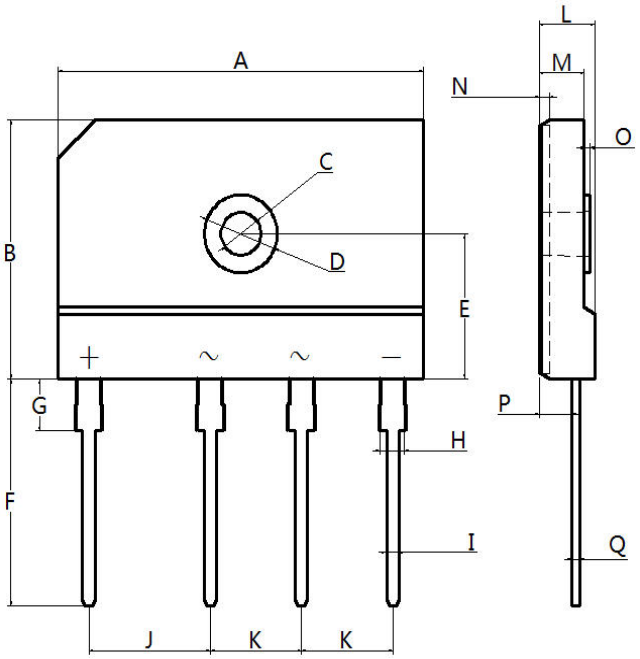
Pinning information

Simplified outline	Symbol
	

Marking

Type number	Marking code
GBJH2506 GBJH2508 GBJH2510 GBJH2512	GBJH2506 GBJH2508 GBJH2510 GBJH2512

HGBJ Package Information



Dim.	Unit(mm)		Unit(inch)	
	Min.	Max.	Min.	Max.
A	29.70	30.30	1.169	1.193
B	19.70	20.30	0.776	0.799
C	3.10	3.50	0.122	0.138
D	5.80	6.20	0.228	0.244
E	11.00	11.40	0.433	0.449
F	17.00	18.00	0.669	0.709
G	3.50	4.50	0.138	0.177
H	1.80	2.20	0.071	0.087
I	0.90	1.10	0.035	0.043
J	9.80	10.20	0.386	0.402
K	7.30	7.70	0.287	0.303
L	4.40	4.80	0.173	0.189
M	3.50	3.90	0.138	0.154
N	0.75	0.95	0.030	0.037
O	0.30	0.70	0.012	0.028
P	2.50	2.90	0.098	0.114
Q	0.55	0.75	0.022	0.030