GBU25B Thru GBU25M

High Current Glass Passivated Molding Single-Phase Bridge Rectifier

Reverse Voltage 100 to 1000V   Forward Current 25A

FEATURES

- Plastic Package has Underwriters Laboratory Flammability Classification 94V-0
- High current capacity with small package
- Glass passivated chip junctions
- Superior thermal conductivity
- High IFSM
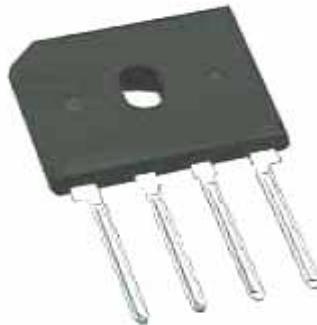
1. Maximum & Thermal Characteristics Ratings at 25 ambient temperature unless otherwise specified.

Parameter Symbol	Symbol	GBU25B	GBU25D	GBU25G	GBU25J	GBU25K	GBU25M	Unit
Maximum repetitive voltage	V_{RRM}	100	200	400	600	800	1000	V
Maximum RMS Voltage	V_{RMS}	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	100	200	400	600	800	1000	V
Maximum DC reverse current TA=25	I_R	5						µA
at rated DC blocking voltage TA=125		500						
Maximum average forward rectified output current at Tc=100	I_o	25						A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load	IFSM	350						A
Rating of fusing (t<8.3ms)	I^2t	300						A^2sec
Dielectric strength terminals to case AC 1 minute Current 1mA	Vdia	2.5						KV
Max instantaneous forward voltage at 12.5A	VF	1.05						V
Maximum thermal on P.C.B. without heat-sink	$R_{\theta JA}$	MAX22						/W
resistance per leg on Al plate heat-sink	$R_{\theta JC}$	MAX2.0						
Operating junction temperature	TJ	-55~150						
Storage temperature	Tstg	-55~150						
Mounting torque	Tor	Rating Torque : 0.8 Suggests 0.45~0.65						N.m

GBU25B Thru GBU25M

## 2. Ratings and Characteristic Curves (TA = 25°C unless otherwise noted)

Fig. 1 Derating Curve

Average Rectified Forward Current Io(A) vs Case Temperature Tc( )
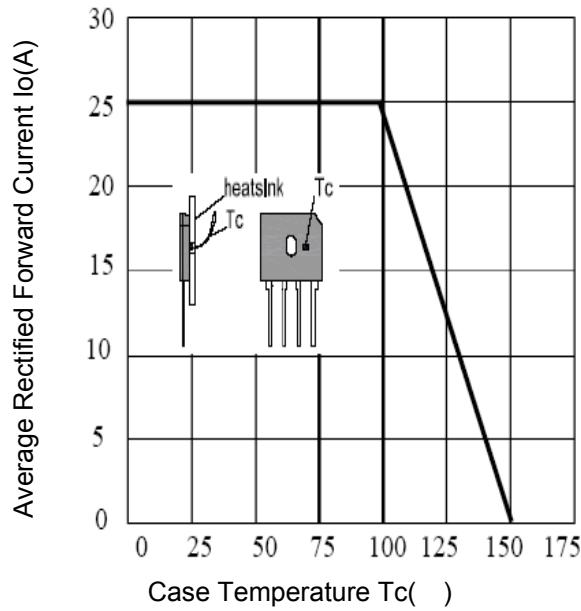
Fig.2 Typical Reverse Characteristics

Instantaneous Reverse Current (μA) vs Percent of Rated Peak Reverse Voltage

Fig.3 Forward Voltage

Forward Current (A) vs Forward Voltage VF
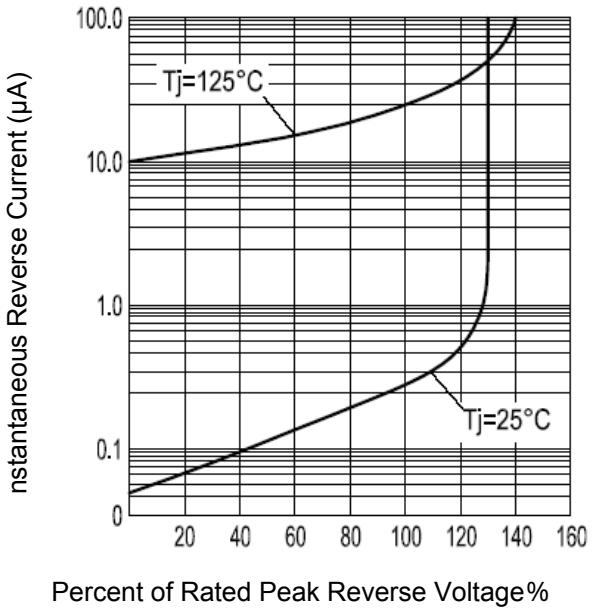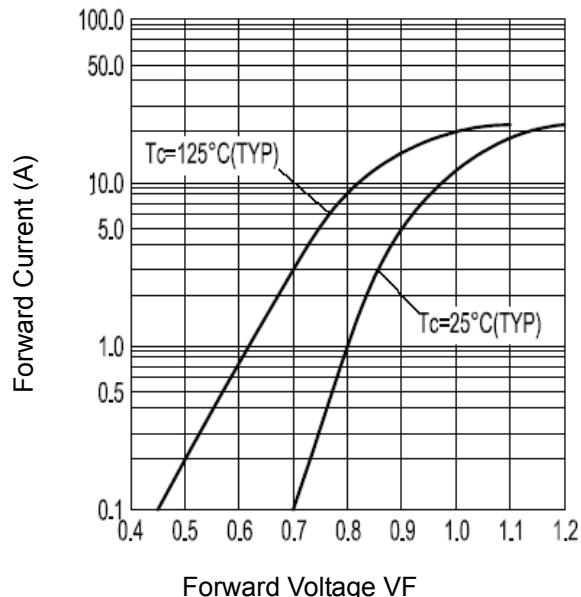
Fig.4 Peak Surge Forward Capability


Peak Surge Forward Current IFSM(A) vs Number of Cycles
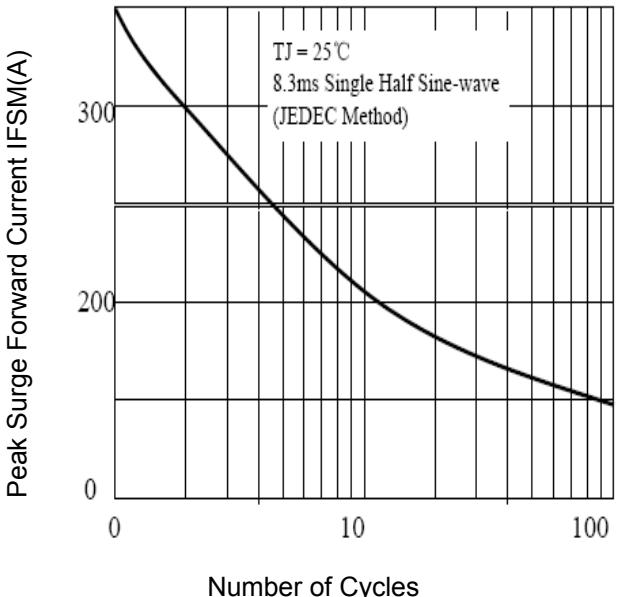
GBU25B Thru GBU25M

3. Marking Identification
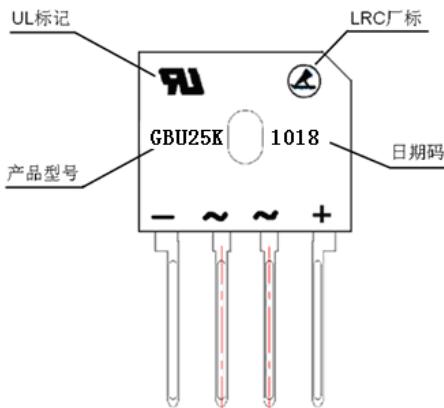
Note

　　　　　　4　　　　　　"1018"　　　　"10"　　2010
"18"　　18　　　　　　　2010　18

GBU 25 K

→ bridge reverse voltage=800V

→ average rectified forward Current=25A

→ mean GBU series bridge

4. Dimension