

Inline bridge

Silicon-Bridge Rectifiers

GBI 25A ... GBI 25M

Forward Current: 25 A

Reverse Voltage: 50 to 1000 V

Publish Data

Features

- max. solder temperature 260°C, max. 5s
- UL recognized, file no. E63532
- Standard packaging: bulk

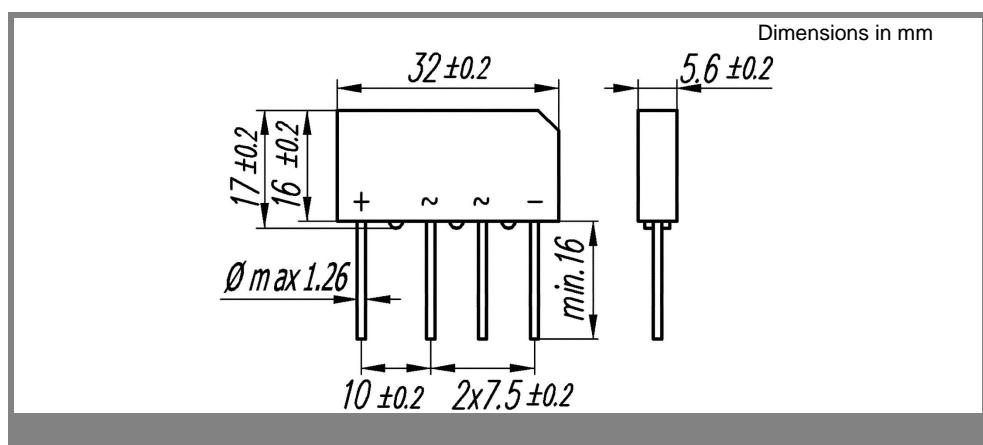
Mechanical Data

- Plastic case 32 * 5,6 * 17 [mm]
- Weight approx. 7g
- Terminals: plated terminals solderable per IEC 68-2-20
- Mounting position : any
- Marking : Type number

Type	Alternating input voltage V _{RMS} V	Repetitive peak reverse voltage V _{RRM} V
GBI 25A	35	50
GBI 25B	70	100
GBI 25D	140	200
GBI 25G	280	400
GBI 25J	420	600
GBI 25K	560	800
GBI 25M	700	1000

Symbol	Conditions	$T_c = 25 \text{ }^\circ\text{C}$ unless otherwise specified	
		Values	Units
I _{FRM}	Repetitive peak forward current; f > 15 Hz ¹⁾	60	A
I ² t	Rating for fusing, t < 10 ms	450	A ² s
I _{FSM}	Peak forward surge current, 50 Hz half sine-wave $T_A = 25 \text{ }^\circ\text{C}$	300	A
I _{FAV}	Max. averaged fwd. current, R-load, $T_A = 50 \text{ }^\circ\text{C}$ ¹⁾	5,0	A
I _{FAV}	Max. averaged fwd. current, C-load, $T_A = 50 \text{ }^\circ\text{C}$ ¹⁾	4,0	A
I _{FAV}	Max. current with cooling fin, R-load, $T_C = 100 \text{ }^\circ\text{C}$ ²⁾	25	A
I _{FAV}	Max. current with cooling fin, C-load, $T_C = 100 \text{ }^\circ\text{C}$ ²⁾	20	A
R _{thA}	Thermal resistance junction to ambient ¹⁾	15	K/W
R _{thC}	Thermal resistance junction to case ¹⁾	1,5	K/W
T _j	Operating junction temperature	- 50 ... + 150	$^\circ\text{C}$
T _s	Storage temperature	- 50 ... + 150	$^\circ\text{C}$

Symbol	Conditions	$T_c = 25 \text{ }^\circ\text{C}$ unless otherwise specified	
		Values	Units
V _F	Maximum forward. voltage, $T_j = 25 \text{ }^\circ\text{C}$; I _F = 12,5 A	1,05	V
I _R	Maximum Leakage current, $T_j = 25 \text{ }^\circ\text{C}$; V _R = V _{RRM}	10	μA
C _J	Typical junction capacitance per leg at V, MHz		pF



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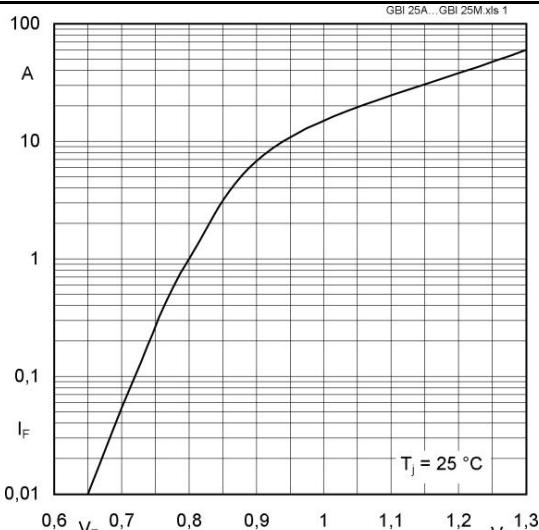


Fig. 1 : Forward characteristics (typical values)

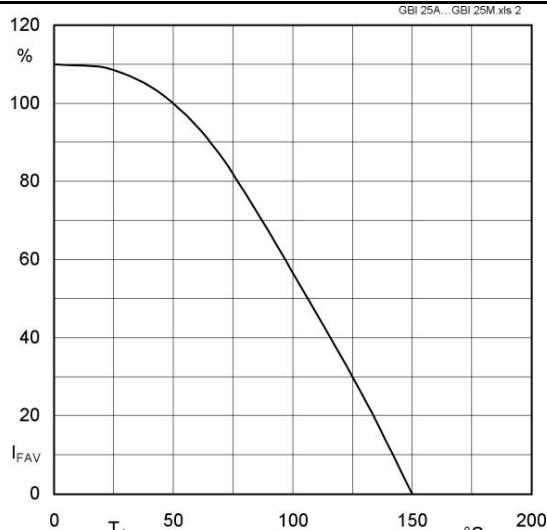


Fig. 2 : Rated forward current vs. ambient temperature