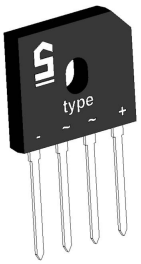
GBU 12A ... GBU 12M ...



Inline bridge

Type	Alternating input voltage V_{RMS} V	Repetetive peak reverse voltage V_{RRM} V
GBU 12A	35	50
GBU 12B	70	100
GBU 12D	140	200
GBU 12G	280	400
GBU 12J	420	600
GBU 12K	560	800
GBU 12M	700	1000

Silicon-Bridge Rectifiers

GBU 12A ... GBU 12M

Forward Current: 12 A

Reverse Voltage: 50 to 1000 V

Publish Data

Features

- max. solder temperature 260ºC, max. 5s
- UL recognized, file no. E63532
- Standard packing: bulk
- V_{ISO} > 2500 V

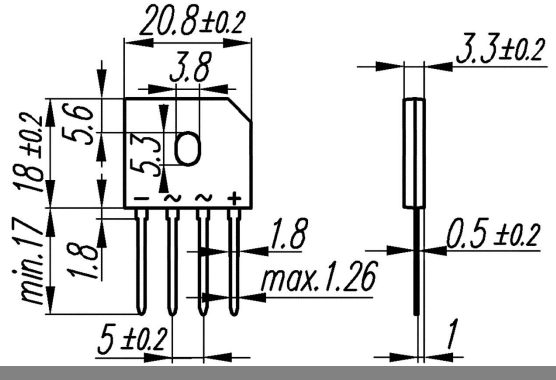
Mechanical Data

- Plastic case 20,8 x 3,3 x18 mm
- Weight approx. 4 g
- Terminals: plated terminals solderable per IEC 68-2-20
- Mounting position: any
- Admissible torque for mouting (M3): 1(+-10%) Nm

Absolute Maximum Ratings		T_c = 25 ºC unless otherwise specified	
Symbol	**Conditions**	**Values**	**Units**
I_{FRM}	Repetitive peak forward current; f > 15 Hz[1)]	60	A
I^2t	Rating for fusing, t < 10 ms	375	A^2s
I_{FSM}	Peak forward surge current, 50 Hz half sine-wave T_A = 25 °C	300	A
I_{FAV}	Max. averaged fwd. current, R-load, T_A = 50 °C [1)]	4	A
I_{FAV}	Max. averaged fwd. current, C-load, T_A = 50 °C [1)]	3,2	A
I_{FAV}	Max. current with cooling fin, R-load, T_C = 100 °C [2)]	12	A
I_{FAV}	Max. current with cooling fin, C-load, T_C = 100 °C [2)]	9,6	A
R_{thA}	Thermal resistance junction to ambient [1)]	/	K/W
R_{thC}	Thermal resistance junction to case [1)]	2,7	K/W
T_j	Operating junction temperature	- 50 ... + 150	°C
T_s	Storage temperature	- 50 ... + 150	°C

Characteristics		T_c = 25 ºC unless otherwise specified	
Symbol	**Conditions**	**Values**	**Units**
V_F	Maximum forward. voltage, T_j = 25 °C; I_F = 12 A	1	V
I_R	Maximum Leakage current, T_j = 25 °C; V_R = V_{RRM}	10	µA
C_J	Typical junction capacitance per leg at V, MHz		pF

Dimensions in mm



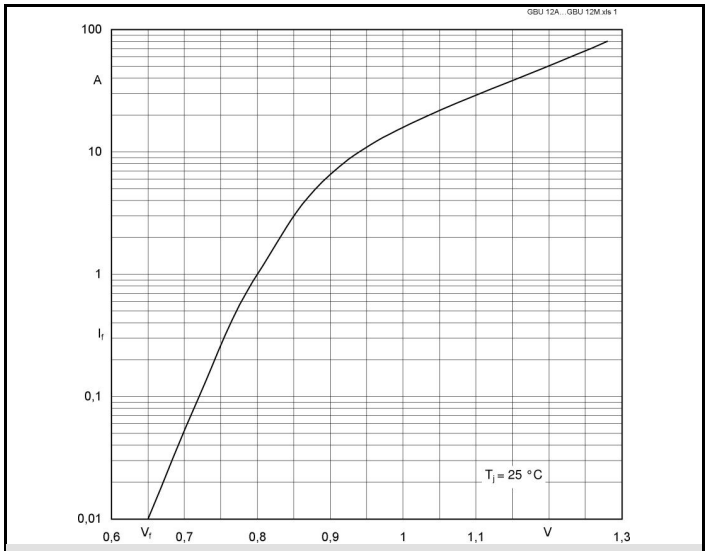


Fig. 1 : Forward characteristics (typical values)

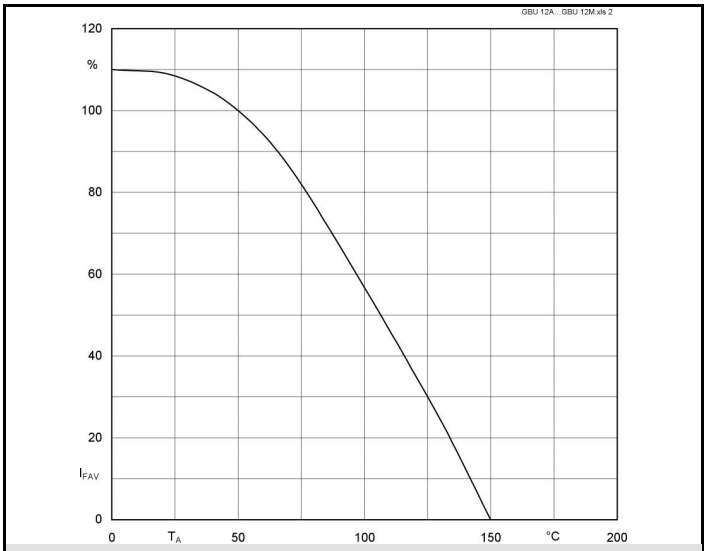


Fig. 2 : Rated forward current vs. ambient temperature

