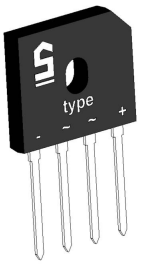
GBU 6A ... GBU 6M ...



Inline bridge

Silicon-Bridge Rectifiers

GBU 6A ... GBU 6M

Forward Current: 6 A

Reverse Voltage: 50 to 1000 V

Publish Data

Features

- max. solder temperature 260°C, 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

Type	Alternating input voltage V_{RMS} V	Repetetive peak reverse voltage V_{RRM} V
GBU 6A	35	50
GBU 6B	70	100
GBU 6D	140	200
GBU 6G	280	400
GBU 6J	420	600
GBU 6K	560	800
GBU 6M	700	1000

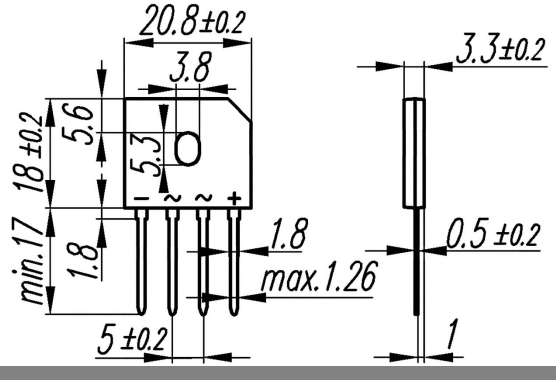
Absolute Maximum Ratings T_c = 25 °C unless otherwise specified

Symbol	Conditions	Values	Units
I_{FRM}	Repetitive peak forward current; f > 15 Hz[1)]	40	A
I^2t	Rating for fusing, t < 10 ms	260	A^2s
I_{FSM}	Peak forward surge current, 50 Hz half sine-wave T_A = 25 °C	250	A
I_{FAV}	Max. averaged fwd. current, R-load, T_A = 50 °C [1)]	3	A
I_{FAV}	Max. averaged fwd. current, C-load, T_A = 50 °C [1)]	2,4	A
I_{FAV}	Max. current with cooling fin, R-load, T_C = 100 °C [2)]	6	A
I_{FAV}	Max. current with cooling fin, C-load, T_C = 100 °C [2)]	4,8	A
R_{thA}	Thermal resistance junction to ambient [1)]	/	K/W
R_{thC}	Thermal resistance junction to case [1)]	3,3	K/W
T_j	Operating junction temperature	- 50 ... + 150	°C
T_s	Storage temperature	- 50 ... + 150	°C

Characteristics T_c = 25 °C unless otherwise specified

Symbol	Conditions	Values	Units
V_F	Maximum forward. voltage, T_j = 25 °C; I_F = 6 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



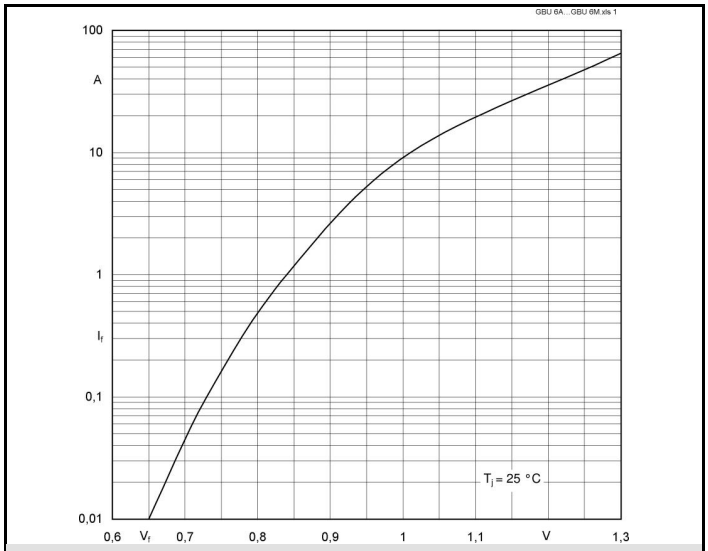


Fig. 1 : Forward characteristics (typical values)

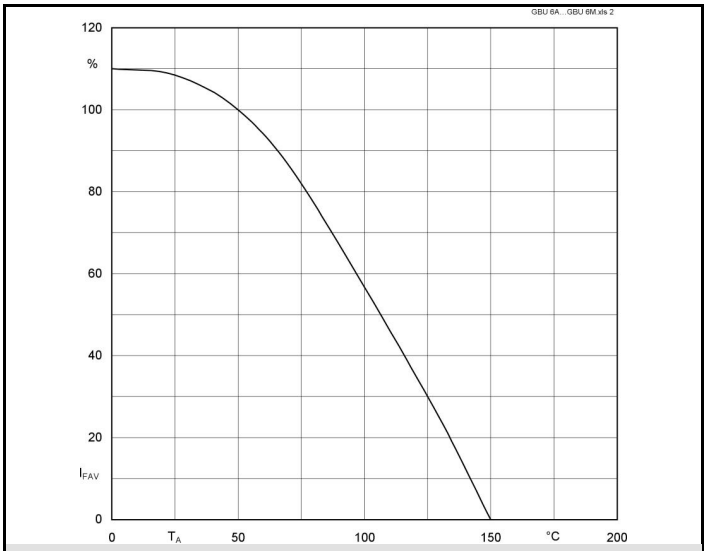


Fig. 2 : Rated forward current vs. ambient temperature

