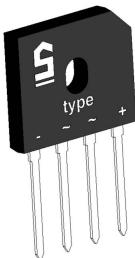


GBU 6A ... GBU 6M ...



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

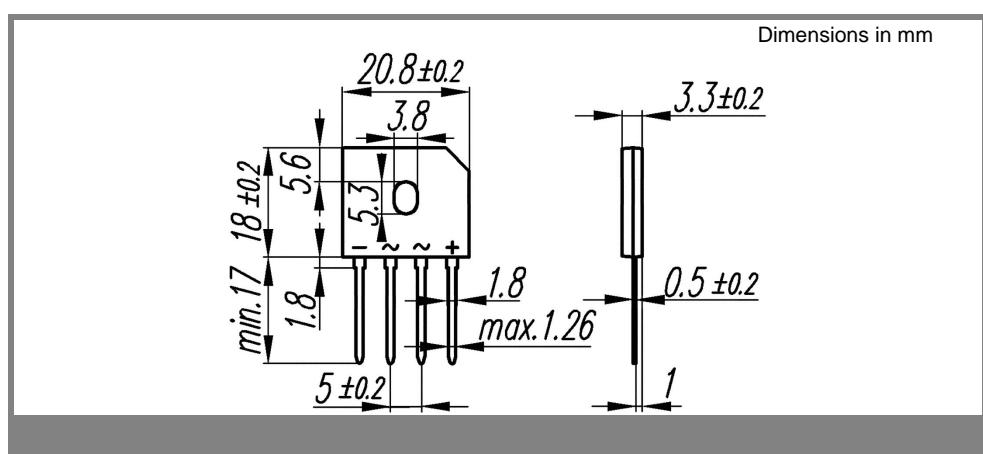
Mechanical Data

- 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 mounting (M3): 1(+10%) Nm

Type	Alternating input voltage V_{RMS} V	Repetitive 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

Symbol	Conditions	$T_c = 25$ °C unless otherwise specified	
		Values	Units
I_{FRM}	Repetitive peak forward current; $f > 15$ Hz ¹⁾	40	A
I^2t	Rating for fusing, $t < 10$ ms	260	A ² s
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

Symbol	Conditions	$T_c = 25$ °C unless otherwise specified	
		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



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

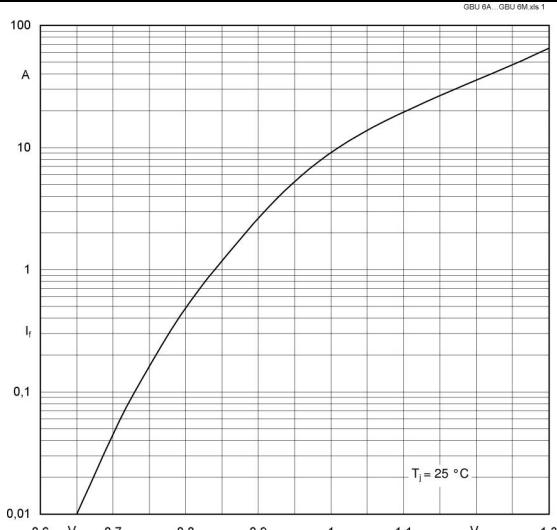


Fig. 1 : Forward characteristics (typical values)

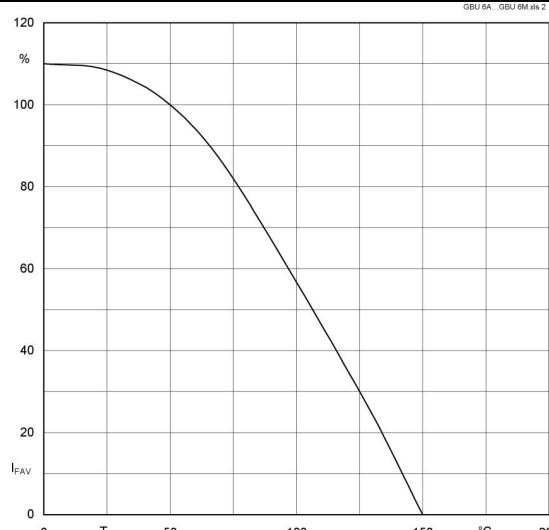


Fig. 2 : Rated forward current vs. ambient temperature