



## 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 x 18 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	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

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

Characteristics		$T_c = 25^\circ\text{C}$ unless otherwise specified	
Symbol	Conditions	Values	Units
$V_F$	Maximum forward. voltage, $T_j = 25^\circ\text{C}$ ; $I_F = 6$ A	1	V
$I_R$	Maximum Leakage current, $T_j = 25^\circ\text{C}$ ; $V_R = V_{RRM}$	10	$\mu\text{A}$
$C_j$	Typical junction capacitance per leg at V, MHz		pF



