

V_{RSM}, V_{RRM} V	V_{VRMS} V	$I_D = 9 \text{ A } (T_c = 65^\circ\text{C})$ Types	C_{max} μF	R_{min} Ω
400	280	BI 6/04		0,75
800	560	BI 6/08		1,8
1200	800	BI 6/12		2,7
1600	1000	BI 6/16		3,9
1800	1250	BI 6/18		4,5

Power Bridge Rectifiers

BI 6

Preliminary Data

Features

- Isolated metal case with in-line wire leads
- Ideal for printed circuit boards
- Allow easy heatsink mounting
- Solder temperature: 260°C max. (max. 7 s)
- Blocking voltage up to 1600 V
- High surge current
- Standard packing: 54 pieces box

Typical Applications*

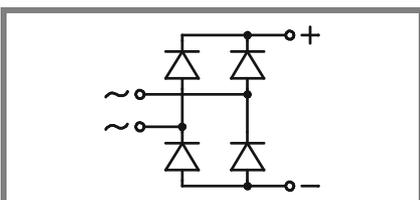
- Rectifier for power supplies
- Input rectifier for variable frequency drives
- Rectifier for DC motor field supplies
- Battery charger rectifiers
- Recommended snubber network:
RC: 0,1 μF , 50 Ω ($P_R = 1 \text{ W}$)

1) Mounted on a 50 x 75 mm p.c.b.

2) Mounted on a painted metal sheet of min. 250 x 250 x 1 mm

3) Recommended V_{VRMS} values:
 $V_{VRMS} = V_{RRM} / 2,83$

Symbol	Conditions	Values	Units
I_D	$T_a = 45^\circ\text{C}$, P5A/100, natural cooling $T_a = 45^\circ\text{C}$, chassis ²⁾	8 7	A A
I_{DCL}	$T_a = 45^\circ\text{C}$, P5A/100, natural cooling $T_a = 45^\circ\text{C}$, chassis ²⁾ $T_a = 45^\circ\text{C}$, isolated ¹⁾	7 6 2,35	A A A
I_{FSM}	$T_{vj} = 25^\circ\text{C}$, 10 ms $T_{vj} = 150^\circ\text{C}$, 10 ms	200 165	A A
i^2t	$T_{vj} = 25^\circ\text{C}$, 8,3 ... 10 ms $T_{vj} = 150^\circ\text{C}$, 8,3 ... 10 ms	200 136	A^2s A^2s
V_F $V_{(TO)}$ r_T I_{RD} I_{RD}	$T_{vj} = 25^\circ\text{C}$, $I_F = 10 \text{ A}$ $T_{vj} = 150^\circ\text{C}$ $T_{vj} = 150^\circ\text{C}$ $T_{vj} = 25^\circ\text{C}$, $V_{RD} = V_{RRM}$ $T_{vj} = ^\circ\text{C}$, $V_{RD} = V_{RRM} \geq V$	max. 1,2 max. 0,85 max. 30 50	V V m Ω μA
I_{RD} t_{rr} f_G	$T_{vj} = 150^\circ\text{C}$, $V_{RD} = V_{RRM}$ $T_{vj} = ^\circ\text{C}$, $V_{RD} = V_{RRM} \geq V$ $T_{vj} = 25^\circ\text{C}$	5 10 2000	μA mA Hz
$R_{th(j-a)}$ $R_{th(j-c)}$ $R_{th(c-s)}$ T_{vj} T_{stg}	isolated ¹⁾ chassis ²⁾ total (from chips to bridge back side) total	23 7 4 0,15	K/W K/W K/W $^\circ\text{C}$ $^\circ\text{C}$
V_{isol} M_s M_t a w	a.c. 50...60 Hz; r.m.s.; 1s / 1 min. torque for mounting (M4 screw) approx.	3000 / 2500 $2 \pm 15\%$ 20	V~ Nm Nm m/s ² g
Fu			A
Case	40 x 20 x 10 mm plus 20 mm leads	BI	



B (B2U)

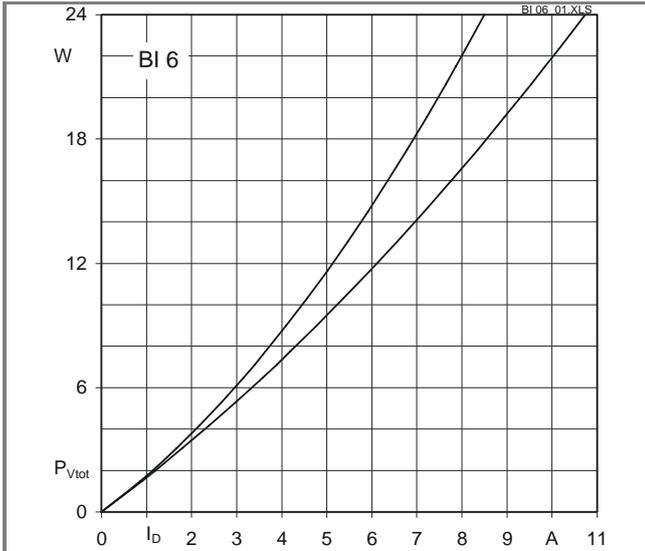


Fig. 3L Power dissipation vs. output current

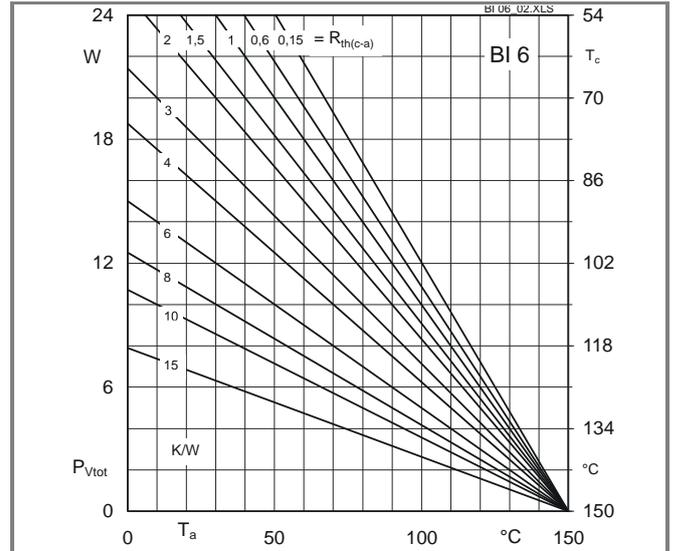
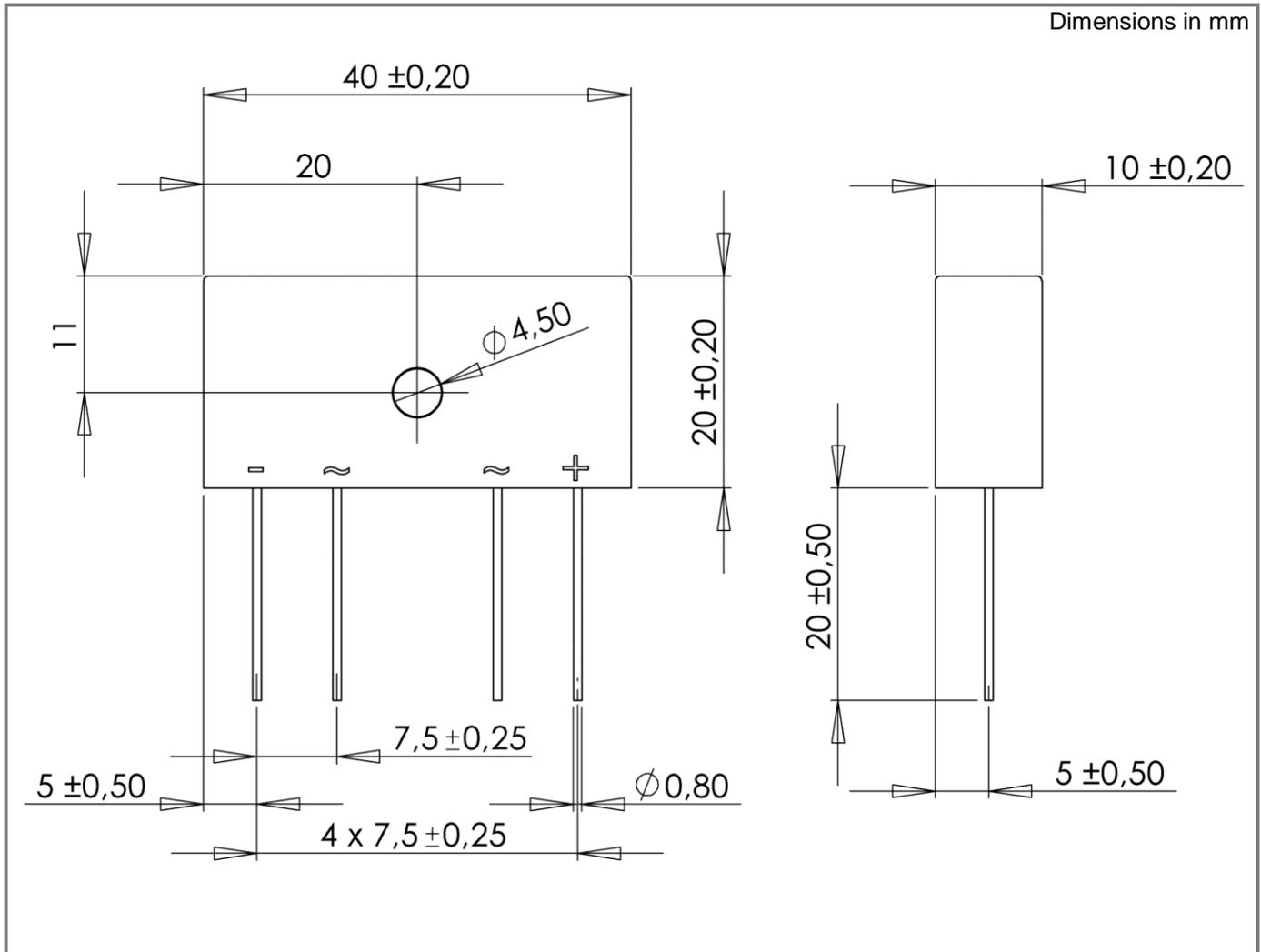


Fig. 3R Power dissipation vs. case temperature



Case BI

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