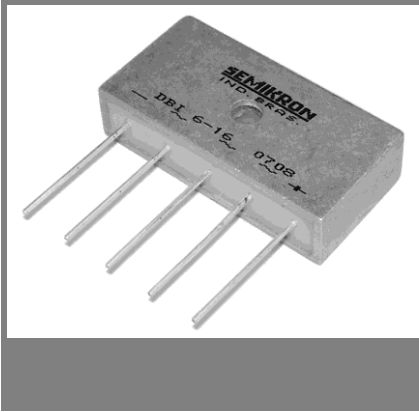


DBI 6



Power Bridge Rectifiers

DBI 6

Features

- Isolated metal case with in-line wire leads
- Ideal for printed circuit boards
- Allow easy heatsink mounting
- Solder temperature: 260°C max. (max. 5 s)
- Blocking voltage up to 1800 V
- High surge current
- Standard packing: 54 pieces box

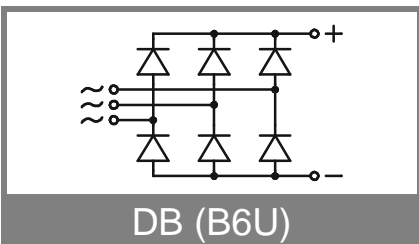
Typical Applications*

- 3 phase 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, 20...50 Ω (P_R = 1 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

V _{RSM} , V _{RRM} V	V _{VRMS} ³⁾ V	I _D = 9 A (T _c = 90 °C) Types	C _{max} µF	R _{min} Ω
400	280	DBI 6-04		0,75
800	560	DBI 6-08		1,8
1200	800	DBI 6-12		2,7
1400	900	DBI 6-14		3,1
1600	1000	DBI 6-16		3,6

Symbol	Conditions	Values	Units
I _D	T _a = 50 °C, P5A/100, natural cooling T _a = 45 °C, chassis ²⁾	9 8	A A
I _{DCL}	T _a = 50 °C, P5A/100, natural cooling T _a = 45 °C, chassis ²⁾ T _a = 50 °C, isolated ¹⁾	9 8 2,5	A A A
I _{FSM}	T _{vj} = 25 °C, 10 ms T _{vj} = 150 °C, 10 ms	180 150	A A
i ² t	T _{vj} = 25 °C, 8,3 ... 10 ms T _{vj} = 150 °C, 8,3 ... 10 ms	162 113	A ² s A ² s
V _F V _(TO) r _T I _{RD} I _{RD} t _{rr} f _G	T _{vj} = 25°C, I _F = 10 A T _{vj} = 150°C T _{vj} = 150°C T _{vj} = 25°C, V _{RD} = V _{RRM} T _{vj} = 150°C, V _{RD} = V _{RRM} T _{vj} = 25°C	max. 1,2 max. 0,85 max. 30 50 5 10 2000	V V mΩ µA mA µs Hz
R _{th(j-a)} R _{th(i-c)} R _{th(c-s)} T _{vj} T _{stg}	isolated ¹⁾ chassis ²⁾ total (from chips to bridge back side) total	22 6 3 0,15 -40...+150 -55...+150	K/W K/W K/W °C °C
V _{isol} M _s M _t a w	a.c. 50...60 Hz; r.m.s.; 1s / 1 min. torque for heatsink mounting (M4 screw) approx.	3000 / 2500 2 ± 15% 21	V~ Nm Nm m/s ² g
Fu			A
Case	40 x 20 x 10 mm plus 20 mm leads	DBI	



DB (B6U)

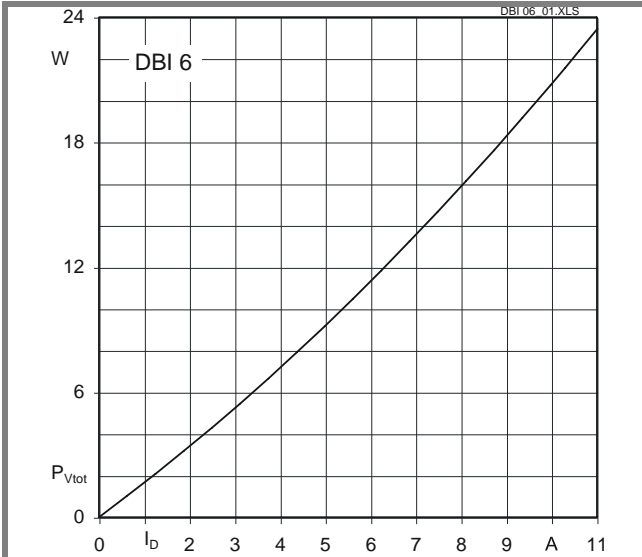


Fig. 3L Power dissipation vs. output current

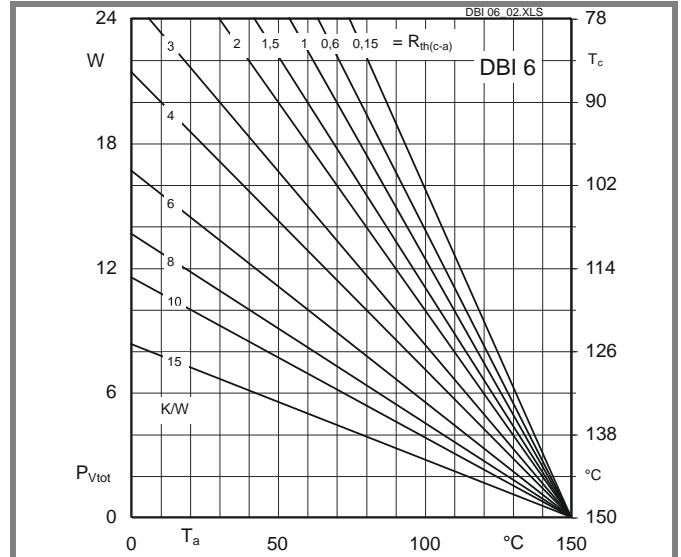
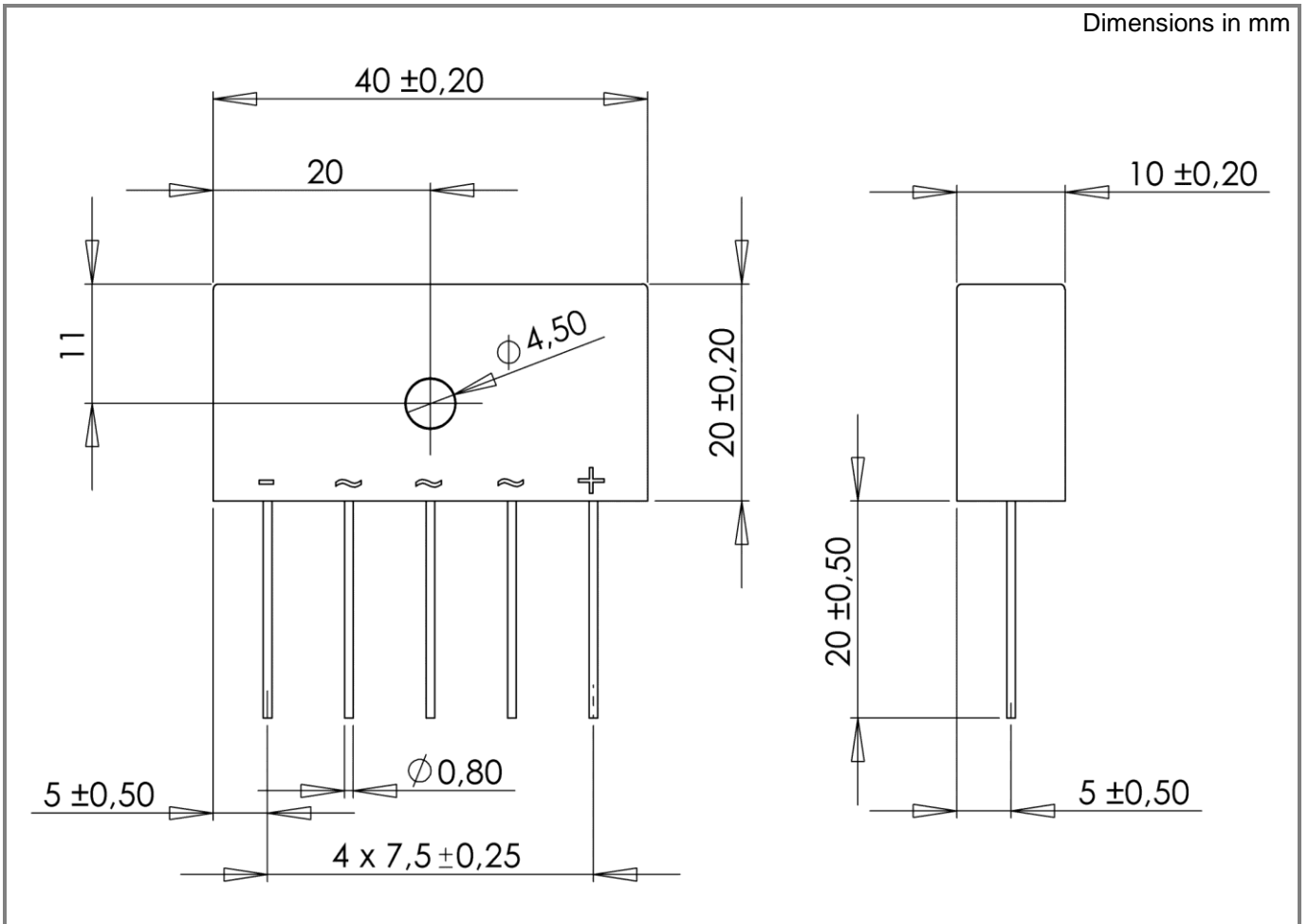


Fig. 3R Power dissipation vs. case temperature



Case DBI

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