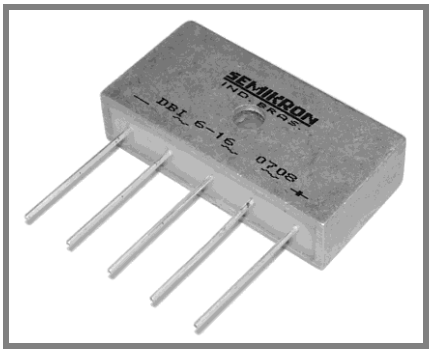
DBI 6



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
1800	1250	DBI 6-18		4,5

Power Bridge Rectifiers

DBI 6

Features

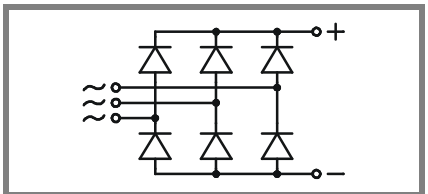
- Isolated metal case with in-line wire leads
- Ideal for printed circuit boards
- Allow easy heatsink mounting
- Solder temperature: 260°C max. (max. 5 s)
- Blocking voltage up to 1800 V
- High surge current
- Standard packing: 54 pieces box

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: $V_{VRMS} = V_{RRM} / 2,83$

Symbol	Conditions	Values	Units
I_D	T_a = 50 °C, P5A/100, natural cooling	9	A
	T_a = 45 °C, chassis[2]	8	A
I_{DCL}	T_a = 50 °C, P5A/100, natural cooling	9	A
	T_a = 45 °C, chassis[2]	8	A
	T_a = 50 °C, isolated[1]	2,5	A
I_{FSM}	T_{vj} = 25 °C, 10 ms	180	A
	T_{vj} = 150 °C, 10 ms	150	A
i^2t	T_{vj} = 25 °C, 8,3 ... 10 ms	162	A^2s
	T_{vj} = 150 °C, 8,3 ... 10 ms	113	A^2s
V_F	T_{vj} = 25°C, I_F = 10 A	max. 1,2	V
$V_{(TO)}$	T_{vj} = 150°C	max. 0,85	V
r_T	T_{vj} = 150°C	max. 30	mΩ
I_{RD}	T_{vj} = 25°C, V_{RD} = V_{RRM}	50	µA
I_{RD}	T_{vj} = 150°C, V_{RD} = V_{RRM}	5	mA
t_{rr}	T_{vj} = 25°C	10	µs
f_G		2000	Hz
$R_{th(j-a)}$	isolated[1]	22	K/W
	chassis[2]	6	K/W
$R_{th(j-c)}$	total (from chips to bridge back side)	3	K/W
$R_{th(c-s)}$	total	0,15	K/W
T_{vj}		-40...+150	°C
T_{stg}		-55...+150	°C
V_{isol}	a.c. 50...60 Hz; r.m.s.; 1s / 1 min.	3000 / 2500	V~
M_s	torque for heatsink mounting (M4 screw)	2 ± 15%	Nm
M_t			Nm
a			m/s^2
w	approx.	21	g
Fu			A
Case	40 x 20 x 10 mm plus 20 mm leads	DBI	



DB (B6U)

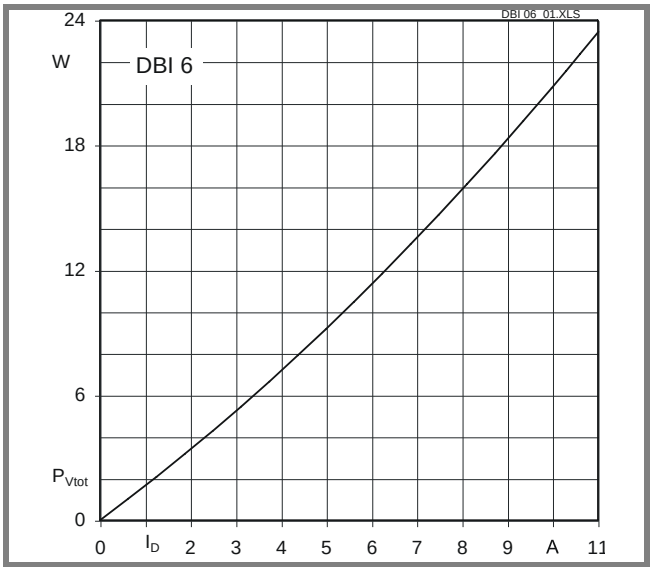


Fig. 3L Power dissipation vs. output current

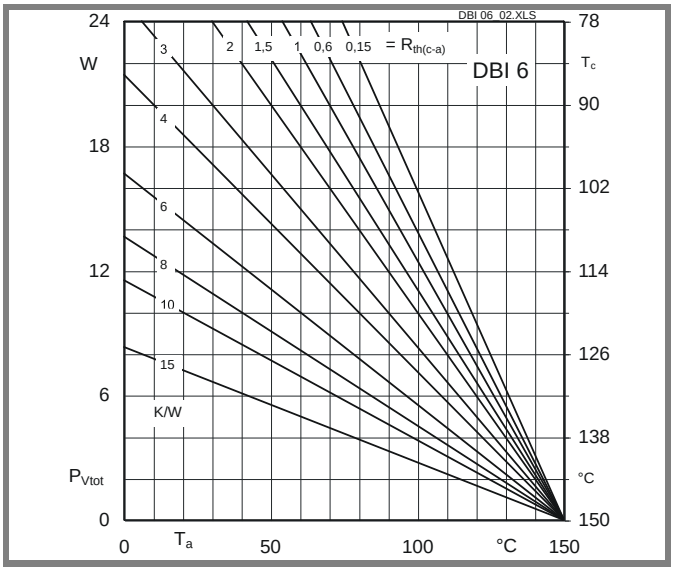
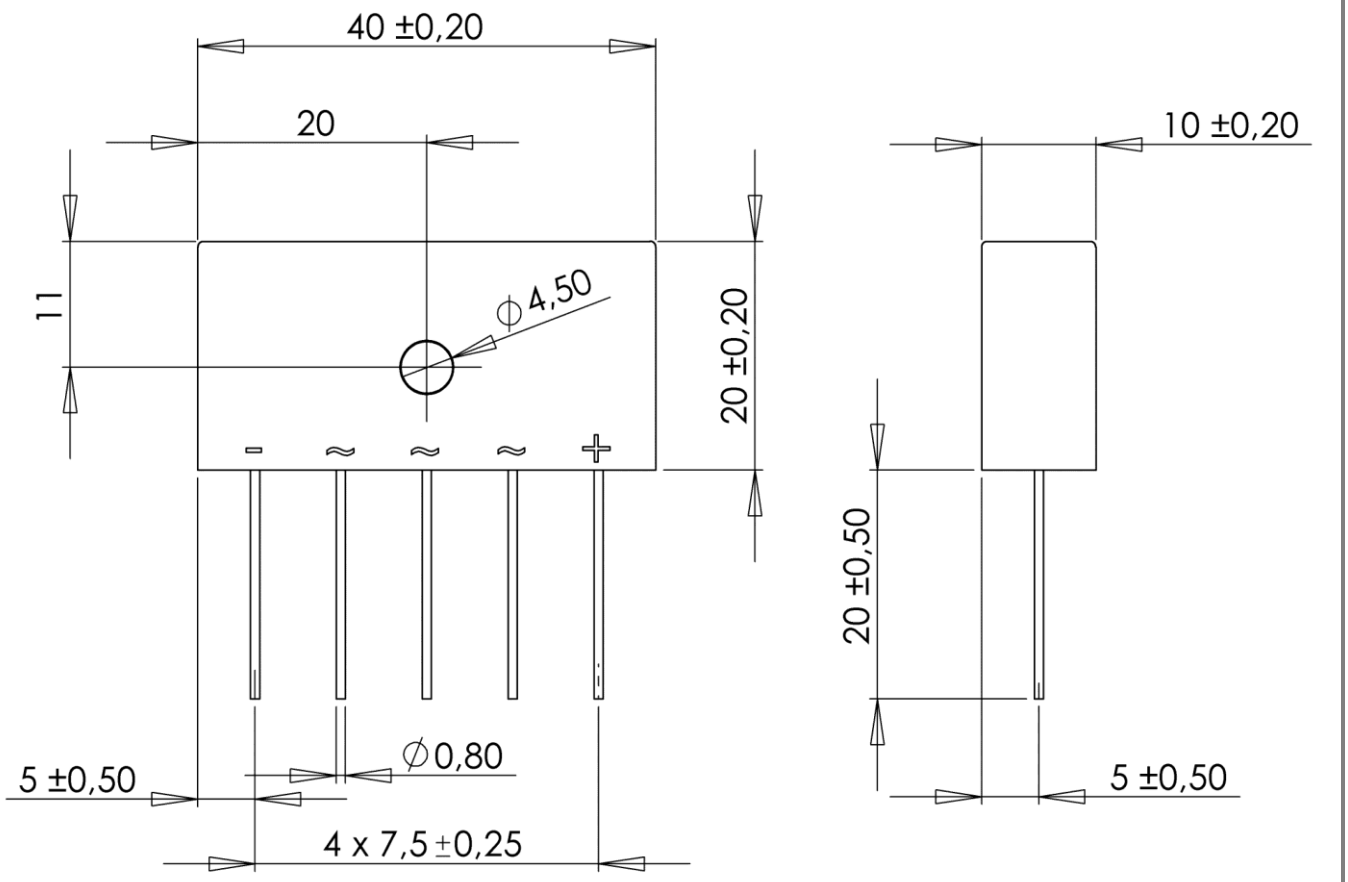


Fig. 3R Power dissipation vs. case temperature

DBI 6

Dimensions in mm



Case DBI

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