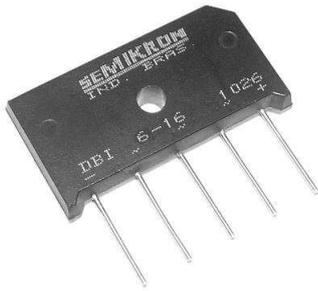


DBI 6 P



V_{RSM}, V_{RRM} V	V_{VRMS} V	$I_D = 9 \text{ A}$ ($T_c = 113 \text{ }^\circ\text{C}$) Types	C_{max} μF	R_{min} Ω
400	280	DBI 6-04 P		0,75
800	560	DBI 6-08 P		1,8
1200	800	DBI 6-12 P		2,7
1600	1100	DBI 6-16 P		3,9
1800	1250	DBI 6-18 P		4,5
2000	1400	DBI 6-20 P		5,1
2200	1550	DBI 6-22 P ³⁾		5,6

Power Bridge Rectifiers

DBI 6 P

Features

- Compact plastic package 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 2200 V
- High surge current
- UL 94V-0 classified
- Standard packing: 54 pieces box

Typical Applications*

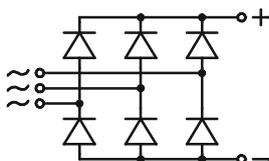
- 3 phase rectifier for power supplies
- Input rectifier for variable frequency drives
- Rectifier for DC motor field supplies
- Battery charger rectifiers
- Recommended snubber network: RC: 10 nF, 20...50 Ω ($P_R = 1 \text{ W}$)

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) Available on limited quantities.

Symbol	Conditions	Values	Units
I_D	$T_a = 60 \text{ }^\circ\text{C}$, P5A/100, natural cooling $T_a = 58 \text{ }^\circ\text{C}$, chassis ²⁾	12 9	A A
I_{DCL}	$T_a = 52 \text{ }^\circ\text{C}$, P5A/100, natural cooling $T_a = 58 \text{ }^\circ\text{C}$, chassis ²⁾ $T_a = 45 \text{ }^\circ\text{C}$, isolated ¹⁾	12 9 2,9	A A A
I_{FSM}	$T_{vj} = 25 \text{ }^\circ\text{C}$, 10 ms $T_{vj} = 150 \text{ }^\circ\text{C}$, 10 ms	200 165	A A
i^2t	$T_{vj} = 25 \text{ }^\circ\text{C}$, 8,3 ... 10 ms $T_{vj} = 150 \text{ }^\circ\text{C}$, 8,3 ... 10 ms	200 136	A^2s A^2s
V_F	$T_{vj} = 25 \text{ }^\circ\text{C}$, $I_F = 80 \text{ A}$	max. 2,65	V
$V_{(TO)}$	$T_{vj} = 150 \text{ }^\circ\text{C}$	max. 0,8	V
r_T	$T_{vj} = 150 \text{ }^\circ\text{C}$	max. 24	$\text{m}\Omega$
I_{RD}	$T_{vj} = 25 \text{ }^\circ\text{C}$, $V_{RD} = V_{RRM}$ $T_{vj} = \text{ }^\circ\text{C}$, $V_{RD} = V_{RRM} \geq V$	50	μA μA
I_{RD}	$T_{vj} = 150 \text{ }^\circ\text{C}$, $V_{RD} = V_{RRM}$ $T_{vj} = \text{ }^\circ\text{C}$, $V_{RD} = V_{RRM} \geq V$	5	mA mA
t_{rr}	$T_{vj} = 25 \text{ }^\circ\text{C}$	10	μs
f_G		2000	Hz
$R_{th(j-a)}$	isolated ¹⁾ chassis ²⁾	21 5	K/W K/W
$R_{th(i-c)}$	total (from chips to bridge back side)	2	K/W
$R_{th(c-s)}$	total	0,15	K/W
T_{vj}		-40...+150	$^\circ\text{C}$
T_{stq}		-55...+150	$^\circ\text{C}$
V_{isol}	a.c. 50...60 Hz; r.m.s.; 1s / 1 min.	3000 / 2500	V~
M_s	torque for mounting (M4 screw)	$2 \pm 15\%$	Nm
M_t			Nm
a			m/s^2
w	approx.	12,5	g
F_u			A
Case	40 x 21,5 x 6,4 mm plus 20 mm leads	DBI P	



DB (B6U)

DBI 6 P

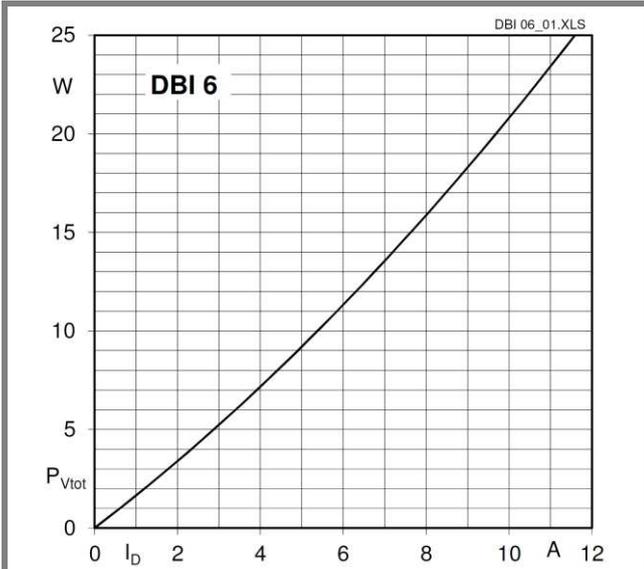


Fig. 3L Power dissipation vs. output current

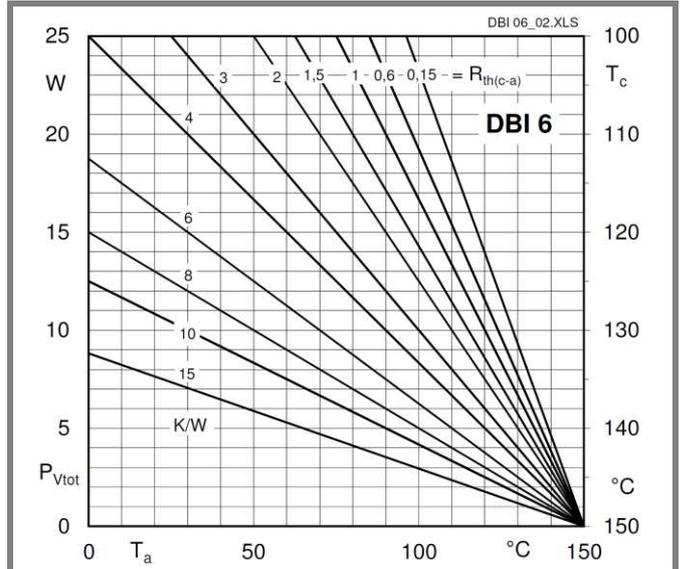


Fig. 3R Power dissipation vs. case temperature

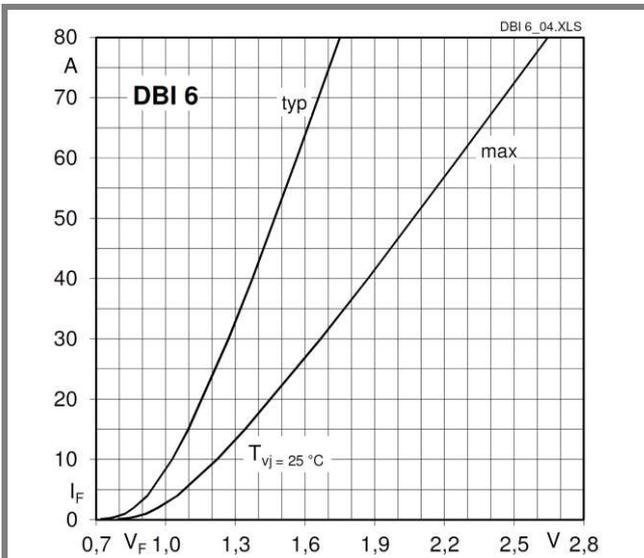


Fig. 9 Forward characteristics of a diode arm

