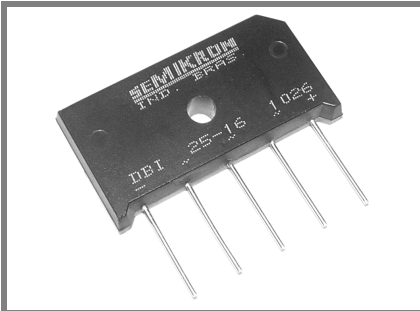


DBI 25 P



V_{RSM}, V_{RRM} V	V_{VRMS} V	$I_D = 27 \text{ A } (T_c = 32 \text{ °C})$ Types	C_{max} μF	R_{min} Ω
400	280	DBI 25-04 P		0,3
800	560	DBI 25-08 P		0,7
1200	800	DBI 25-12 P		1
1600	1000	DBI 25-16 P		1,5
1800	1100	DBI 25-18 P		1,8
2200	1250	DBI 25-22 P		2,2

Power Bridge Rectifiers

DBI 25 P

Features

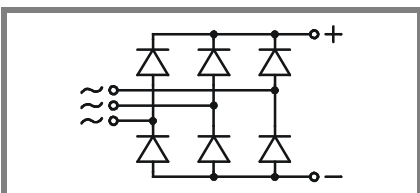
- Compact plastic package with in-line wire leads
- Ideal for printed circuit boards
- Allow easy heatsink mounting
- Solder temperature: 260°C max. (max. 5 s)
- Blocking voltage up to 2200 V
- High surge current
- Plastic material is UL 94V-0 classified
- Standard packing: 54 pieces box

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: 100 nF, 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	$T_a = 44 \text{ °C}$, P5A/100, natural cooling $T_a = 45 \text{ °C}$, chassis ²⁾	17 12	A A
I_{DCL}	$T_a = 44 \text{ °C}$, P5A/100, natural cooling $T_a = 45 \text{ °C}$, chassis ²⁾ $T_a = 45 \text{ °C}$, isolated ¹⁾	17 12 2,9	A A A
I_{FSM}	$T_{vj} = 25 \text{ °C}$, 10 ms $T_{vj} = 150 \text{ °C}$, 10 ms	370 310	A A
i^2t	$T_{vj} = 25 \text{ °C}$, 8,3 ... 10 ms $T_{vj} = 150 \text{ °C}$, 8,3 ... 10 ms	680 480	A^2s A^2s
V_F $V_{(TO)}$ r_T I_{RD} I_{RD} t_{rr} f_G	$T_{vj} = 25 \text{ °C}$, $I_F = 150 \text{ A}$ $T_{vj} = 150 \text{ °C}$ $T_{vj} = 150 \text{ °C}$ $T_{vj} = 25 \text{ °C}$, $V_{RD} = V_{RRM}$ $T_{vj} = 150 \text{ °C}$, $V_{RD} = V_{RRM}$ $T_{vj} = 25 \text{ °C}$	max. 1,95 max. 0,85 max. 9 50 5 10 2000	V V m Ω 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	20,5 4,5 1,7 0,15	K/W K/W K/W K/W
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 $2 \pm 15\%$ 13	V~ Nm Nm m/s^2 g
Fu			A
Case	40 x 21,5 x 6,4 mm plus 15 mm leads	DBI P	



DB (B6U)

DBI 25 P



Fig. 3L Power dissipation vs. output current

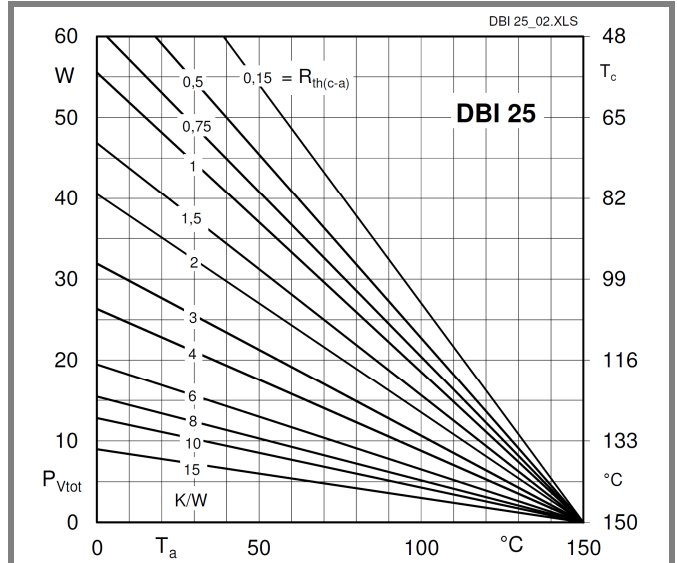


Fig. 3R Power dissipation vs. case temperature

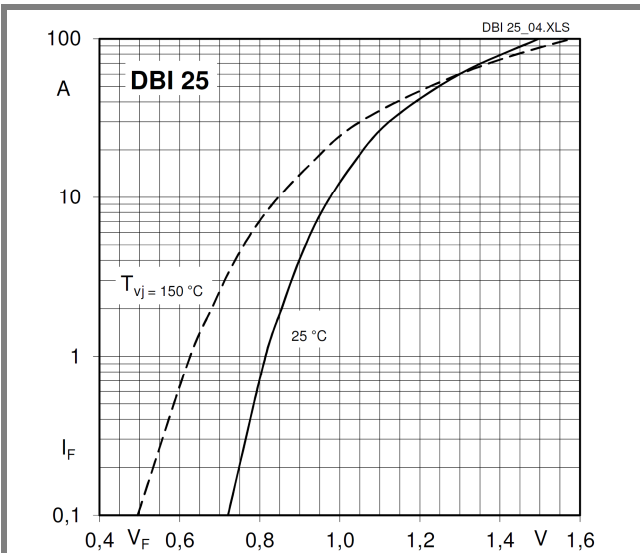
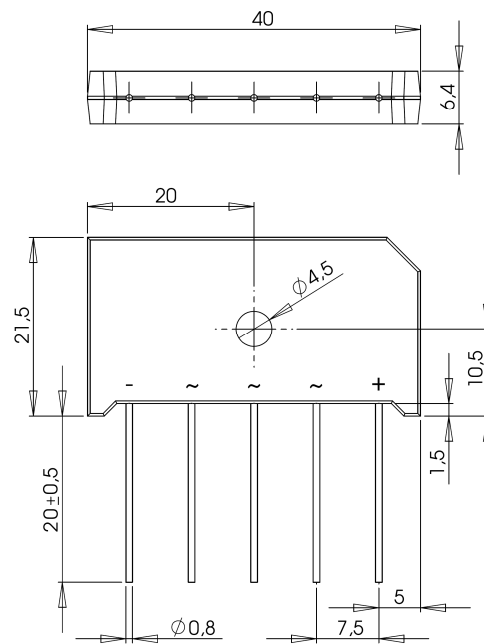


Fig. 9 Forward characteristics of a diode arm



Case DBI P

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