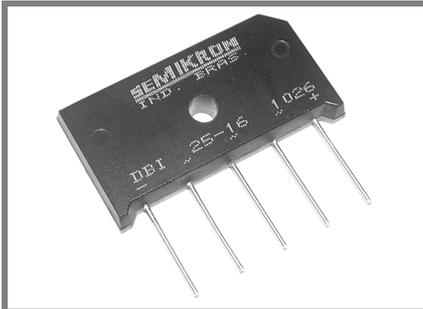


# DBI 25 P



$V_{RSM}, V_{RRM}$ V	$V_{VRMS}$ V	$I_D = 27 \text{ A } (T_c = 32 \text{ }^\circ\text{C})$ Types	$C_{max}$ $\mu\text{F}$	$R_{min}$ $\Omega$
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

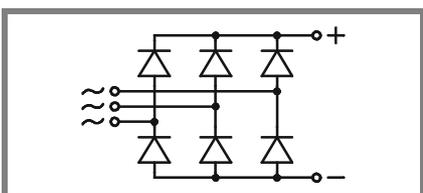
- Compact plastic package with in-line wire leads
- Ideal for printed circuit boards
- Allow easy heatsink mounting
- Solder temperature: 260°C max. (max. 5 s)
- Blocking voltage up to 2200 V
- High surge current
- Plastic material is UL 94V-0 classified
- Standard packing: 54 pieces box

#### 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  $\Omega$  ( $P_R = 1 \text{ W}$ )

- 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
$I_D$	$T_a = 44 \text{ }^\circ\text{C}$ , P5A/100, natural cooling $T_a = 45 \text{ }^\circ\text{C}$ , chassis <sup>2)</sup>	17 12	A A
$I_{DCL}$	$T_a = 44 \text{ }^\circ\text{C}$ , P5A/100, natural cooling $T_a = 45 \text{ }^\circ\text{C}$ , chassis <sup>2)</sup> $T_a = 45 \text{ }^\circ\text{C}$ , isolated <sup>1)</sup>	17 12 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	370 310	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	680 480	$\text{A}^2\text{s}$ $\text{A}^2\text{s}$
$V_F$ $V_{(TO)}$ $r_T$ $I_{RD}$ $I_{RD}$ $t_{rr}$ $f_G$	$T_{vj} = 25 \text{ }^\circ\text{C}$ , $I_F = 150 \text{ A}$ $T_{vj} = 150 \text{ }^\circ\text{C}$ $T_{vj} = 150 \text{ }^\circ\text{C}$ $T_{vj} = 25 \text{ }^\circ\text{C}$ , $V_{RD} = V_{RRM}$ $T_{vj} = 150 \text{ }^\circ\text{C}$ , $V_{RD} = V_{RRM}$ $T_{vj} = 25 \text{ }^\circ\text{C}$	max. 1,95 max. 0,85 max. 9 50 5 10 2000	V V m $\Omega$ $\mu\text{A}$ mA $\mu\text{s}$ Hz
$R_{th(j-a)}$ $R_{th(j-c)}$ $R_{th(c-s)}$ $T_{vj}$ $T_{stg}$	isolated <sup>1)</sup> chassis <sup>2)</sup> 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 $\text{m/s}^2$ g
Fu			A
Case	40 x 21,5 x 6,4 mm plus 15 mm leads	DBI P	



DB (B6U)

# DBI 25 P

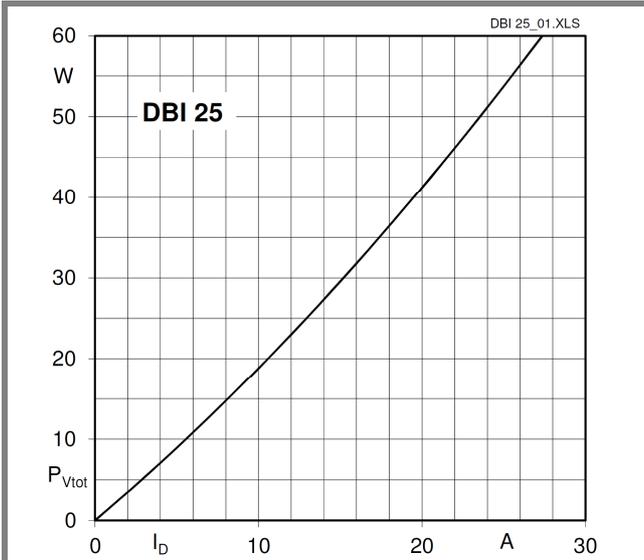


Fig. 3L Power dissipation vs. output current

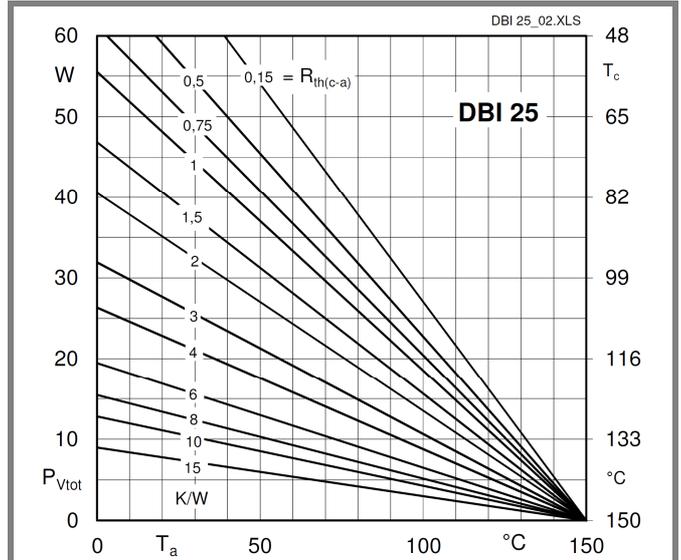


Fig. 3R Power dissipation vs. case temperature

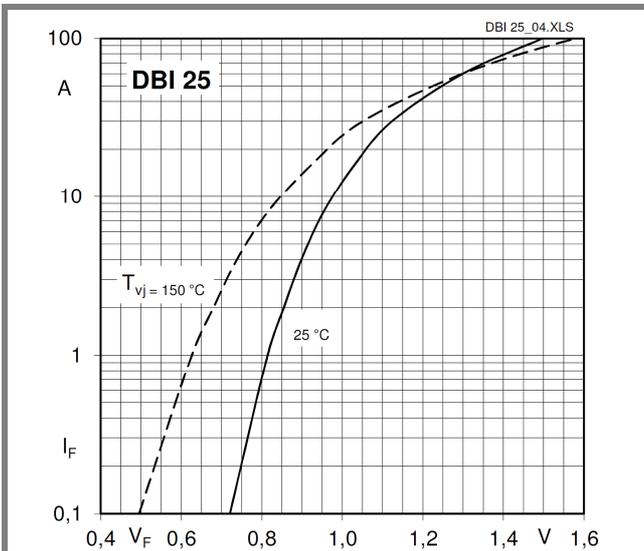
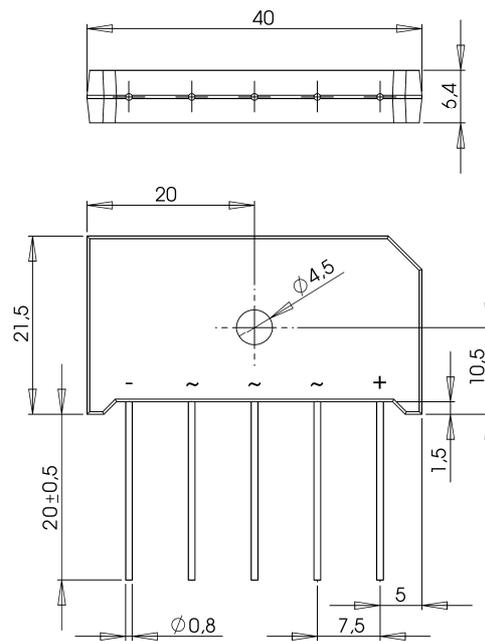


Fig. 9 Forward characteristics of a diode arm



## Case DBI P

## \* IMPORTANT INFORMATION AND WARNINGS

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