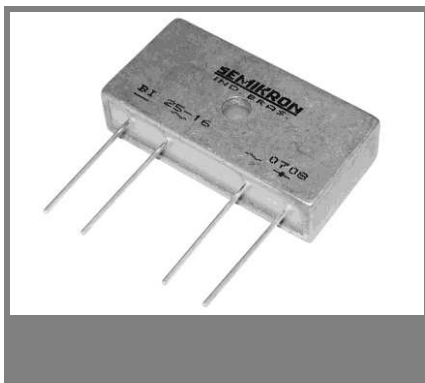




Power Bridge Rectifiers

BI 25

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

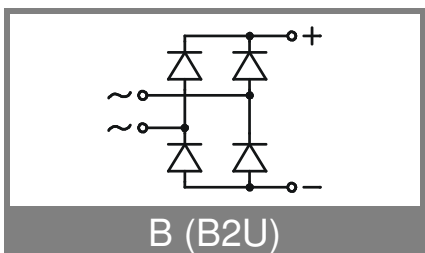
Typical Applications*

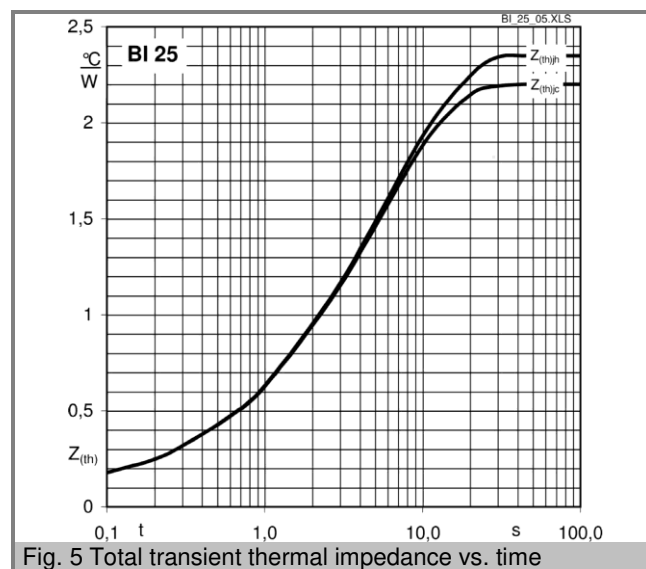
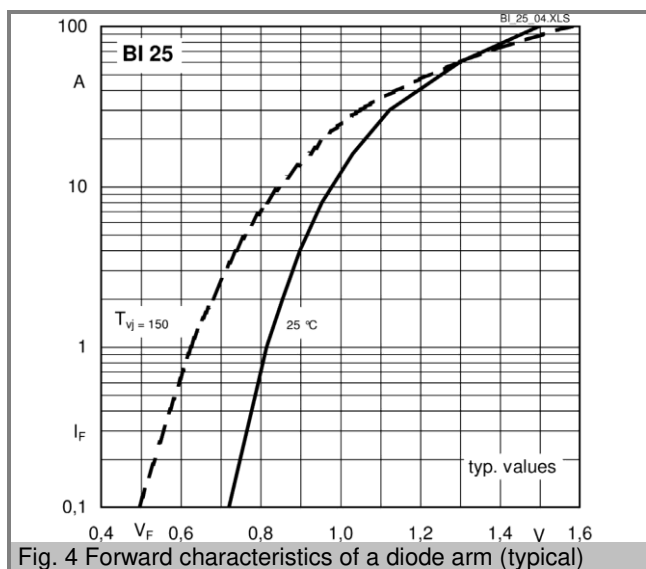
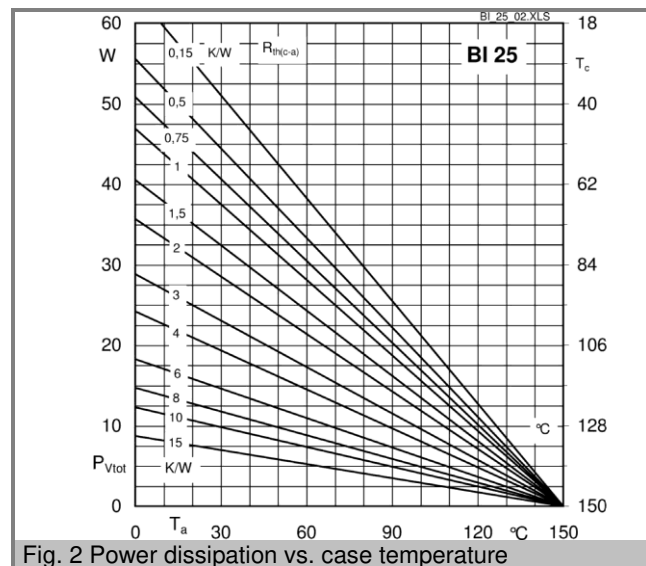
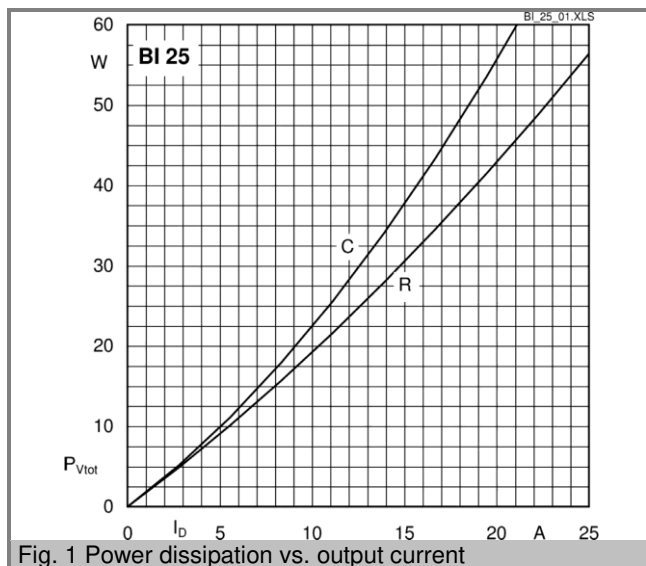
- Rectifier for power supplies
- Input rectifier for variable frequency drives
- Rectifier for DC motor field supplies
- Battery charger rectifiers
- Recommended snubber network: RC: 0.1 μ F, 50 Ω ($P_R = 1$ W)

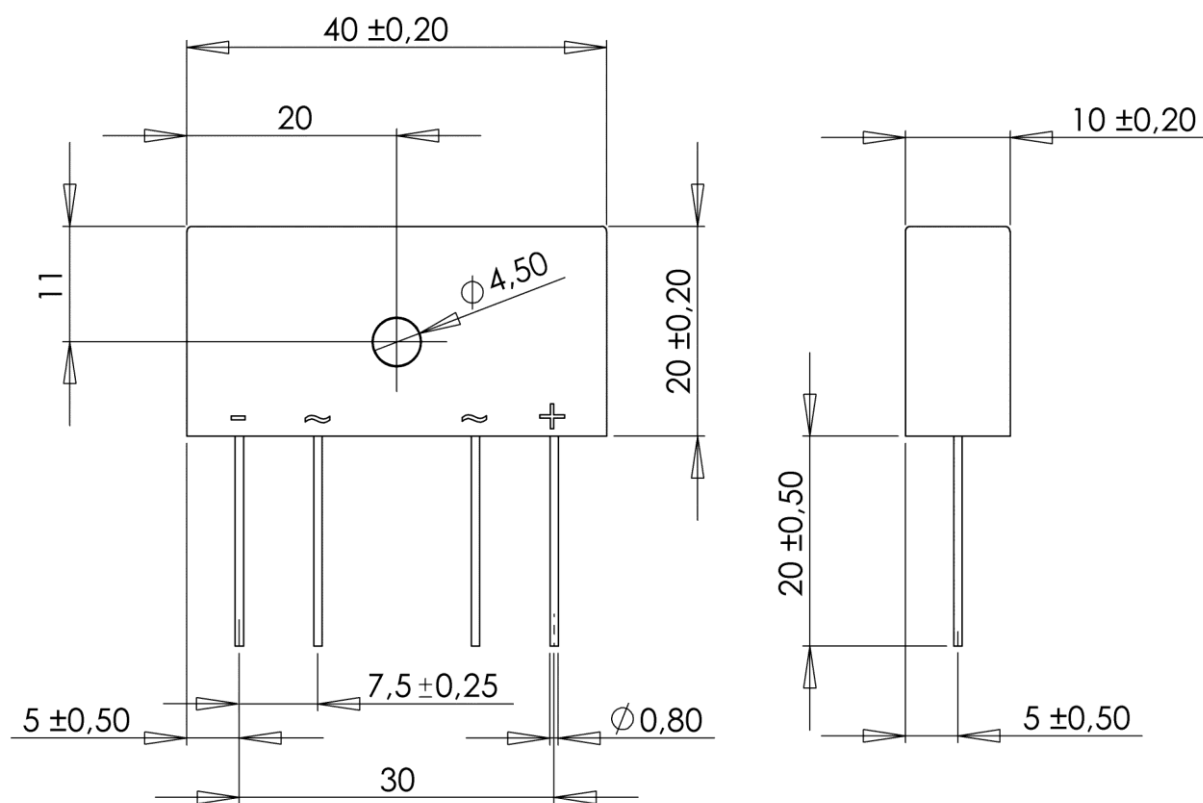
- 1) Mounted on a 50 x 75 mm p.c.b.
- 2) Mounted on a painted metal sheet of min. 250 x 250 x 1 mm
- 3) Recommended V_{VRMS} values:
 $V_{VRMS} = V_{RRM} / 2,83$

V_{RSM}, V_{RRM} V	V_{VRMS} V	$I_D = 25$ A ($T_c = 26$ °C) Types	C_{max} μ F	R_{min} Ω
400	280	BI 25-04 P		0,75
800	560	BI 25-08 P		1,8
1200	800	BI 25-12 P		2,7
1600	1000	BI 25-16 P		3,9
1800	1250	BI 25-18 P		4,4

Symbol	Conditions	Values	Units
I_D	$T_a = 45$ °C, P5A/100, natural cooling $T_a = 45$ °C, chassis ²⁾	16,5 11	A A
I_{DCL}	$T_a = 45$ °C, P5A/100, natural cooling $T_a = 45$ °C, chassis ²⁾ $T_a = 45$ °C, isolated ¹⁾	14 9,5 2,7	A A A
I_{FSM}	$T_{vj} = 25$ °C, 10 ms $T_{vj} = 150$ °C, 10 ms	370 310	A A
i^2t	$T_{vj} = 25$ °C, 8,3 ... 10 ms $T_{vj} = 150$ °C, 8,3 ... 10 ms	680 480	A ² s A ² s
V_F $V_{(TO)}$ r_T I_{RD}	$T_{vj} = 25$ °C, $I_F = 12,5$ A $T_{vj} = 150$ °C $T_{vj} = 150$ °C $T_{vj} = 25$ °C, $V_{RD} = V_{RRM}$ $T_{vj} =$ °C, $V_{RD} = V_{RRM} \geq V$	max. 1,05 max. 0,85 max. 9 50	V V m Ω μ A
I_{RD}	$T_{vj} = 150$ °C, $V_{RD} = V_{RRM}$ $T_{vj} =$ °C, $V_{RD} = V_{RRM} \geq V$	5	μ A mA
t_{rr} f_G	$T_{vj} = 25$ °C	10 2000	μ s Hz
$R_{th(j-a)}$ $R_{th(j-c)}$ $R_{th(c-s)}$ T_{vj} T_{stg}	isolated ¹⁾ chassis ²⁾ total (from chips to bridge back side) total $-40...+150$ $-55...+130$	21 5 2,2 0,15	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 mounting (M4 screw) approx.	3000 / 2500 $2 \pm 15\%$ 20	V~ Nm Nm m/s ² g
F_u			A
Case	40 x 20 x 10 mm plus 20 mm leads	BI	







Case BI

*IMPORTANT INFORMATION AND WARNINGS

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