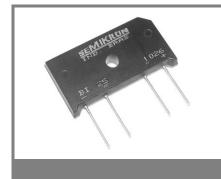
# BI 25 P



## **Power Bridge Rectifiers**

#### BI 25 P

Preliminary Data

### Features

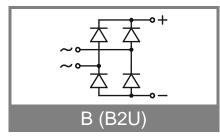
- Compact plastic package with in-line wire leads
- Ideal for printed circuit boards
- Allow easy heatsink mounting
- Solder temperature: 260°C max. (max. 5 s)
- Blocking voltage up to 1600 V
- High surge current
- Plastic material is UL 94V-0 classified
- Standard packing: 54 pieces box

### **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: 50  $\Omega$ , 0,1µF (P<sub>R</sub> = 1 W)
- Mounted on a 50 x 75 mm p.c.b.
   Mounted on a painted metal sheet of min.
- 2) Mounted on a painted metal sheet of min. 250 x 250 x 1 mm
- Available in limited quantities

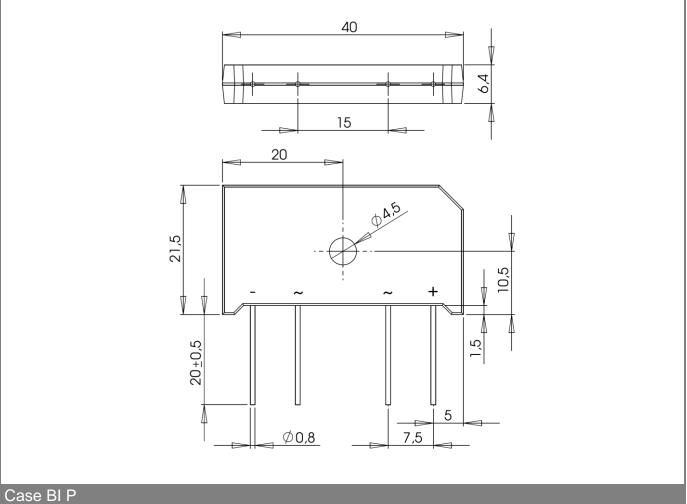
V <sub>RSM</sub> , V <sub>RRM</sub>	V <sub>VRMS</sub>	I <sub>D</sub> = 25 A (T <sub>c</sub> = 26 °C)	C <sub>max</sub>	R <sub>min</sub>
V	V	Types	µF	Ω
400	280	BI 25-04 P		0,4
800	560	BI 25-08 P		0,7
1200	800	BI 25-12 P		1,0
1600	1100	BI 25-16 P		1,5
1800	1200	BI 25-18 P		2,0
2000	1400	BI 25-20 P		2,2
2200	1550	BI 25-22 P <sup>3)</sup>		2,4

Symbol	Conditions	Values	Units
I <sub>D</sub>	T <sub>a</sub> = 46 °C, P1/120, natural cooling	16,5	Α
	$T_a = 45 \text{ °C}, \text{ chassis}^{2)}$	11	Α
I <sub>DCL</sub>	$T_a = 46 \text{ °C}, P1/120, \text{ natural cooling}$	14	A
	$T_a = 46 \text{ °C}, \text{ chassis}_{1}^{2}$	9,5	A
	$T_a = 45 \text{ °C}$ , isolated <sup>1)</sup>	2,7	A
I <sub>FSM</sub>	$T_{vi} = 25 \text{ °C}, 10 \text{ ms}$	370	A
2	T <sub>vi</sub> = 150 °C, 10 ms	310	A
i <sup>2</sup> t	T <sub>vi</sub> = 25 °C, 8,3 10 ms	680	A <sup>2</sup> s
	T <sub>vj</sub> = 150 °C, 8,3 10 ms	480	A <sup>2</sup> s
V <sub>F</sub>	$T_{vi} = 25^{\circ}C, I_F = 12,5 A$	max. 1,05	V
V <sub>(TO)</sub>	$T_{vi} = 150^{\circ}C$	max. 0,85	V
r <sub>T</sub>	$T_{vj} = 150^{\circ}C$	max. 9	mΩ
RD	$T_{vi} = 25^{\circ}C, V_{RD} = V_{RRM}$	50	μA
I <sub>RD</sub>	$T_{vi} = 150^{\circ}C, V_{RD} = V_{RRM}$	5	mA
t <sub>rr</sub> ≠	$T_{vj} = 25^{\circ}C$	10 2000	µs
f <sub>G</sub>		2000	Hz
R <sub>th(j-a)</sub>	isolated <sup>1)</sup>	21	K/W
	chassis <sup>2)</sup>	5	K/W
R <sub>th(j-c)</sub>	total (from chips to bridge back side)	2,2	K/W
R <sub>th(c-s)</sub>	total	0,15	K/W
T <sub>vi</sub>		-40+150 -55+150	°C ℃
T <sub>stg</sub>			-
V <sub>isol</sub>	a.c. 5060 Hz; r.m.s.; 1s / 1 min.	3000 / 2500	V~
M <sub>s</sub>	torque for mounting (M4 screw)	2 ± 15%	Nm Nm
M <sub>t</sub> a			$m/s^2$
a W	approx.	20	
Fu		20	g A
Case	40 x 20 x 10 mm plus 20 mm leads	BIP	~
Case			



**BI 25 F** 

Dimensions in mm



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