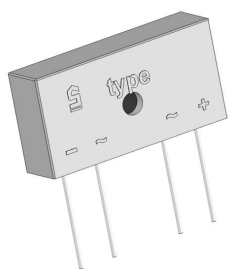


BI 25-005 ... BI 25-16 ...



Inline bridge

One-Phase Si-Bridge Rectifiers

BI 25-005 ... BI 25-16

Forward Current: 25 A

Reverse Voltage: 50 to 1600 V

Publish Data

Features

- Max. solder temperature: 260 °C, max. 5s
- UL recognized, file No. E63532
- $V_{ISO} > 2500\text{ V}$
- In-line isolated metal case with wired connectors
- Blocking voltage to 1600V
- High surge current
- Input rectifier for variable frequency drivers
- Rectifier for DC motor field supplies
- Battery charger
- Recommended snubber network : RC 50Ω, 0.1μF

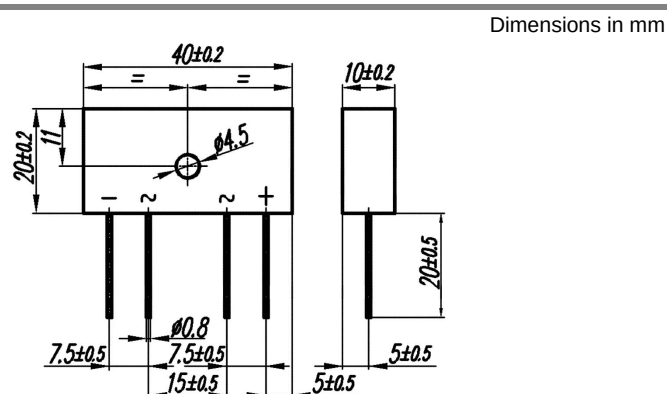
Mechanical Data

- Metal case, dimensions: 40 x 20 x 10 mm
- Weight approx. 35
- Terminals: plated terminals solderable per IEC 68-2-20
- Admissible torque for mounting (M 4): 2 ($\pm 10\%$) N
- Standard packing : bulk
- Heat sink mounting not on the marking side

Type	Alternating input voltage V_{RMS} V	Repetitive peak reverse voltage V_{RRM} V
BI 25-005	35	50
BI 25-01	70	100
BI 25-02	140	200
BI 25-04	280	400
BI 25-06	420	600
BI 25-08	560	800
BI 25-10	700	1000
BI 25-12	800	1200
BI 25-14	900	1400
BI 25-16	1000	1600

Absolute Maximum Ratings		T _C = 25 °C unless otherwise specified	
Symbol	Conditions	Values	Units
I _{FRM}	Repetitive peak forward current; f > 15 Hz ¹⁾	100	A
I _t ²⁾	Rating for fusing, t < 10 ms	550	A ² s
I _{FSM}	Peak forward surge current, 50 Hz half sine-wave T _A = 25 °C	350	A
I _{FAV}	Max. averaged fwd. current, R-load, T _A = 50 °C ¹⁾	4	A
I _{FAV}	Max. averaged fwd. current, C-load, T _A = 50 °C ¹⁾	3,2	A
I _{FAV}	Max. current with cooling fin, R-load, T _C = 100 °C ²⁾	25	A
I _{FAV}	Max. current with cooling fin, C-load, T _C = 100 °C ²⁾	20	A
R _{thA}	Thermal resistance junction to ambient ¹⁾	8	K/W
R _{thC}	Thermal resistance junction to case ¹⁾	4,1	K/W
T _j	Operating junction temperature	- 50 ... + 150 °C	°C
T _s	Storage temperature	- 50 ... + 150 °C	°C

Characteristics		T _C = 25 °C unless otherwise specified	
Symbol	Conditions	Values	Units
V _F	Maximum forward. voltage, T _j = 25 °C; I _F = 12,5 A	1,05	V
I _R	Maximum Leakage current, T _j = 25 °C; V _R = V _{RRM}	10	μA
C _J	Typical junction capacitance per leg at V, MHz		pF



BI 25-005 ... BI 25-16 ...

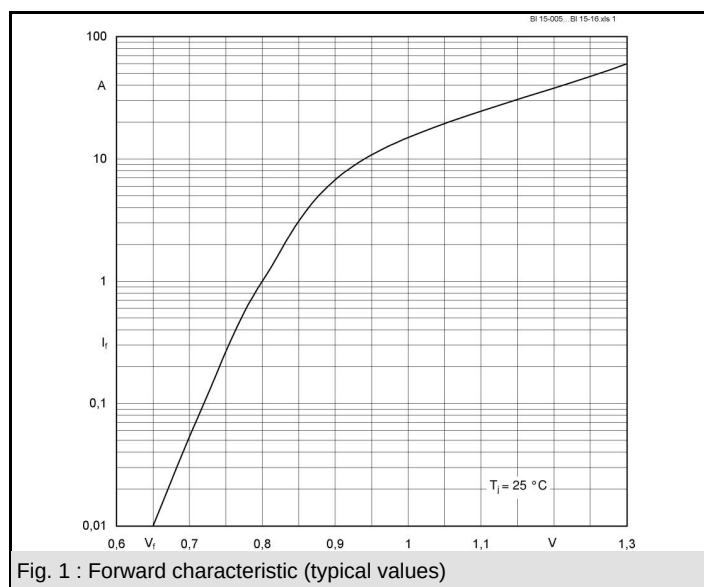


Fig. 1 : Forward characteristic (typical values)

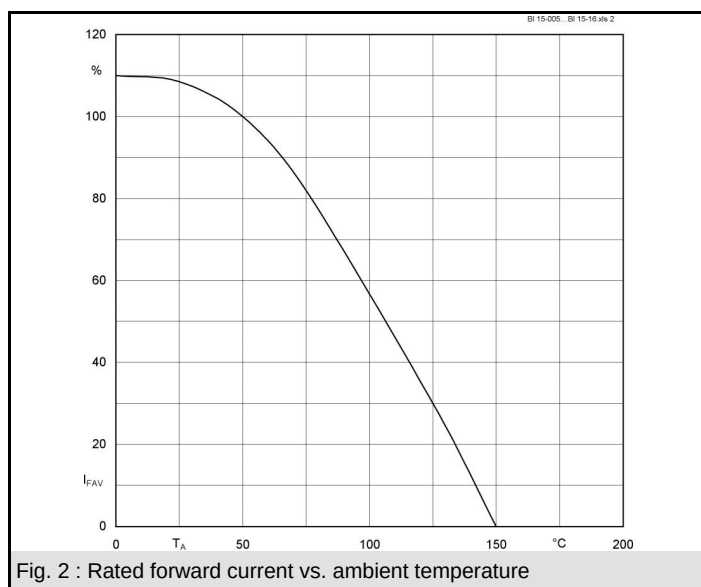


Fig. 2 : Rated forward current vs. ambient temperature