



Inline bridge

Silicon-Bridge Rectifiers

GBI 15A ... GBI 15M

Forward Current: 15 A

Reverse Voltage: 50 to 1000 V

Publish Data

Features

- max. solder temperature 260°C, max. 5s
- UL recognized, file no. E63532
- Standard packaging: bulk

Mechanical Data

- Plastic case 32 * 5,6 * 17 [mm]
- Weight approx. 7g
- Terminals: plated terminals solderable per IEC 68-2-20
- Mounting position : any
- Marking : Type number

Type	Alternating input voltage V_{RMS} V	Repetitive peak reverse voltage V_{RRM} V
GBI 15A	35	50
GBI 15B	70	100
GBI 15D	140	200
GBI 15G	280	400
GBI 15J	420	600
GBI 15K	560	800
GBI 15M	700	1000

Absolute Maximum Ratings		$T_c = 25^\circ\text{C}$ unless otherwise specified	
Symbol	Conditions	Values	Units
I_{FRM}	Repetitive peak forward current; $f > 15\text{ Hz}^{1)}$	45	A
I^2t	Rating for fusing, $t < 10\text{ ms}$	240	A^2s
I_{FSM}	Peak forward surge current, 50 Hz half sine-wave $T_A = 25^\circ\text{C}$	220	A
I_{FAV}	Max. averaged fwd. current, R-load, $T_A = 50^\circ\text{C}^{1)}$	3,5	A
I_{FAV}	Max. averaged fwd. current, C-load, $T_A = 50^\circ\text{C}^{1)}$	2,8	A
I_{FAV}	Max. current with cooling fin, R-load, $T_c = 100^\circ\text{C}^{2)}$	15	A
I_{FAV}	Max. current with cooling fin, C-load, $T_c = 100^\circ\text{C}^{2)}$	12	A
R_{thA}	Thermal resistance junction to ambient $^{1)}$	20	K/W
R_{thC}	Thermal resistance junction to case $^{1)}$	2,5	K/W
T_j	Operating junction temperature	- 50 ... + 150	$^\circ\text{C}$
T_s	Storage temperature	- 50 ... + 150	$^\circ\text{C}$

Characteristics		$T_c = 25^\circ\text{C}$ unless otherwise specified	
Symbol	Conditions	Values	Units
V_F	Maximum forward. voltage, $T_j = 25^\circ\text{C}$; $I_F = 7,5\text{ A}$	1,05	V
I_R	Maximum Leakage current, $T_j = 25^\circ\text{C}$; $V_R = V_{RRM}$	10	μA
C_j	Typical junction capacitance per leg at V, MHz		pF



