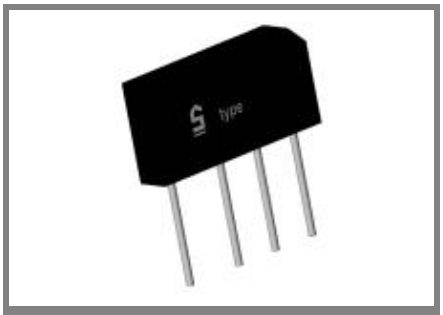
# GBI 10A ... GBI 10M



**Inline bridge**

## Silicon-Bridge Rectifiers

**GBI 10A ... GBI 10M**

**Forward Current: 10 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

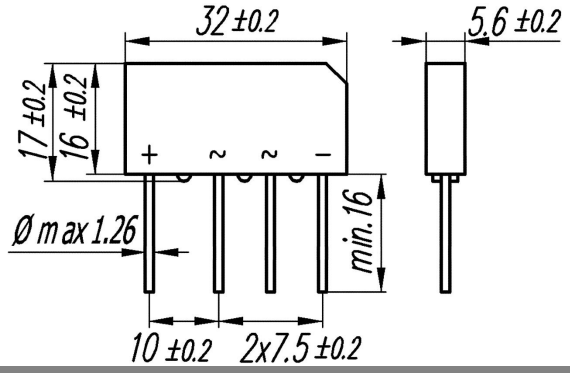
- Plastic case 32 * 5,6 * 17 [mm]
- Weight approx. 7g
- Terminals: plated terminals solderable per IEC 68-2-20
- Mounting position : any
- Marking : Type number

| Type | Alternating input voltage $V_{RMS}$ V | Repetetive peak reverse voltage $V_{RRM}$ V |
|---|---|---|
| GBI 10A | 35 | 50 |
| GBI 10B | 70 | 100 |
| GBI 10D | 140 | 200 |
| GBI 10G | 280 | 400 |
| GBI 10J | 420 | 600 |
| GBI 10K | 560 | 800 |
| GBI 10M | 700 | 1000 |

| **Absolute Maximum Ratings** | | $T_c$ = 25 °C unless otherwise specified | |
|---|---|---|---|
| **Symbol** | **Conditions** | **Values** | **Units** |
| $I_{FRM}$ | Repetitive peak forward current; f > 15 Hz[1)] | 40 | A |
| $I^2t$ | Rating for fusing, t < 10 ms | 200 | $A^2s$ |
| $I_{FSM}$ | Peak forward surge current, 50 Hz half sine-wave $T_A$ = 25 °C | 200 | A |
| $I_{FAV}$ | Max. averaged fwd. current, R-load, $T_A$ = 50 °C [1)] | 3,0 | A |
| $I_{FAV}$ | Max. averaged fwd. current, C-load, $T_A$ = 50 °C [1)] | 2,2 | A |
| $I_{FAV}$ | Max. current with cooling fin, R-load, $T_C$ = 100 °C [2)] | 10 | A |
| $I_{FAV}$ | Max. current with cooling fin, C-load, $T_C$ = 100 °C [2)] | 8 | A |
| $R_{thA}$ | Thermal resistance junction to ambient [1)] | 25 | K/W |
| $R_{thC}$ | Thermal resistance junction to case [1)] | 3 | K/W |
| $T_j$ | Operating junction temperature | - 50 ... + 150 | °C |
| $T_s$ | Storage temperature | - 50 ... + 150 | °C |

| **Characteristics** | | $T_c$ = 25 °C unless otherwise specified | |
|---|---|---|---|
| **Symbol** | **Conditions** | **Values** | **Units** |
| $V_F$ | Maximum forward. voltage, $T_j$ = 25 °C; $I_F$ = 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 |

Dimensions in mm



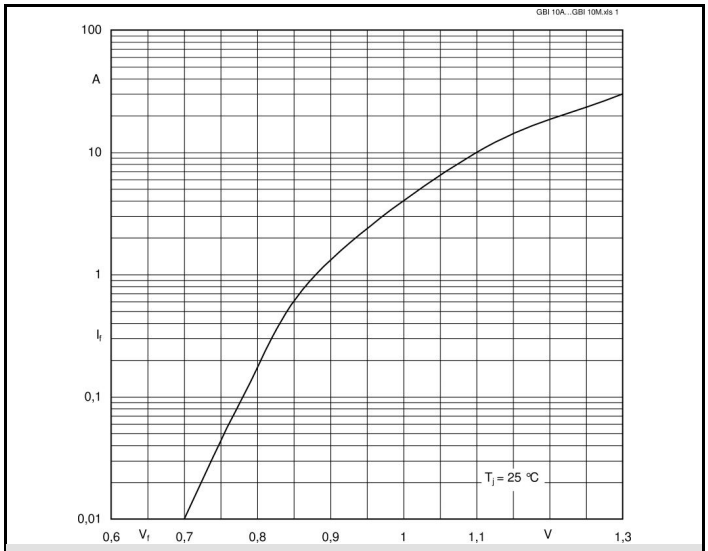



Fig. 1 : Forward characteristics (typical values)

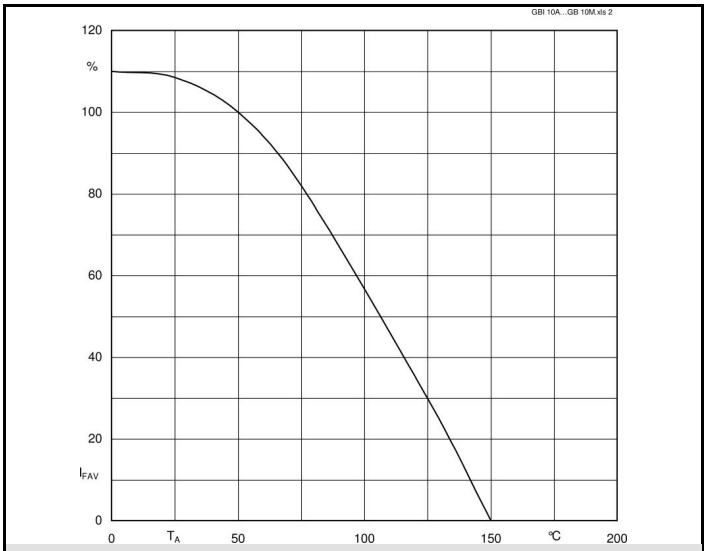



Fig. 2 : Rated forward current vs. ambient temperature