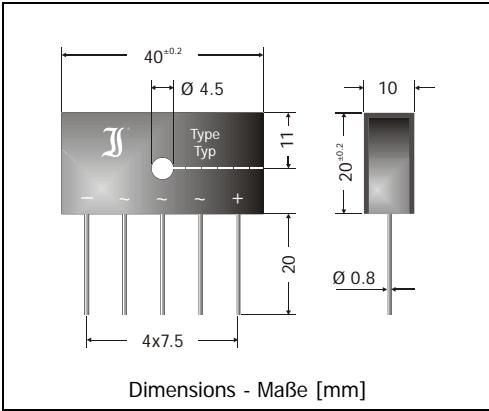


DBI 15-005 ... DBI 15-16
Three-Phase Si-Bridge-Rectifiers
Dreiphasen-Si-Brückengleichrichter

Version 2006-04-26



| | |
|--|-------------------|
| Nominal current Nennstrom | 15 A |
| Alternating input voltage Eingangswchelspannung | 35...1000 V |
| Metal case – Metallgehäuse | 40 x 20 x 10 [mm] |
| Weight approx. – Gewicht ca. | 35 g |
| Compound has classification UL94V-0 Vergussmasse nach UL94V-0 klassifiziert | |
| Standard packaging bulk Standard Lieferform lose im Karton | |



Maximum ratings

Grenzwerte

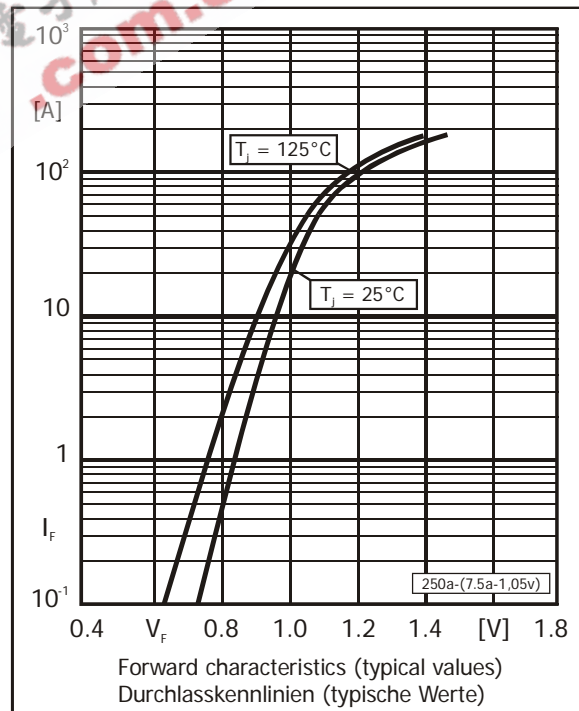
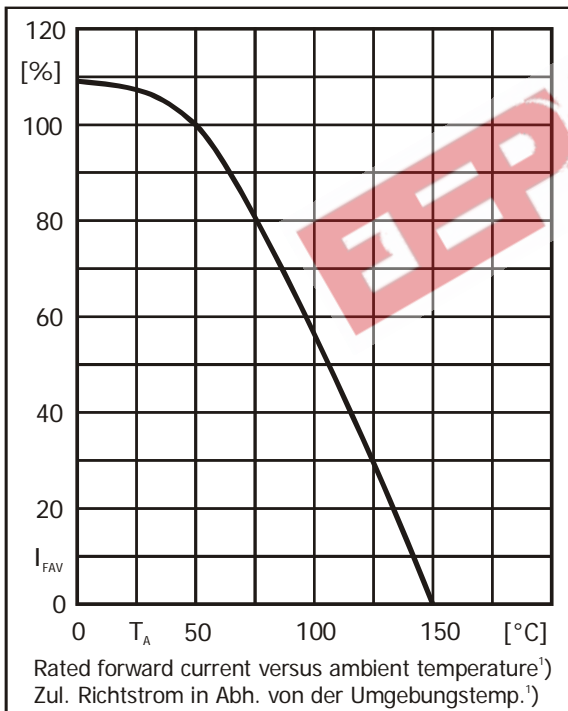
| Type Typ | Max. alternating input voltage Max. Eingangswchelspannung V_{VRMS} [V] | Repetitive peak reverse voltage Periodische Spitzensperrspannung V_{RRM} [V] ¹⁾ |
|-------------|--|--|
| DBI15-005 | 35 | 50 |
| DBI15-01 | 70 | 100 |
| DBI15-02 | 140 | 200 |
| DBI15-04 | 280 | 400 |
| DBI15-06 | 420 | 600 |
| DBI15-08 | 560 | 800 |
| DBI15-10 | 700 | 1000 |
| DBI15-12 | 800 | 1200 |
| DBI15-14 | 900 | 1400 |
| DBI15-16 | 1000 | 1600 |

| | | | |
|--|--------------------------|----------------|------------------------------|
| Repetitive peak forward current Periodischer Spitzenstrom | $f > 15$ Hz | I_{FRM} | 80 A ²⁾ |
| Peak forward surge current 50 Hz half sine-wave Stoßstrom für eine 50 Hz Sinus-Halbwell | $T_A = 25^\circ\text{C}$ | I_{FSM} | 250 A |
| Peak forward surge current 60 Hz half sine-wave Stoßstrom für eine 60 Hz Sinus-Halbwell | $T_A = 25^\circ\text{C}$ | I_{FSM} | 275 A |
| Rating for fusing, $t < 10$ ms Grenzlastintegral, $t < 10$ ms | $T_A = 25^\circ\text{C}$ | i^2t | 330 A ² s |
| Operating junction temperature – Sperrschichttemperatur Storage temperature – Lagerungstemperatur | | T_j T_s | -50...+150°C -50...+150°C |

1 Valid for one branch – Gültig für einen Brückenweig
 2 Valid, if leads are kept at ambient temperature at a distance of 5 mm from case
 Gültig, wenn die Anschlussdrähte in 5 mm Abstand vom Gehäuse auf Umgebungstemperatur gehalten werden

Characteristics
Kennwerte

| | | | | |
|--|--------------------------|----------------------|------------------------|--|
| Max. current without cooling fin Dauergrenzstrom ohne Kühlblech | $T_A = 50^\circ\text{C}$ | R-load C-load | I_{FAV} I_{FAV} | 2.5 A ¹⁾ 2.5 A ¹⁾ |
| Max. current with cooling fin 300 cm ² Dauergrenzstrom mit Kühlblech 300 cm ² | $T_A = 50^\circ\text{C}$ | R-load C-load | I_{FAV} I_{FAV} | 15 A 15 A |
| Forward voltage – Durchlass-Spannung | $T_J = 25^\circ\text{C}$ | $I_F = 7.5\text{ A}$ | V_F | < 1.05 V ¹⁾ |
| Leakage current – Sperrstrom | $T_J = 25^\circ\text{C}$ | $V_R = V_{RRM}$ | I_R | < 10 μA |
| Isolation voltage terminals to case Isolationsspannung Anschlüsse zum Gehäuse | | | V_{ISO} | > 2500 V |
| Thermal resistance junction to case Wärmewiderstand Sperrschicht – Gehäuse | | | R_{thc} | < 3.3 K/W |
| Admissible torque for mounting Zulässiges Anzugsdrehmoment | | | M4 | 18 \pm 10% lb.in. 2 \pm 10% Nm |



1 Valid for one branch – Gültig für einen Brückenweig