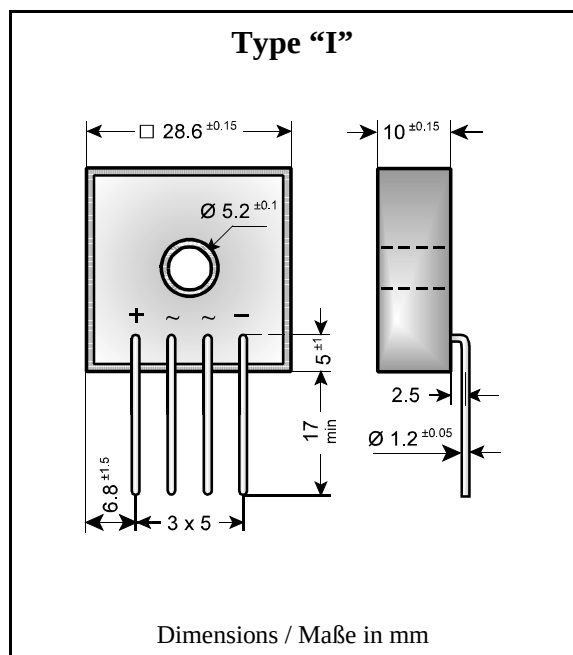


### Silicon-Bridge Rectifiers

### Silizium-Brückengleichrichter



Nominal current 35 A  
Nennstrom

Alternating input voltage 35...700 V  
Eingangswchselspannung

Plastic case with alu-bottom  
Kunststoffgeh. mit Alu-Boden

Dimensions 28.6 x 28.6 x 10 [mm]  
Abmessungen

Weight approx. – Gewicht ca. 23 g

Compound has classification UL94V-0  
Vergußmasse UL94V-0 klassifiziert

Standard packaging bulk  
Standard Lieferform lose im Karton

### Maximum ratings

### Grenzwerte

| Type<br>Typ | Alternating input voltage<br>Eingangswchselspanng.<br>$V_{VRMS}$ [V] | Repetitive peak reverse voltage<br>Period. Spitzensperrspannung<br>$V_{RRM}$ [V] <sup>1)</sup> | Surge peak reverse voltage<br>Stoßspitzensperrspannung<br>$V_{RSM}$ [V] <sup>1)</sup> |
|-------------|----------------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| KBPC 3500 I | 35                                                                   | 50                                                                                             | 80                                                                                    |
| KBPC 3501 I | 70                                                                   | 100                                                                                            | 130                                                                                   |
| KBPC 3502 I | 140                                                                  | 200                                                                                            | 250                                                                                   |
| KBPC 3504 I | 280                                                                  | 400                                                                                            | 450                                                                                   |
| KBPC 3506 I | 420                                                                  | 600                                                                                            | 700                                                                                   |
| KBPC 3508 I | 560                                                                  | 800                                                                                            | 1000                                                                                  |
| KBPC 3510 I | 700                                                                  | 1000                                                                                           | 1200                                                                                  |

Repetitive peak fwd. current – Period. Spitzenstrom  $f > 15$  Hz  $I_{FRM}$  80 A <sup>2)</sup>

Peak forward surge current, 50 Hz half sine-wave  
Stoßstrom für eine 50 Hz Sinus-Halbwellen  $T_A = 25^\circ\text{C}$   $I_{FSM}$  360 A

Peak forward surge current, 60 Hz half sine-wave  
Stoßstrom für eine 60 Hz Sinus-Halbwellen  $T_A = 25^\circ\text{C}$   $I_{FSM}$  400 A

Rating for fusing – Grenzlastintegral,  $t < 10$  ms  $T_A = 25^\circ\text{C}$   $i^2t$  660 A<sup>2</sup>s

<sup>1)</sup> Valid for one branch – Gültig für einen Brückenweig

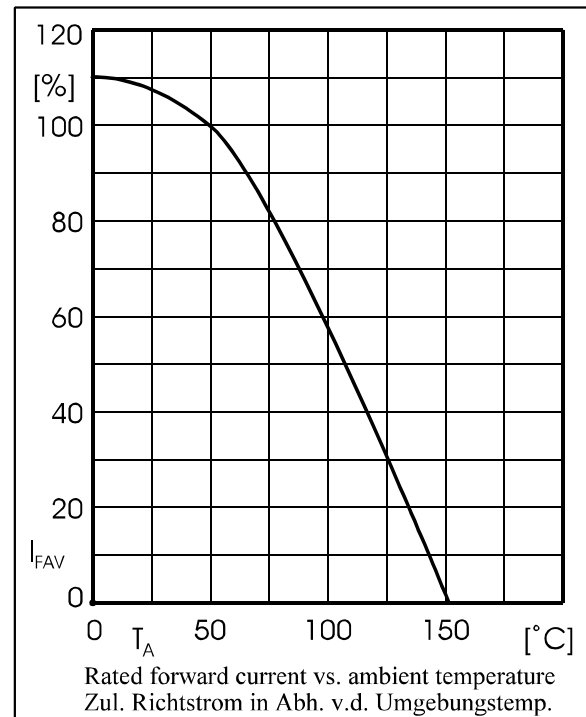
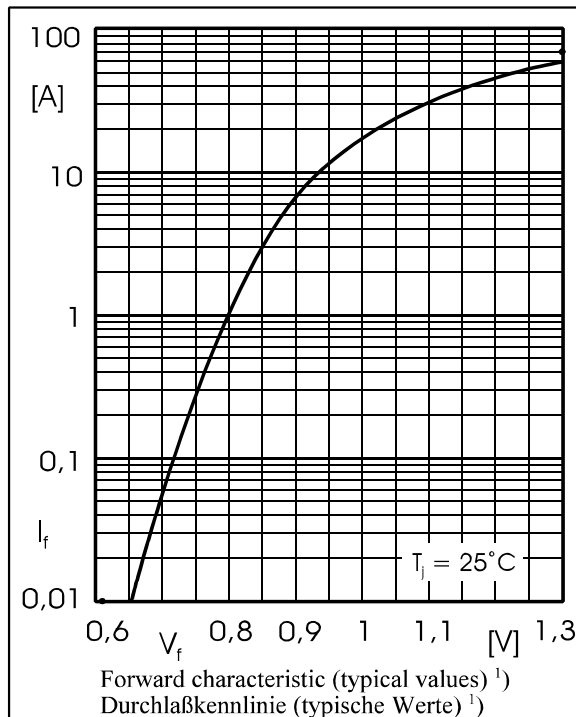
<sup>2)</sup> Valid, if the temperature of the case is kept to 120°C – Gültig, wenn die Gehäusetemperatur auf 120°C gehalten wird

Operating junction temperature – Sperrschichttemperatur  
Storage temperature – Lagerungstemperatur

$T_j$  – 50...+150 °C  
 $T_s$  – 50...+150 °C

**Characteristics****Kennwerte**

|                                                                                                        |                          |                        |                                      |                                      |
|--------------------------------------------------------------------------------------------------------|--------------------------|------------------------|--------------------------------------|--------------------------------------|
| Max. current with cooling fin 300 cm <sup>2</sup><br>Dauergrenzstrom mit Kühlblech 300 cm <sup>2</sup> | $T_A = 50^\circ\text{C}$ | R-load<br>C-load       | $I_{\text{FAV}}$<br>$I_{\text{FAV}}$ | 35.0 A<br>28.0 A                     |
| Forward voltage – Durchlaßspannung                                                                     | $T_j = 25^\circ\text{C}$ | $I_F = 17.5\text{ A}$  | $V_F$                                | < 1.1 V <sup>1)</sup>                |
| Leakage current – Sperrstrom                                                                           | $T_j = 25^\circ\text{C}$ | $V_R = V_{\text{RRM}}$ | $I_R$                                | < 25 $\mu\text{A}$                   |
| Isolation voltage terminals to case<br>Isolationsspannung Anschlüsse zum Gehäuse                       |                          |                        | $V_{\text{ISO}}$                     | >2500 V                              |
| Thermal resistance junction to case<br>Wärmewiderstand Sperrschicht – Gehäuse                          |                          |                        | $R_{\text{thC}}$                     | < 1.5 K/W                            |
| Admissible torque for mounting<br>Zulässiges Anzugsdrehmoment                                          |                          | 10-32 UNF<br>M 5       |                                      | 18 $\pm$ 10% lb.in<br>2 $\pm$ 10% Nm |



<sup>1)</sup> Valid for one branch – Gültig für einen Brückenweig