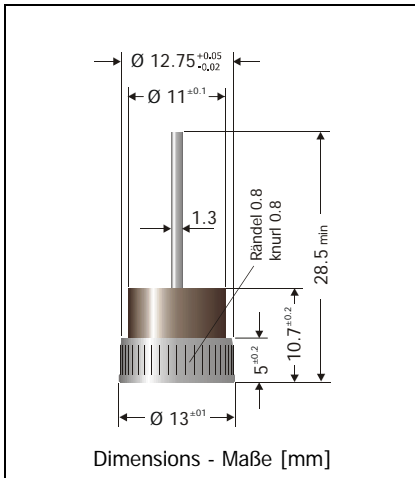


**BYP35A05 ... BYP35A6, BYP35K05 ... BYP35K6**

**Silicon-Press-Fit-Diodes – High Temperature Diodes  
Silizium-Einpress-Dioden – Hochtemperatur-Dioden**

Version 2006-04-22



Nominal Current 35 A  
 Nennstrom  
 Repetitive peak reverse voltage 50 ... 600 V  
 Periodische Spitzensperrspannung  
 Metal press-fit case with plastic cover  
 Metall-Einpressgehäuse mit Plastik-Abdeckung  
 Weight approx. 10 g  
 Gewicht ca.  
 Compound has classification UL94V-0  
 Vergussmasse nach UL94V-0 klassifiziert  
 Standard packaging: bulk  
 Standard Lieferform: lose im Karton



**Maximum ratings**

**Grenzwerte**

| Type / Typ<br>Wire to / Draht an |          | Repetive peak reverse voltage<br>Periodische Spitzensperrspannung<br>$V_{RRM}$ [V] | Surge peak reverse voltage<br>Stoßspitzensperrspannung<br>$V_{RSM}$ [V] |
|----------------------------------|----------|--|---|
| Anode                            | Cathode  |  |   |
| BYP35A05                         | BYP35K05 | 50   | 60  |
| BYP35A1                          | BYP35K1  | 100  | 120   |
| BYP35A2                          | BYP35K2  | 200  | 240   |
| BYP35A3                          | BYP35K3  | 300  | 360   |
| BYP35A4                          | BYP35K4  | 400  | 480   |
| BYP35A6                          | BYP35K6  | 600  | 700   |

|  |                           |                |                              |
|--|---------------------------|----------------|------------------------------|
| Max. average forward rectified current, R-load<br>Dauergrenzstrom in Einwegschaltung mit R-Last      | $T_C = 150^\circ\text{C}$ | $I_{FAV}$      | 35 A                         |
| Repetitive peak forward current<br>Periodischer Spitzenstrom   | $f > 15\text{ Hz}$        | $I_{FRM}$      | 130 A <sup>1)</sup>          |
| Peak forward surge current, 50/60 Hz half sine-wave<br>Stoßstrom für eine 50/60 Hz Sinus-Halbwellen  | $T_A = 25^\circ\text{C}$  | $I_{FSM}$      | 360/400 A                    |
| Rating for fusing, $t < 10\text{ ms}$<br>Grenzlastintegral, $t < 10\text{ ms}$                       | $T_A = 25^\circ\text{C}$  | $i^2t$         | 660 A <sup>2</sup> s         |
| Operating junction temperature – Sperrschichttemperatur<br>Storage temperature – Lagerungstemperatur |                           | $T_j$<br>$T_s$ | -50...+215°C<br>-50...+215°C |

1 Max. case temperature  $T_C = 150^\circ\text{C}$  – Max. Gehäusetemperatur  $T_C = 150^\circ\text{C}$

**Characteristics**

**Kennwerte**

|  |  |           |                     |
|--|--|-----------|---------------------|
| Forward Voltage – Durchlass-Spannung   | $T_j = 25^\circ\text{C}$ $I_F = 35\text{ A}$ | $V_F$     | < 1.1 V             |
| Leakage Current – Sperrstrom   | $T_j = 25^\circ\text{C}$ $V_R = V_{RRM}$     | $I_R$     | < 100 $\mu\text{A}$ |
| Thermal Resistance Junction – Case<br>Wärmewiderstand Sperrschicht – Gehäuse |  | $R_{thc}$ | < 0.8 K/W           |

