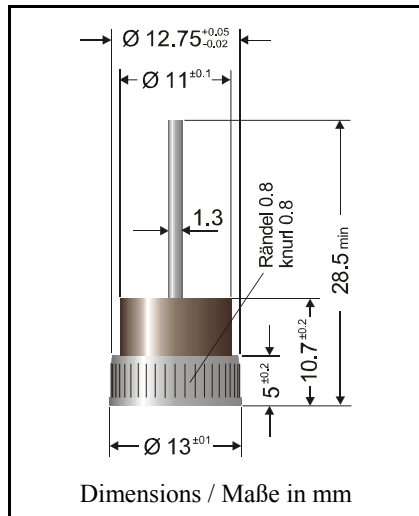


**Silicon Press-Fit-Diodes**  
**High-temperature diodes**

**Silizium-Einpreßdioden**  
**Hochtemperaturdioden**



Nominal current – Nennstrom 25 A

Repetitive peak reverse voltage 50...600 V  
Periodische Spitzensperrspannung

Metal press-fit case with plastic cover  
Metall-Einpreßgehäuse mit Plastik-Abdeckung

Weight approx. – Gewicht ca. 10 g

Casting compound has UL classification 94V-0  
Vergußmasse UL94V-0 klassifiziert

Standard packaging: bulk  
Standard Lieferform: lose im Karton

**Maximum ratings**

**Grenzwerte**

| Type / Typ         | Repetitive peak reverse voltage | Surge peak reverse voltage |
|--------------------|---------------------------------|----------------------------|
| Wire to / Draht an | Periodische Spitzensperrspanng. | Stoßspitzensperrspannung   |
| Anode Cathode      | $V_{RRM}$ [V]                   | $V_{RSM}$ [V]              |
| BYP 25A05          | 50                              | 60                         |
| BYP 25A1           | 100                             | 120                        |
| BYP 25A2           | 200                             | 240                        |
| BYP 25A3           | 300                             | 360                        |
| BYP 25A4           | 400                             | 480                        |
| BYP 25A6           | 600                             | 700                        |

|                                                                                                         |                           |           |                      |
|---------------------------------------------------------------------------------------------------------|---------------------------|-----------|----------------------|
| Max. average forward rectified current, R-load<br>Dauergrenzstrom in Einwegschaltung mit R-Last         | $T_C = 150^\circ\text{C}$ | $I_{FAV}$ | 25 A                 |
| Repetitive peak forward current<br>Periodischer Spitzenstrom                                            | $f > 15\text{ Hz}$        | $I_{FRM}$ | 90 A <sup>1)</sup>   |
| Peak forward surge current, 50 / 60 Hz half sine-wave<br>Stoßstrom für eine 50 / 60 Hz Sinus-Halbwellen | $T_A = 25^\circ\text{C}$  | $I_{FSM}$ | 270 / 300 A          |
| Rating for fusing – Grenzlasterintegral, $t < 10\text{ ms}$                                             | $T_A = 25^\circ\text{C}$  | $i^2t$    | 375 A <sup>2</sup> s |
| Operating junction temperature – Sperrschichttemperatur                                                 |                           | $T_j$     | – 50...+215 °C       |
| Storage temperature – Lagerungstemperatur                                                               |                           | $T_s$     | – 50...+215 °C       |
| Maximum pressure – Maximaler Einpreßdruck                                                               |                           |           | 7 kN                 |

<sup>1)</sup> Max. case temperature  $T_C = 150^\circ\text{C}$  – Max. Gehäusetemperatur  $T_C = 150^\circ\text{C}$

## Characteristics

## Kennwerte

|                                                                               |                          |                     |           |                            |
|-------------------------------------------------------------------------------|--------------------------|---------------------|-----------|----------------------------|
| Forward voltage – Durchlaßspannung                                            | $T_j = 25^\circ\text{C}$ | $I_F = 25\text{ A}$ | $V_F$     | $< 1.1\text{ V}$           |
| Leakage current – Sperrstrom                                                  | $T_j = 25^\circ\text{C}$ | $V_R = V_{RRM}$     | $I_R$     | $< 100\text{ }\mu\text{A}$ |
| Thermal resistance junction to case<br>Wärmewiderstand Sperrschicht – Gehäuse |                          |                     | $R_{thC}$ | $< 1\text{ K/W}$           |

