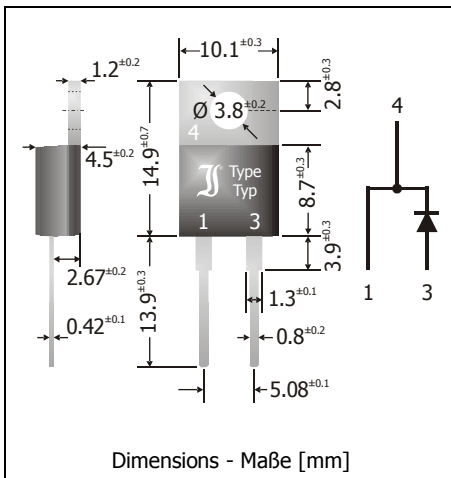


**PT800A ... PT800M**
**Silicon Rectifier Diodes – Single Diode**  
**Silizium-Gleichrichterdioden – Einzeldiode**

Version 2013-05-07



Nominal current

8 A

Nennstrom

 Repetitive peak reverse voltage  
 Periodische Spitzensperrspannung

50...1000 V

 Plastic case  
 Kunststoffgehäuse

TO-220AC

 Weight approx.  
 Gewicht ca.

1.8 g

 Plastic material has UL classification 94V-0  
 Gehäusematerial UL94V-0 klassifiziert

 Standard packaging in tubes  
 Standard Lieferform in Stangen
**Maximum ratings and Characteristics****Grenz- und Kennwerte**

| Type<br>Typ | Repetitive peak reverse voltage<br>Periodische Spitzensperrspannung<br>$V_{RRM}$ [V] | Surge peak reverse voltage<br>Stoßspitzensperrspannung<br>$V_{RSM}$ [V] | Forward voltage<br>Durchlass-Spannung<br>$V_F$ [V] <sup>1)</sup> |                    |
|-------------|--------------------------------------------------------------------------------------|-------------------------------------------------------------------------|------------------------------------------------------------------|--------------------|
|             |                                                                                      |                                                                         | $I_F = 5\text{ A}$                                               | $I_F = 8\text{ A}$ |
| PT800A      | 50                                                                                   | 50                                                                      | < 1.0                                                            | < 1.1              |
| PT800B      | 100                                                                                  | 100                                                                     | < 1.0                                                            | < 1.1              |
| PT800D      | 200                                                                                  | 200                                                                     | < 1.0                                                            | < 1.1              |
| PT800G      | 400                                                                                  | 400                                                                     | < 1.0                                                            | < 1.1              |
| PT800J      | 600                                                                                  | 600                                                                     | < 1.0                                                            | < 1.1              |
| PT800K      | 800                                                                                  | 800                                                                     | < 1.0                                                            | < 1.1              |
| PT800M      | 1000                                                                                 | 1000                                                                    | < 1.0                                                            | < 1.1              |

|                                                                                                     |                           |                |                              |
|-----------------------------------------------------------------------------------------------------|---------------------------|----------------|------------------------------|
| Max. average forward rectified current, R-load<br>Dauergrenzstrom in Einwegschaltung mit R-Last     | $T_C = 100^\circ\text{C}$ | $I_{FAV}$      | 8 A                          |
| Repetitive peak forward current<br>Periodischer Spitzenstrom                                        | $f > 15\text{ Hz}$        | $I_{FRM}$      | 30 A <sup>2)</sup>           |
| Peak forward surge current, 50/60 Hz half sine-wave<br>Stoßstrom für eine 50/60 Hz Sinus-Halbwellen | $T_A = 25^\circ\text{C}$  | $I_{FSM}$      | 135/150 A                    |
| Rating for fusing, $t < 10\text{ ms}$<br>Grenzlastintegral, $t < 10\text{ ms}$                      | $T_A = 25^\circ\text{C}$  | $i^2t$         | 90 A <sup>2</sup> s          |
| Junction temperature – Sperrschichttemperatur<br>Storage temperature – Lagerungstemperatur          |                           | $T_j$<br>$T_s$ | -50...+150°C<br>-50...+175°C |

1  $T_j = 25^\circ\text{C}$ 2 Max. temperature of the case  $T_C = 100^\circ\text{C}$  – Max. Temperatur des Gehäuses  $T_C = 100^\circ\text{C}$

**Characteristics**
**Kennwerte**

|                                                                               |                                          |           |                     |
|-------------------------------------------------------------------------------|------------------------------------------|-----------|---------------------|
| Leakage current<br>Sperrstrom                                                 | $T_j = 25^\circ\text{C}$ $V_R = V_{RRM}$ | $I_R$     | $< 5 \mu\text{A}$   |
| Thermal resistance junction to case<br>Wärmewiderstand Sperrschicht – Gehäuse |                                          | $R_{thC}$ | $< 2.5 \text{ K/W}$ |

