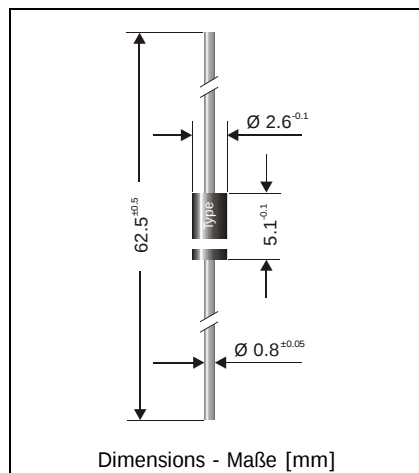


## HV1.5 ... HV2

**Fast Switching High Voltage Si-Rectifiers**  
**Schnelle Si-Hochspannungs-Gleichrichter**

Version 2006-04-27



|                                                                                       |                   |
|---------------------------------------------------------------------------------------|-------------------|
| Nominal current<br>Nennstrom                                                          | 500 mA            |
| Repetitive peak reverse voltage<br>Periodische Spitzensperrspannung                   | 1500...2000 V     |
| Plastic case<br>Kunststoffgehäuse                                                     | DO-41<br>DO-204AL |
| Weight approx.<br>Gewicht ca.                                                         | 0.4 g             |
| Plastic material has UL classification 94V-0<br>Gehäusematerial UL94V-0 klassifiziert |                   |
| Standard packaging taped in ammo pack<br>Standard Lieferform gegurtet in Ammo-Pack    |                   |

**Maximum ratings****Grenzwerte**

| Type<br>Typ | Repetitive peak reverse voltage<br>Periodische Spitzensperrspannung<br>$V_{RRM}$ [V] | Surge peak reverse voltage<br>Stoßspitzensperrspannung<br>$V_{RSM}$ [V] |
|-------------|--------------------------------------------------------------------------------------|-------------------------------------------------------------------------|
| HV1.5       | 1500                                                                                 | 1500                                                                    |
| HV2         | 2000                                                                                 | 2000                                                                    |

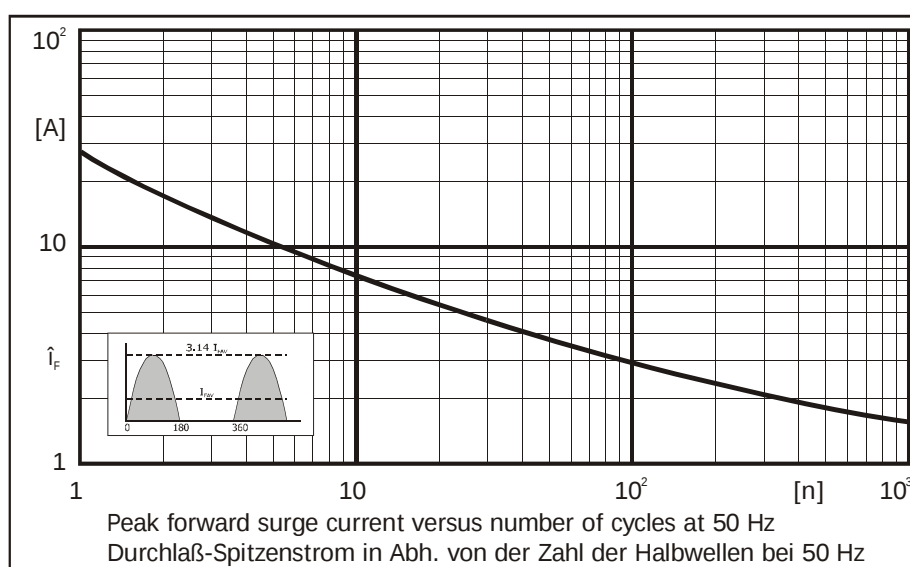
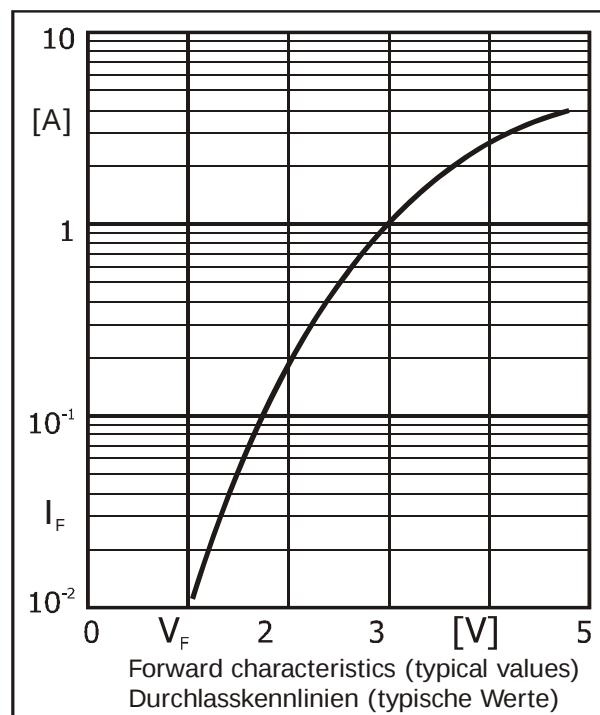
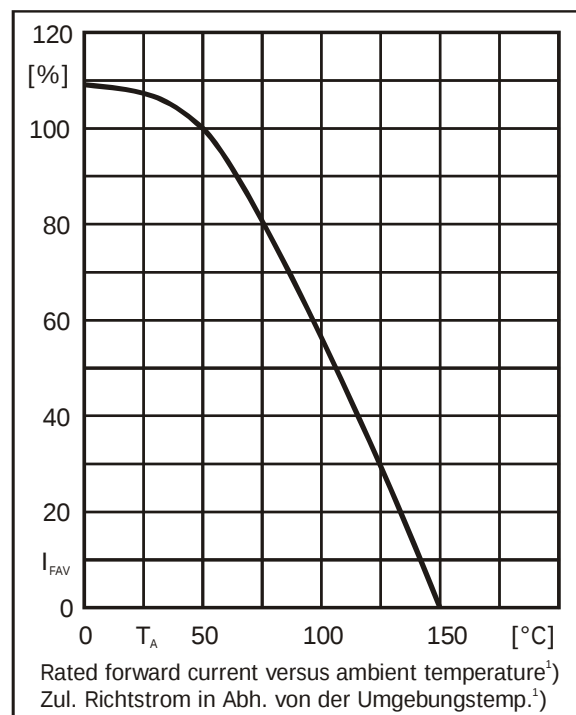
|                                                                                                    |                          |                |                              |
|----------------------------------------------------------------------------------------------------|--------------------------|----------------|------------------------------|
| Max. average forward rectified current, R-load<br>Dauergrenzstrom in Einwegschaltung mit R-Last    | $T_A = 50^\circ\text{C}$ | $I_{FAV}$      | 500 mA <sup>1)</sup>         |
| Repetitive peak forward current<br>Periodischer Spitzenstrom                                       | $f > 15\text{ Hz}$       | $I_{FRM}$      | 5 A <sup>1)</sup>            |
| Peak forward surge current, 50/60 Hz half sine-wave<br>Stoßstrom für eine 50/60 Hz Sinus-Halbwelle | $T_A = 25^\circ\text{C}$ | $I_{FSM}$      | 27/30 A                      |
| Rating for fusing – Grenzlastintegral, $t < 10\text{ ms}$                                          | $T_A = 25^\circ\text{C}$ | $i^2t$         | 3.5 A <sup>2</sup> s         |
| Junction temperature – Sperrschichttemperatur<br>Storage temperature – Lagerungstemperatur         |                          | $T_j$<br>$T_s$ | -50...+150°C<br>-50...+150°C |

1 Valid, if leads are kept at ambient temperature at a distance of 10 mm from case  
Gültig, wenn die Anschlussdrähte in 10 mm Abstand vom Gehäuse auf Umgebungstemperatur gehalten werden

# Characteristics

# Kennwerte

|                                                                                             |                                                                                  |           |                          |
|---------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------|-----------|--------------------------|
| Forward voltage – Durchlass-Spannung                                                        | $T_j = 25^\circ\text{C}$ $I_F = 500\text{ mA}$                                   | $V_F$     | $< 3\text{ V}$           |
| Leakage current<br>Sperrstrom                                                               | $T_j = 25^\circ\text{C}$ $V_R = V_{RRM}$                                         | $I_R$     | $< 3\text{ }\mu\text{A}$ |
| Reverse recovery time<br>Sperrverzugszeit                                                   | $I_F = 10\text{ mA}$ through/über<br>$I_R = 10\text{ mA}$ to $I_R = 1\text{ mA}$ | $t_{rr}$  | $< 400\text{ ns}$        |
| Thermal resistance junction to ambient air<br>Wärmewiderstand Sperrschicht – umgebende Luft |                                                                                  | $R_{thA}$ | $< 60\text{ K/W}^{1)}$   |



1 Valid, if leads are kept at ambient temperature at a distance of 10 mm from case  
Gültig, wenn die Anschlussdrähte in 10 mm Abstand vom Gehäuse auf Umgebungstemperatur gehalten werden