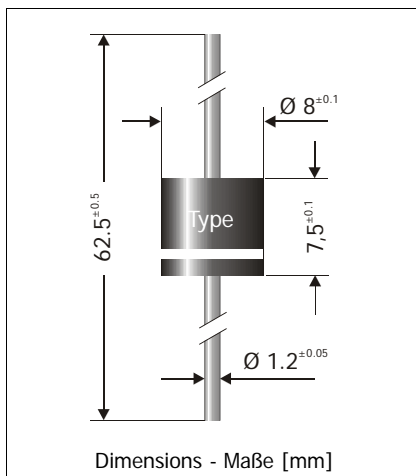


## UF600A ... UF600M

### Ultrafast Switching Si-Rectifiers – Ultraschnelle Si-Gleichrichter

Version 2006-04-26



|   |                              |
|---|------------------------------|
| Nominal current<br>Nennstrom  | 6 A                          |
| Repetitive peak reverse voltage<br>Periodische Spitzensperrspannung                   | 50...1000 V                  |
| Plastic case<br>Kunststoffgehäuse   | Ø 8 x 7.5 [mm]<br>P600 Style |
| Weight approx.<br>Gewicht ca.   | 1.3 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] |
|-------------|--|---|
| UF600A      | 50   | 50  |
| UF600B      | 100  | 100   |
| UF600D      | 200  | 200   |
| UF600G      | 400  | 400   |
| UF600J      | 600  | 600   |
| UF600K      | 800  | 800   |
| UF600M      | 1000   | 1000  |

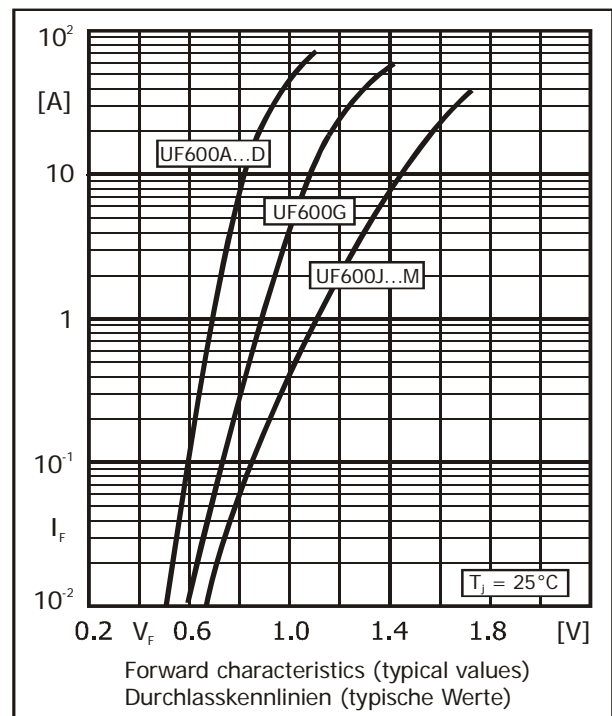
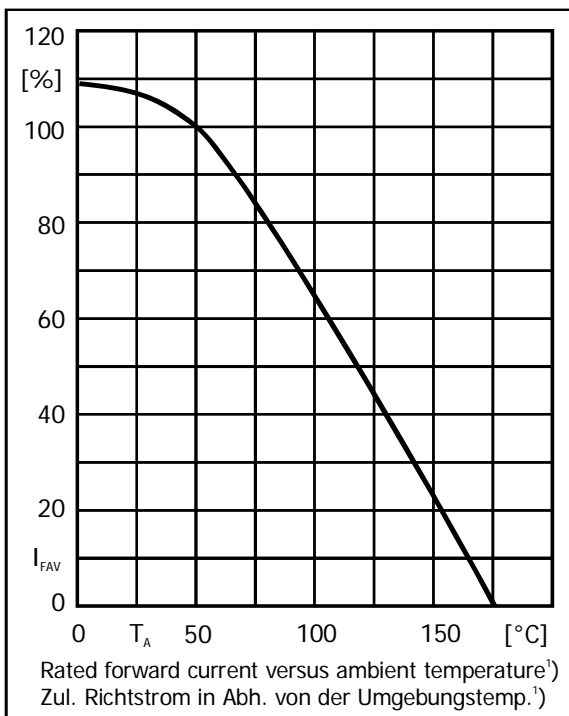
|   |                          |                |                              |
|---|--------------------------|----------------|------------------------------|
| Max. average forward rectified current, R-load<br>Dauergrenzstrom in Einwegschaltung mit R-Last     | $T_A = 50^\circ\text{C}$ | $I_{FAV}$      | 6 A <sup>1)</sup>            |
| Repetitive peak forward current<br>Periodischer Spitzenstrom  | $f > 15\text{ Hz}$       | $I_{FRM}$      | 60 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, Grenzlastintegral, $t < 10\text{ ms}$  | $T_A = 25^\circ\text{C}$ | $i^2t$         | 370 A <sup>2</sup> s         |
| Junction temperature – Sperrschichttemperatur<br>Storage temperature – Lagerungstemperatur          |                          | $T_j$<br>$T_s$ | -50...+175°C<br>-50...+175°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 von Gehäuse auf Umgebungstemperatur gehalten werden

**Characteristics**
**Kennwerte**

| Type<br>Typ       | Reverse recovery time<br>Sperrverzugszeit | Forward voltage<br>Durchlass-Spannung |
|-------------------|---|---------------------------------------|
|                   | $T_j = 25^\circ\text{C}$                  | $I_F = [\text{A}]$                    |
|                   | $t_{rr} [\text{ns}]^1)$                   | $V_F [\text{V}]$ at / bei             |
| UF600A ... UF600D | < 75                                      | < 1.0                                 |
| UF600G            | < 75                                      | < 1.25                                |
| UF600J ... UF600M | < 100                                     | < 1.7                                 |

|   |  |           |                        |
|---|--|-----------|------------------------|
| Leakage current<br>Sperrstrom   | $T_j = 25^\circ\text{C}$ $V_R = V_{RRM}$ | $I_R$     | < 25 $\mu\text{A}$     |
| Thermal resistance junction to ambient air<br>Wärmewiderstand Sperrschicht – umgebende Luft |  | $R_{thA}$ | < 14 K/W <sup>1)</sup> |
| Thermal resistance junction to leads<br>Wärmewiderstand Sperrschicht – Anschlussdraht       |  | $R_{thL}$ | < 4 K/W                |



1  $I_F = 0.5 \text{ A}$  through/über  $I_R = 1 \text{ A}$  to/auf  $I_R = 0.25 \text{ A}$

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 von Gehäuse auf Umgebungstemperatur gehalten werden