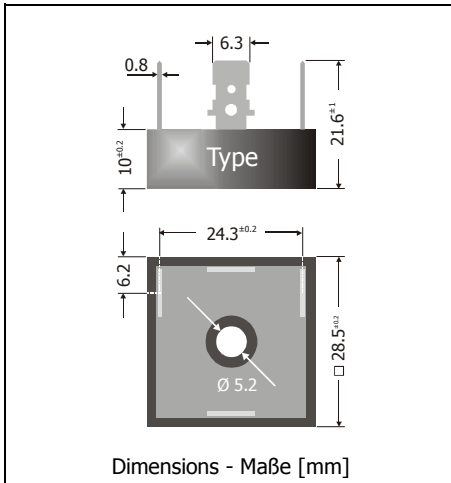


D60VC20 ... D60VC120

Silicon-Twin-Rectifiers Silizium-Doppeldiode

Version 2005-04-26



| | |
|---|-----------------------|
| Nominal current Nennstrom | 60 A |
| Alternating input voltage Eingangswchelspannung | 60...800 V |
| Plastic case with alu-bottom Kunststoffgehäuse mit Alu-Boden | 28.5 x 28.5 x 10 [mm] |
| Weight approx. Gewicht ca. | 23 g |
| Plastic material has UL classification 94V-0 Gehäusematerial UL94V-0 klassifiziert | |
| Standard packaging bulk Standard Lieferform lose im Karton | |

Maximum ratings

Grenzwerte

| Type Typ | Repetitive peak reverse voltage Periodische Sperrspannung V_{RRM} [V] | Surge peak reverse voltage Stoßsperrspannung V_{RSM} [V] ¹⁾ |
|-------------|---|--|
| D60VC20 | 200 | 200 |
| D60VC40 | 400 | 400 |
| D60VC60 | 600 | 600 |
| D60VC80 | 800 | 800 |
| D60VC100 | 1000 | 1000 |
| D60VC120 | 1200 | 1200 |

| | | | |
|--|--------------------------|-----------|----------------------|
| Max. average forward rectified current, R-load Dauergrenzstrom in Einwegschtung mit R-Last | per diode 'pro Diode | I_{FAV} | 60 A ²⁾ |
| Repetitive peak forward current Periodischer Spitzenstrom | $f > 15$ Hz | I_{FRM} | 120 A ²⁾ |
| Peak forward surge current, 50/60 Hz half sine-wave Stoßstrom für eine 50/60 Hz Sinus-Halbwelle | $T_A = 25^\circ\text{C}$ | I_{FSM} | 450/500 A |
| Rating for fusing, $t < 10$ ms Grenzlastintegral, $t < 10$ ms | $T_A = 25^\circ\text{C}$ | i^2t | 1000A ² s |
| Isolation voltage terminals to case Isolationsspannung Anschlüsse zum Gehäuse | $t = 1$ min | V_{ISO} | ≥ 2000 V |
| Junction temperature – Sperrschichttemperatur | | T_j | -50...+150°C |
| Storage temperature – Lagerungstemperatur | | T_s | -50...+150°C |

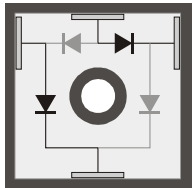
1 Per diode – Pro Diode

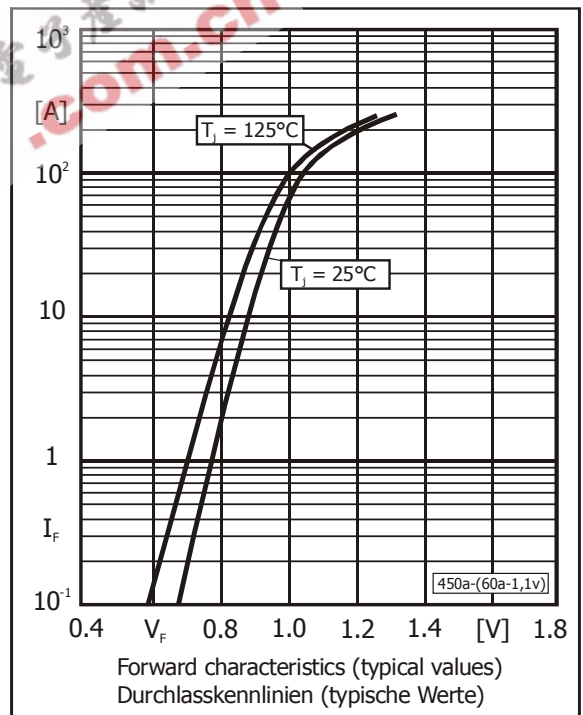
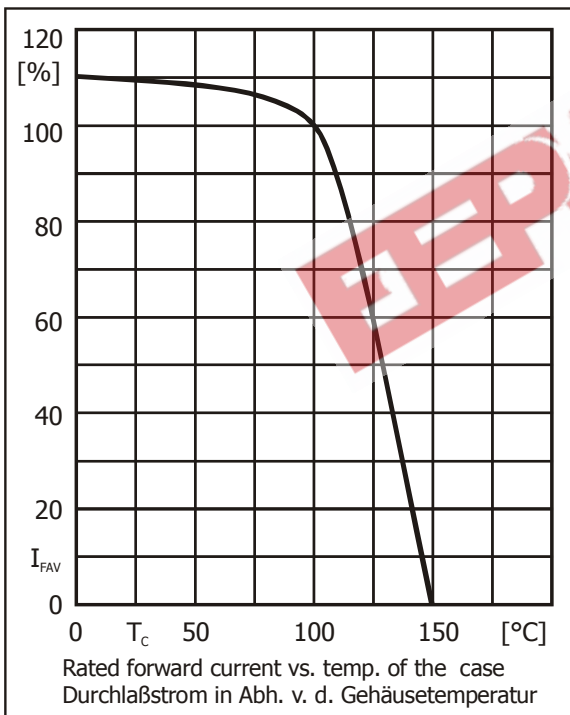
2 Max. case temperature $T_c = 100^\circ\text{C}$ – Max. Gehäusetemperatur $T_c = 100^\circ\text{C}$

Characteristics

Kenwerte

| | | | | |
|---|--------------------------|---------------------|------------|--|
| Forward voltage Durchlass-Spannung | $T_j = 25^\circ\text{C}$ | $I_F = 60\text{ A}$ | V_F | $< 1.1\text{ V}^1)$ |
| Leakage current – Sperrstrom | $T_j = 25^\circ\text{C}$ | $V_R = V_{RRM}$ | I_R | $< 100\ \mu\text{A}$ |
| Thermal resistance junction to case Wärmewiderstand Sperrschicht – Gehäuse | | | R_{thJC} | $< 0.6\text{ K/W}$ |
| Admissible torque for mounting Zulässiges Anzugsdrehmoment | | 10-32 UNF M5 | | $18 \pm 10\% \text{ lb.in}$ $2 \pm 10\% \text{ Nm}$ |

| | | |
|---------------------------------|---|--|
| Device layout Innerer Aufbau |  | For grey colored diodes only blocking characteristics are valid Für die grau gezeichneten Dioden gelten nur die Sperrigenschaften |
|---------------------------------|---|--|



1 Per diode – Pro Diode