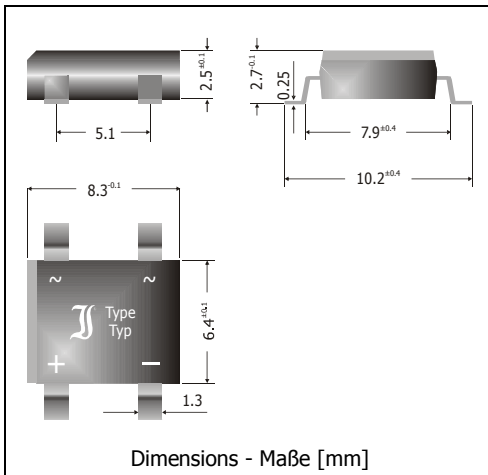


CS10S ... CS50S

"Slim" Profile Surface Mount Schottky-Bridge-Rectifiers Schottky-Brückengleichrichter für die Oberflächenmontage mit „schlanker“ Bauhöhe

Version 2013-02-01



Dimensions - Maße [mm]

| | |
|---|----------------------|
| Nominal current Nennstrom | 1 A |
| Alternating input voltage Eingangswchselfspannung | 10...50 V |
| Plastic case slim profile 1.6mm Kunststoffgehäuse schlanke Bauhöhe 1.6mm | 8.3 x 6.4 x 2.5 [mm] |
| Weight approx. – Gewicht ca. | 0.1 g |
| Plastic material has UL classification 94V-0 Gehäusematerial UL94V-0 klassifiziert | |
| Standard packaging taped and reeled Standard Lieferform gegurtet auf Rolle | |



Recognized Product – Underwriters Laboratories Inc.® File E175067
Anerkanntes Produkt – Underwriters Laboratories Inc.® Nr. E175067

Maximum ratings and characteristics

Grenz- und Kennwerte

| Type Typ | Max. alternating input voltage Max. Eingangswchselfspannung V_{VRMS} [V] | Repetitive peak reverse voltage Period. Spitzensperrspannung V_{RRM} [V] | Forward voltage Durchlass-Spannung V_F [V] ^{1,2)} |
|-------------|--|--|--|
| CS10S | 10 | 20 | < 0.50 |
| CS20S | 20 | 40 | < 0.50 |
| CS30S | 30 | 60 | < 0.70 |
| CS40S | 40 | 80 | < 0.79 |
| CS50S | 50 | 100 | < 0.79 |

| | | | |
|--|--------------------------|----------------|------------------------------|
| Repetitive peak forward current Periodischer Spitzenstrom | $f > 15$ Hz | I_{FRM} | 10 A ¹⁾ |
| Peak forward surge current, 50/60 Hz half sine-wave Stoßstrom für eine 50/60 Hz Sinus-Halbwell | $T_A = 25^\circ\text{C}$ | I_{FSM} | 40/44 A |
| Rating for fusing, $t < 10$ ms Grenzlastintegral, $t < 10$ ms | $T_A = 25^\circ\text{C}$ | i^2t | 8 A ² s |
| Operating junction temperature – Sperrschichttemperatur Storage temperature – Lagerungstemperatur | | T_j T_s | -50...+150°C -50...+150°C |

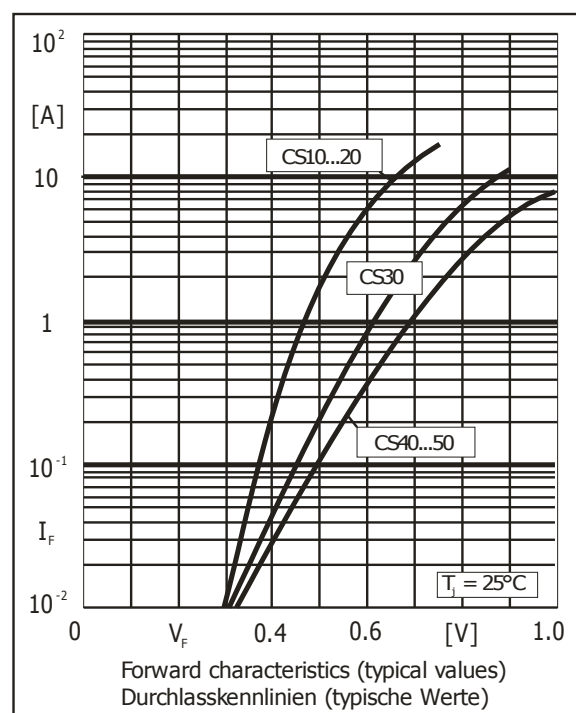
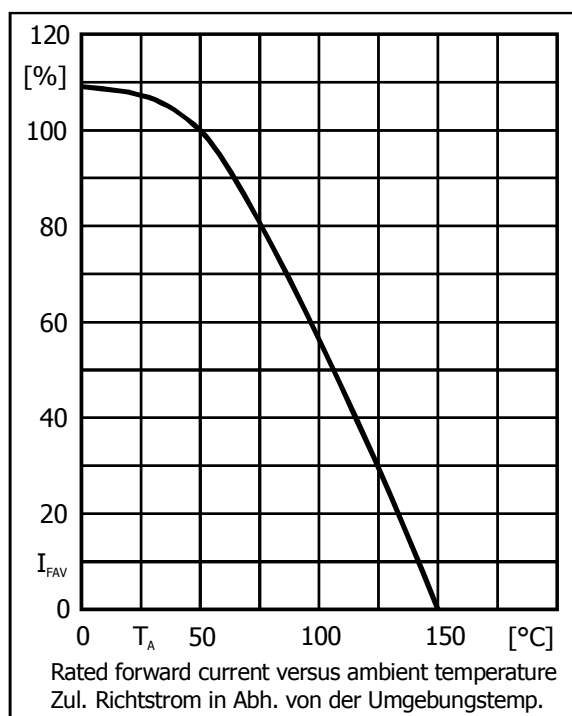
1 $I_F = 1$ A, $T_j = 25^\circ\text{C}$

2 Per Diode – Pro Diode

1 Max. temperature of the terminals $T_T = 100^\circ\text{C}$ – Max. Temperatur der Anschlüsse $T_T = 100^\circ\text{C}$

Characteristics
Kennwerte

| | | | | |
|---|---|------------------------------------|------------------------|--|
| Max. average forward rectified current Dauergrenzstrom | $T_A = 50^\circ\text{C}$ | R-load C-load | I_{FAV} I_{FAV} | $1.0\text{ A}^{1)}$ $0.8\text{ A}^{1)}$ |
| Leakage current Sperrstrom | $T_j = 25^\circ\text{C}$ $T_j = 100^\circ\text{C}$ | $V_R = V_{RRM}$ $V_R = V_{RRM}$ | I_R I_R | $< 0.5\text{ mA}$ $< 5.0\text{ mA}$ |
| Thermal resistance junction to ambient air Wärmewiderstand Sperrschicht – umgebende Luft | | | R_{thA} | $< 60\text{ K/W}^{1)}$ |



1 Mounted on P.C. Board with 25 mm² copper pads at each terminal
Montage auf Leiterplatte mit 25 mm² Kupferbelag (Löt-pad) an jedem Anschluss