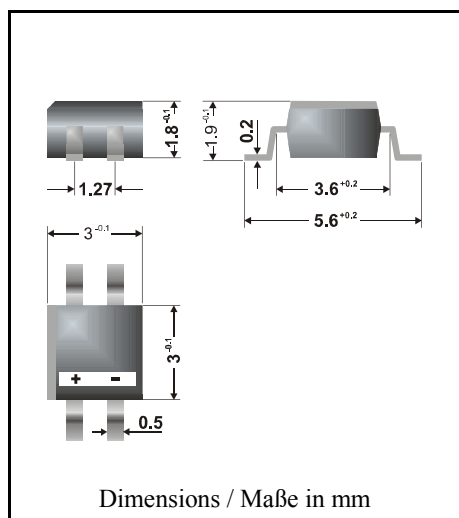


# Surface Mount Si-Bridge Rectifiers

## Si-Brückengleichrichter für die Oberflächenmontage



|                                                                                       |                               |
|---------------------------------------------------------------------------------------|-------------------------------|
| Nominal current – Nennstrom                                                           | 0.5 A                         |
| Alternating input voltage<br>Eingangswchselspannung                                   | 40...250 V                    |
| Plastic case<br>Kunststoffgehäuse                                                     | 3 x 3 x 1.8 [mm]<br>MicroDIL  |
| Weight approx. – Gewicht ca.                                                          | 0.04 g                        |
| Plastic material has UL classification 94V-0<br>Gehäusematerial UL94V-0 klassifiziert |                               |
| Standard packaging taped and reeled<br>Standard Lieferform gegurtet auf Rolle         | see page 18<br>siehe Seite 18 |

Marking: Coloured bar denotes “DC-side” and “voltage class” (see below)  
Kennzeichnung: Farbiger Balken kennzeichnet “Gleichstromseite” und “Spannungsklasse” (s.u.)



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

### Maximum ratings

### Grenzwerte

| Type<br>Typ | Alternating input voltage<br>Eingangswchselspannung<br>$V_{VRMS}$ [V] | Repetitive peak reverse voltage<br>Period. Spitzensperrspannung<br>$V_{RRM}$ [V] <sup>1)</sup> | Colour of bar<br>Balkenfarbe |
|-------------|-----------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------|
| MYS 40      | 40                                                                    | 80                                                                                             | yellow / gelb                |
| MYS 80      | 80                                                                    | 160                                                                                            | red / rot                    |
| MYS 125     | 125                                                                   | 250                                                                                            | white / weiß                 |
| MYS 250     | 250                                                                   | 600                                                                                            | green / grün                 |

|                                                                                                      |                          |                |                                |
|------------------------------------------------------------------------------------------------------|--------------------------|----------------|--------------------------------|
| Repetitive peak forward current<br>Periodischer Spitzenstrom                                         | $f > 15$ Hz              | $I_{FRM}$      | 6 A <sup>2)</sup>              |
| Peak forward surge current, 50 Hz half sine-wave<br>Stoßstrom für eine 50 Hz Sinus-Halbwellen        | $T_A = 25^\circ\text{C}$ | $I_{FSM}$      | 20 A                           |
| Rating for fusing, $t < 10$ ms<br>Grenzlastintegral, $t < 10$ ms                                     | $T_A = 25^\circ\text{C}$ | $i^2t$         | 4.5 A <sup>2</sup> s           |
| Operating junction temperature – Sperrschichttemperatur<br>Storage temperature – Lagerungstemperatur |                          | $T_j$<br>$T_s$ | – 55...+150°C<br>– 55...+150°C |

<sup>1)</sup> Valid for one branch – Gültig für einen Brückenast

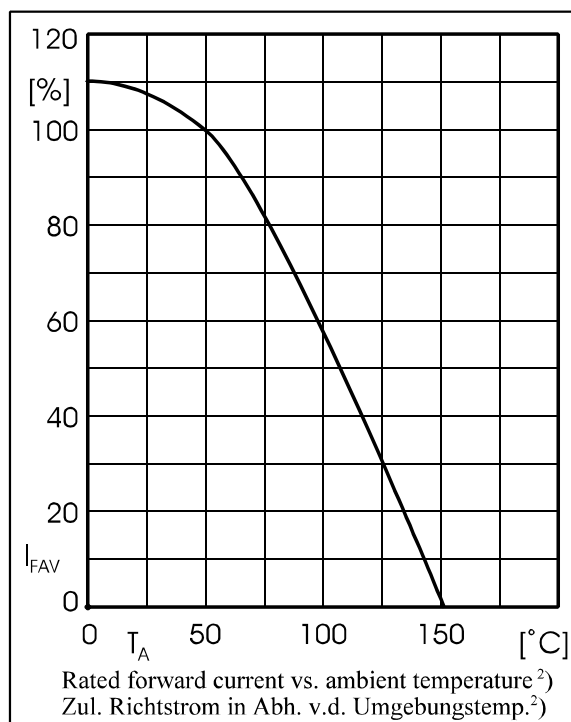
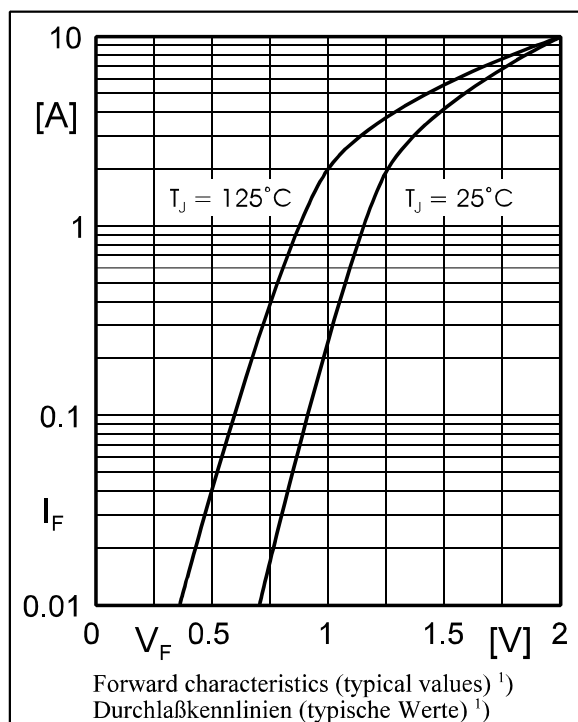
<sup>2)</sup> Max. temperature of the terminals  $T_T = 100^\circ\text{C}$  – Max. Temperatur der Anschlüsse  $T_T = 100^\circ\text{C}$

**Characteristics**

**Kennwerte**

|                                                                                             |                          |                        |                                      |                                            |
|---------------------------------------------------------------------------------------------|--------------------------|------------------------|--------------------------------------|--------------------------------------------|
| Max. average forward rectified current<br>Dauergrenzstrom                                   | $T_A = 50^\circ\text{C}$ | R-load<br>C-load       | $I_{\text{FAV}}$<br>$I_{\text{FAV}}$ | $0.5\text{ A}^{2)}$<br>$0.4\text{ A}^{2)}$ |
| Forward voltage – Durchlaßspannung                                                          | $T_j = 25^\circ\text{C}$ | $I_F = 0.5\text{ A}$   | $V_F$                                | $< 1.2\text{ V}^{1)}$                      |
| Leakage current – Sperrstrom                                                                | $T_j = 25^\circ\text{C}$ | $V_R = V_{\text{RRM}}$ | $I_R$                                | $< 10\text{ }\mu\text{A}$                  |
| Thermal resistance junction to ambient air<br>Wärmewiderstand Sperrschicht – umgebende Luft |                          |                        | $R_{\text{thA}}$                     | $< 70\text{ K/W}^{2)}$                     |

| Type<br>Typ | Max. admissible load capacitor<br>Max. zulässiger Ladekondensator<br>$C_L [\mu\text{F}]$ | Min. required protective resistor<br>Min. erforderl. Schutzwiderstand<br>$R_t [\Omega]$ |
|-------------|------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| MYS 40      | 5000                                                                                     | 0.8                                                                                     |
| MYS 80      | 2500                                                                                     | 1.6                                                                                     |
| MYS 125     | 1500                                                                                     | 2.5                                                                                     |
| MYS 250     | 800                                                                                      | 5.0                                                                                     |



<sup>1)</sup> Valid for one branch – Gültig für einen Brückenzweig

<sup>2)</sup> Mounted on P.C. board with 25 mm<sup>2</sup> copper pads at each terminal  
Montage auf Leiterplatte mit 25 mm<sup>2</sup> Kupferbelag (Lötpad) an jedem Anschluß