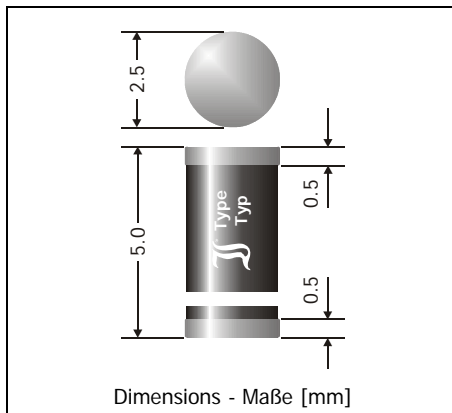



SA154 ... SA160

Fast Switching Surface Mount Si-Rectifiers
Schnelle Si-Gleichrichter für die Oberflächenmontage

Version 2005-06-21



| | |
|---|---|
| Nominal current – Nennstrom | 1 A |
| Repetitive peak reverse voltage Periodische Spitzensperrspannung | 50...1000 V |
| Plastic case MELF Kunststoffgehäuse MELF | DO-213AB |
| Weight approx. – Gewicht ca. | 0.12 g |
| Plastic material has UL classification 94V-0 Gehäusematerial UL94V-0 klassifiziert |  |
| Standard packaging taped and reeled Standard Lieferform gegurtet auf Rolle | |

Maximum ratings**Grenzwerte**

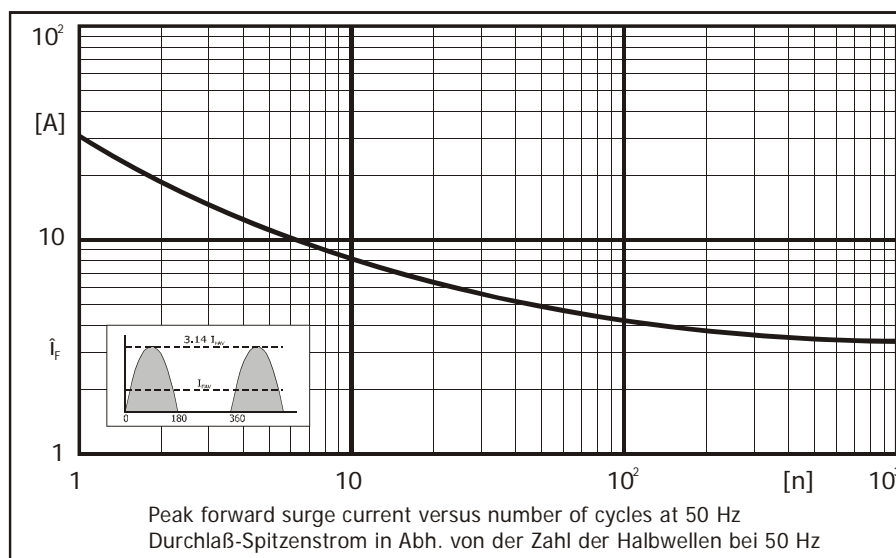
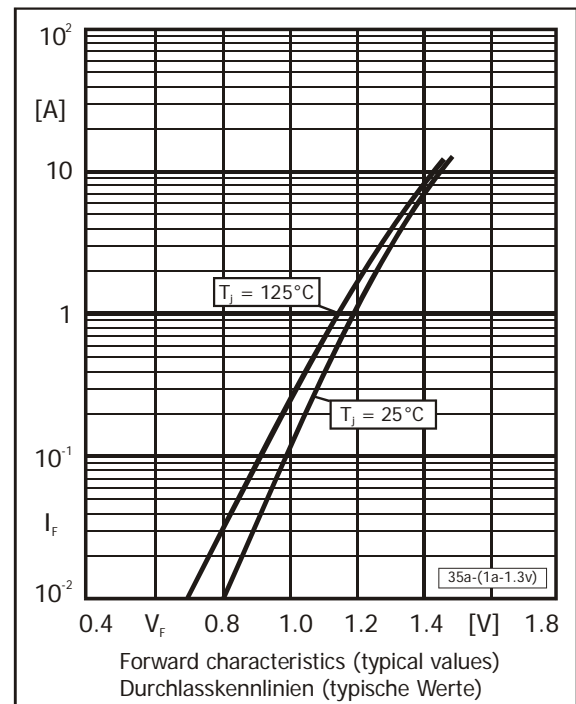
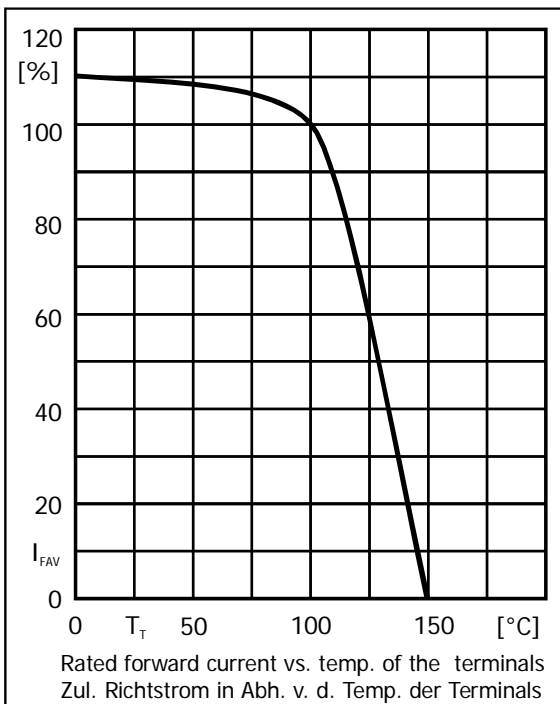
| Type Typ | Repetitive peak reverse voltage Periodische Spitzensperrspannung V_{RRM} [V] | Surge peak reverse voltage Stoßspitzensperrspannung V_{RSM} [V] |
|-------------|--|---|
| SA154 | 50 | 50 |
| SA155 | 100 | 100 |
| SA156 | 200 | 200 |
| SA157 | 400 | 400 |
| SA158 | 600 | 600 |
| SA159 | 800 | 800 |
| SA160 | 1000 | 1000 |

| | | | |
|---|---------------------------|----------------|------------------------------|
| Max. average forward rectified current, R-load Dauergrenzstrom in Einwegschaltung mit R-Last | $T_T = 100^\circ\text{C}$ | I_{FAV} | 1 A |
| Repetitive peak forward current Periodischer Spitzenstrom | $f > 15\text{ Hz}$ | I_{FRM} | 10 A ¹⁾ |
| Peak forward surge current, 50/60 Hz half sine-wave Stoßstrom für eine 50/60 Hz Sinus-Halbwellen | $T_A = 25^\circ\text{C}$ | I_{FSM} | 35/39 A |
| Rating for fusing, $t < 10\text{ ms}$ Grenzlastintegral, $t < 10\text{ ms}$ | $T_A = 25^\circ\text{C}$ | i^2t | 6 A ² s |
| Junction temperature – Sperrschichttemperatur Storage temperature – Lagerungstemperatur | | T_J T_S | -50...+175°C -50...+175°C |

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

Characteristics
Kennwerte

| | | | |
|---|--|-----------|------------------------|
| Forward voltage – Durchlass-Spannung | $T_j = 25^\circ\text{C}$ $I_F = 1\text{ A}$ | V_F | < 1.3 V |
| Leakage current Sperrstrom | $T_j = 25^\circ\text{C}$ $V_R = V_{RRM}$ | I_R | < 5 μA |
| | $T_j = 100^\circ\text{C}$ $V_R = V_{RRM}$ | I_R | < 100 μA |
| Reverse recovery time Sperrverzögerung | $I_F = 0.5\text{ A}$ through/über $I_R = 1\text{ A}$ to $I_R = 0.25\text{ A}$ | t_{rr} | < 300 ns |
| Thermal resistance junction to ambient air Wärmewiderstand Sperrschicht – umgebende Luft | | R_{thA} | < 45 K/W ¹⁾ |
| Thermal resistance junction to terminal Wärmewiderstand Sperrschicht – Anschluss | | R_{thT} | < 15 K/W |



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