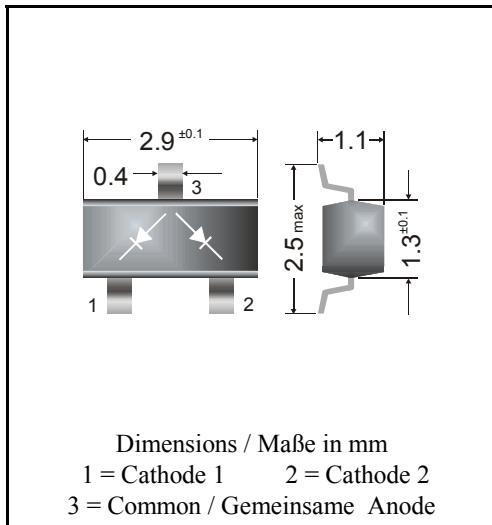


Dual Surface Mount
Silicon Planar Zener Diodes
Silizium-Planar-Zener Doppel-Dioden
für die Oberflächenmontage
Common Anode
Gemeinsame Anode


| | |
|---|----------------|
| Maximum power dissipation | 300 mW |
| Maximale Verlustleistung | |
| ΔV_Z for both diodes in one case | $\leq 5\%$ |
| ΔV_Z beider Dioden in einem Gehäuse | |
| Nominal Z-voltage | 2.7...51 V |
| Nominale Z-Spannung | |
| Plastic case | SOT-23 |
| Kunststoffgehäuse | (TO-236) |
| Weight approx. – Gewicht ca. | 0.01 g |
| Standard packaging taped and reeled | see page 18 |
| Standard Lieferform gegurtet auf Rolle | siehe Seite 18 |

Standard Zener voltage tolerance is graded to the international E 24 (~5%) standard.

Other voltage tolerances and higher Zener voltages on request.

Die Toleranz der Zener-Spannung ist in der Standard-Ausführung gestuft nach der internationalen Reihe E 24 (~5%). Andere Toleranzen oder höhere Arbeitsspannungen auf Anfrage.

Maximum ratings
Grenz- und Kennwerte

| | | | |
|---|--------------------------|------------------|-------------------------|
| Power dissipation | $T_A = 25^\circ\text{C}$ | P_{tot} | 300 mW ¹⁾ |
| Verlustleistung | | | |
| Operating junction temperature – Sperrschichttemperatur | | T_j | - 50...+150°C |
| Storage temperature – Lagerungstemperatur | | T_s | - 50...+150°C |
| Thermal resistance junction to ambient air | | R_{thA} | < 420 K/W ¹⁾ |
| Wärmewiderstand Sperrschicht – umgebende Luft | | | |

Characteristics
Kennwerte

| | | | | |
|------------------|--------------------------|----------------------|-------|---------|
| Forward voltage | $T_j = 25^\circ\text{C}$ | $I_F = 10\text{ mA}$ | V_F | < 0.9 V |
| Durchlaßspannung | | | | |

Zener voltages see table on next page – Zener-Spannungen siehe Tabelle auf der nächsten Seite

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

Maximum ratings
Grenzwerte

| Type Typ | Zener voltage ¹⁾ Zener-Spanng. ¹⁾ I _Z = 5 mA | | Dynamic resistance Inhär. diff. Widerstand r _{zj} [Ω] at f = 1 kHz I _Z = 5 mA I _Z = 1 mA | | Temp. Coeffiz. of Z-voltage ...der Z-spanng. α _{vZ} [10 ⁻⁴ /°C] | Reverse voltage Sperrspannung I _R = 100 nA V _R [V] | Z-current ²⁾ Z-Strom ²⁾ T _A = 25°C I _{Zmax} [mA] |
|-------------------|---|-------------------|---|-------|--|---|---|
| 2BZX84 ... | V _{Zmin} [V] | V _{Zmax} | | | | | |
| ... C2V7A | 2.5 | 2.9 | < 100 | < 600 | -9...-6 | – | 121 |
| ... C3V0A | 2.8 | 3.2 | < 100 | < 600 | -8...-5 | – | 109 |
| ... C3V3A | 3.1 | 3.5 | < 95 | < 600 | -8...-5 | – | 100 |
| ... C3V6A | 3.4 | 3.8 | < 95 | < 600 | -8...-5 | – | 92 |
| ... C3V9A | 3.7 | 4.1 | < 90 | < 600 | -8...-5 | – | 85 |
| ... C4V3A | 4.0 | 4.6 | < 90 | < 600 | -6...-3 | – | 76 |
| ... C4V7A | 4.4 | 5.0 | < 80 | < 500 | -5...+2 | – | 70 |
| ... C5V1A | 4.8 | 5.4 | < 60 | < 480 | -2...+2 | 0.8 | 65 |
| ... C5V6A | 5.2 | 6.0 | < 40 | < 400 | -5...+5 | 1 | 58 |
| ... C6V2A | 5.8 | 6.6 | < 10 | < 200 | +3...+6 | 2 | 53 |
| ... C6V8A | 6.4 | 7.2 | < 10 | < 150 | +3...+7 | 3 | 49 |
| ... C7V5A | 7.0 | 7.9 | < 10 | < 80 | +3...+7 | 5 | 44 |
| ... C8V2A | 7.7 | 8.7 | < 10 | < 80 | +3...+8 | 6 | 40 |
| ... C9V1A | 8.5 | 9.6 | < 15 | < 80 | +3...+9 | 7 | 36 |
| ... C10A | 9.4 | 10.6 | < 20 | < 100 | +3...+10 | 7.5 | 33 |
| ... C11A | 10.4 | 11.6 | < 20 | < 100 | +3...+11 | 8.5 | 30 |
| ... C12A | 11.4 | 12.7 | < 25 | < 100 | +3...+11 | 9 | 28 |
| ... C13A | 12.4 | 14.1 | < 30 | < 130 | +3...+11 | 10 | 25 |
| ... C15A | 13.8 | 15.6 | < 30 | < 150 | +3...+11 | 11 | 22 |
| ... C16A | 15.3 | 17.1 | < 40 | < 200 | +3...+11 | 12 | 20 |
| ... C18A | 16.8 | 19.1 | < 50 | < 200 | +3...+11 | 14 | 18 |
| ... C20A | 18.8 | 21.2 | < 50 | < 250 | +3...+11 | 15 | 17 |
| ... C22A | 20.8 | 23.3 | < 55 | < 250 | +4...+12 | 17 | 15 |
| ... C24A | 22.8 | 25.6 | < 80 | < 250 | +4...+12 | 18 | 14 |
| ... C27A | 25.1 | 28.9 | < 80 | < 300 | +4...+12 | 20 | 12 |
| ... C30A | 28 | 32 | < 80 | < 300 | +4...+12 | 22 | 11 |
| ... C33A | 31 | 35 | < 80 | < 300 | +4...+12 | 25 | 10 |
| ... C36A | 34 | 38 | < 90 | < 300 | +4...+12 | 27 | 9 |
| ... C39A | 37 | 41 | < 90 | < 350 | +4...+12 | 29 | 9 |
| ... C43A | 40 | 46 | < 100 | < 700 | +4...+12 | 32 | 8 |
| ... C47A | 44 | 50 | <100 | < 750 | +4...+12 | 35 | 7 |

¹⁾ Tested with pulses t_p = 5 ms – Gemessen mit Impulsen t_p = 5 ms

²⁾ Per diode - mounted on P.C. board with 25 mm² copper pads at each terminal

 Pro Diode - bei Montage auf Leiterplatte mit 25 mm² Kupferbelag (Löt-pad) an jedem Anschluß