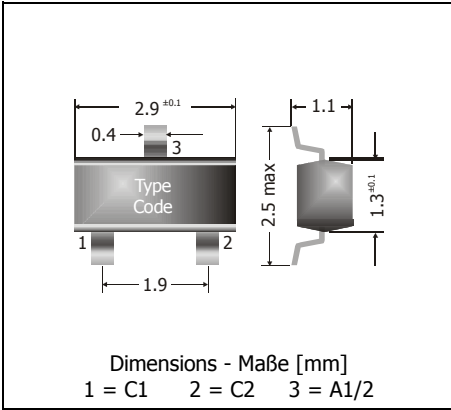


2BZX84C3V0 ... 2BZX84C47 (300 mW)
Surface mount Silicon Planar Dual Zener Diodes
Silizium-Planar-Zener-Doppel-Dioden für die Oberflächenmontage

Version 2007-06-29



| | |
|---|--------------------|
| Maximum power dissipation Maximale Verlustleistung | 300 mW |
| Nominal Z-voltage – Nominale Z-Spannung | 3.0...47 V |
| Plastic case Kunststoffgehäuse | SOT-23 (TO-236) |
| Weight approx. – Gewicht ca. | 0.01 g |
| Plastic material has UL classification 94V-0 Gehäusematerial UL94V-0 klassifiziert | |
| Standard packaging taped and reeled Standard Lieferform gegurtet auf Rolle | |

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.

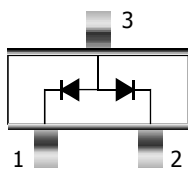
Maximum ratings and Characteristics

Grenz- und Kennwerte

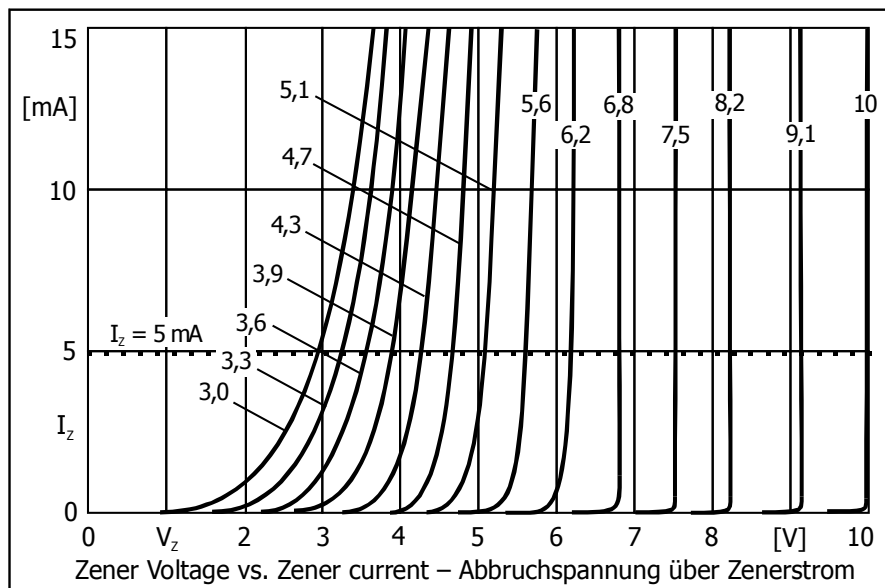
| | | | |
|---|--------------------------|-----------|-------------------------|
| Power dissipation – Verlustleistung | $T_A = 25^\circ\text{C}$ | P_{tot} | 300 mW ¹⁾ |
| Junction temperature – Sperrschichttemperatur | | T_j | -50...+150°C |
| Storage temperature – Lagerungstemperatur | | T_s | -50...+150°C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

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

**Pinning
Anschlussbelegung**



1 = C1 2 = C2 3 = A1/A2



1 Mounted on P.C. board with 3 mm² copper pads at each terminal
 Montage auf Leiterplatte mit 3 mm² Kupferbelag (Lötpad) an jedem Anschluss

Maximum ratings**Grenzwerte**

| Type Typ | Code Kodierung | Zener voltage ¹⁾ Zener-Spanng. ¹⁾ I _Z = 5 mA | | Dynamic resistance Inhär. diff. Widerstand r _{ej} [Ω] at f = 1 kHz | | Temp. Coeffic. of Z-voltage ...der Z-spanng. | Reverse voltage perrspannung V _R at/bei I _R | | Z-current ²⁾ Z-Strom ²⁾ T _A = 50°C |
|-------------|-------------------|---|-----------------------|---|-----------------------|--|---|---------------------|---|
| 2BZX84... | or/oder | V _{zmin} [V] | V _{zmax} [V] | I _Z = 5 mA | I _Z = 1 mA | α _{VZ} [10 ⁻⁴ /°C] | V _R [V] | I _R [μA] | I _{Zmax} [mA] |
| ...C3V0 | D3.0/MR | 2.8 | 3.2 | < 85 | < 600 | -8...-5 | 1 | 10 | 94 |
| ...C3V3 | D3.3/MX | 3.1 | 3.5 | < 85 | < 600 | -8...-5 | 1 | 5 | 86 |
| ...C3V6 | D3.6/MY | 3.4 | 3.8 | < 85 | < 600 | -8...-5 | 1 | 5 | 79 |
| ...C3V9 | D3.9/MZ | 3.7 | 4.1 | < 85 | < 600 | -8...-5 | 1 | 3 | 73 |
| ...C4V3 | D4.3/NA | 4.0 | 4.6 | < 80 | < 600 | -7...-4 | 1 | 3 | 65 |
| ...C4V7 | D4.7/NB | 4.4 | 5.0 | < 80 | < 500 | -5...-2 | 2 | 3 | 60 |
| ...C5V1 | D5.1/NC | 4.8 | 5.4 | < 60 | < 480 | -2...+2 | 2 | 2 | 56 |
| ...C5V6 | D5.6/ND | 5.2 | 6.0 | < 40 | < 400 | -1...+4 | 2 | 1 | 50 |
| ...C6V2 | D6.2/NE | 5.8 | 6.6 | < 10 | < 150 | +2...+5 | 4 | 3 | 45 |
| ...C6V8 | D6.8/NF | 6.4 | 7.2 | < 15 | < 80 | +3...+6 | 4 | 2 | 42 |
| ...C7V5 | D7.5/NH | 7.0 | 7.9 | < 15 | < 80 | +3...+6 | 5 | 1 | 38 |
| ...C8V2 | D8.2/NJ | 7.7 | 8.7 | < 15 | < 80 | +4...+7 | 5 | 0.7 | 34 |
| ...C9V1 | D9.1/NK | 8.5 | 9.6 | < 15 | < 100 | +4...+7 | 6 | 0.5 | 31 |
| ...C10 | D10/NM | 9.4 | 10.6 | < 20 | < 150 | +5...+8 | 7 | 0.2 | 28 |
| ...C11 | D11/NN | 10.4 | 11.6 | < 20 | < 150 | +5...+8 | 8 | 0.1 | 26 |
| ...C12 | D12/NP | 11.4 | 12.7 | < 25 | < 150 | +5...+8 | 8 | 0.1 | 24 |
| ...C13 | D13/NX | 12.4 | 14.1 | < 30 | < 170 | +6...+9 | 8 | 0.1 | 21 |
| ...C15 | D15/NY | 13.8 | 15.6 | < 30 | < 200 | +6...+9 | 10.5 | 0.05 | 19 |
| ...C16 | D16/NZ | 15.3 | 17.1 | < 40 | < 200 | +6...+9 | 11.2 | 0.05 | 18 |
| ...C18 | D18/PA | 16.8 | 19.1 | < 45 | < 225 | +6...+9 | 12.6 | 0.05 | 16 |
| ...C20 | D20/PB | 18.8 | 21.2 | < 55 | < 225 | +6...+9 | 14.0 | 0.05 | 14 |
| ...C22 | D22/PC | 20.8 | 23.3 | < 55 | < 250 | +7...+10 | 15.4 | 0.05 | 13 |
| ...C24 | D24/PD | 22.8 | 25.6 | < 70 | < 250 | +7...+10 | 16.8 | 0.05 | 12 |
| | I _Z = | 2 mA | 2 mA | 2 mA | 0.5 mA | | | | |
| ...C27 | D27/PE | 25.1 | 28.9 | < 80 | < 300 | +7...+10 | 18.9 | 0.05 | 10 |
| ...C30 | D30/PF | 28 | 32 | < 80 | < 300 | +7...+10 | 21.0 | 0.05 | 9 |
| ...C33 | D33/PH | 31 | 35 | < 80 | < 325 | +7...+10 | 23.1 | 0.05 | 9 |
| ...C36 | D36/PJ | 34 | 38 | < 90 | < 350 | +7...+10 | 25.1 | 0.05 | 8 |
| ...C39 | D39/PM | 37 | 41 | < 130 | < 350 | +7...+10 | 27.3 | 0.05 | 7 |
| ...C43 | D42/PN | 40 | 46 | < 150 | < 375 | +7...+10 | 30.1 | 0.05 | 7 |
| ...C47 | D47/PP | 44 | 50 | < 170 | < 375 | +7...+10 | 32.9 | 0.05 | 6 |

1 Tested with pulses t_p = 5 ms – Gemessen mit Impulsen t_p = 5 ms2 Mounted on P.C. board with 3 mm² copper pads at each terminal
Montage auf Leiterplatte mit 3 mm² Kupferbelag (Löt-pad) an jedem Anschluss