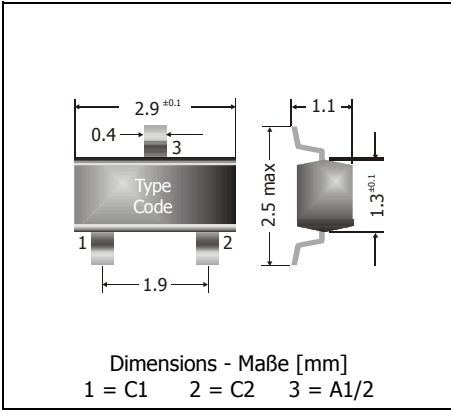


**2BZX84C3V0 ... 2BZX84C47 (300 mW)**  
**Surface mount Silicon Planar Dual Zener Diodes**  
**Silizium-Planar-Zener-Doppel-Dioden für die Oberflächenmontage**

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.

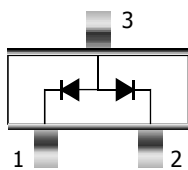
**Maximum ratings and Characteristics**

**Grenz- und Kennwerte**

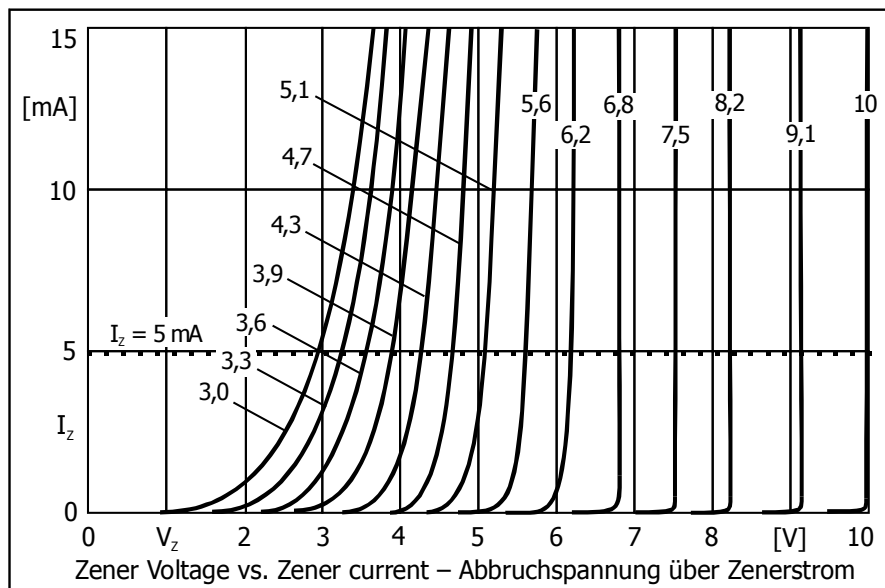
Power dissipation – Verlustleistung	$T_A = 25^\circ\text{C}$	$P_{tot}$	300 mW <sup>1)</sup>
Junction temperature – Sperrschichttemperatur		$T_j$	-50...+150°C
Storage temperature – Lagerungstemperatur		$T_s$	-50...+150°C
Thermal resistance junction to ambient air Wärmewiderstand Sperrschicht – umgebende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

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 mm<sup>2</sup> copper pads at each terminal  
 Montage auf Leiterplatte mit 3 mm<sup>2</sup> Kupferbelag (Lötpad) an jedem Anschluss

**Maximum ratings**
**Grenzwerte**

Type Typ	Code Kodierung	Zener voltage <sup>1)</sup> Zener-Spanng. <sup>1)</sup> I <sub>Z</sub> = 5 mA		Dynamic resistance Inhär. diff. Widerstand r <sub>zj</sub> [Ω] at f = 1 kHz		Temp. Coeffic. of Z-voltage ...der Z-spanng.	Reverse voltage perrspannung V <sub>R</sub> at/bei I <sub>R</sub>		Z-current <sup>2)</sup> Z-Strom <sup>2)</sup> T <sub>A</sub> = 50°C
2BZX84...	or/oder	V <sub>zmin</sub> [V]	V <sub>zmax</sub> [V]	I <sub>Z</sub> = 5 mA	I <sub>Z</sub> = 1 mA	α <sub>VZ</sub> [10 <sup>-4</sup> /°C]	V <sub>R</sub> [V]	I <sub>R</sub> [μA]	I <sub>Zmax</sub> [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 <sub>Z</sub> =	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<sub>p</sub> = 5 ms – Gemessen mit Impulsen t<sub>p</sub> = 5 ms

 2 Mounted on P.C. board with 3 mm<sup>2</sup> copper pads at each terminal  
 Montage auf Leiterplatte mit 3 mm<sup>2</sup> Kupferbelag (Lötpad) an jedem Anschluss