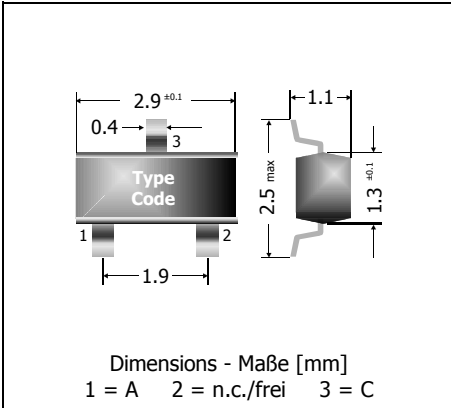


BZX84C2V4 ... BZX84C47 (300 mW)
Surface mount Silicon Planar Zener Diodes
Silizium-Planar-Zener-Dioden für die Oberflächenmontage

Version 2007-06-29



Power dissipation – Verlustleistung	300 mW
Repetitive peak reverse voltage	2.4...47 V
Periodische Spitzensperrspannung	
Plastic case	SOT-23
Kunststoffgehäuse	(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	



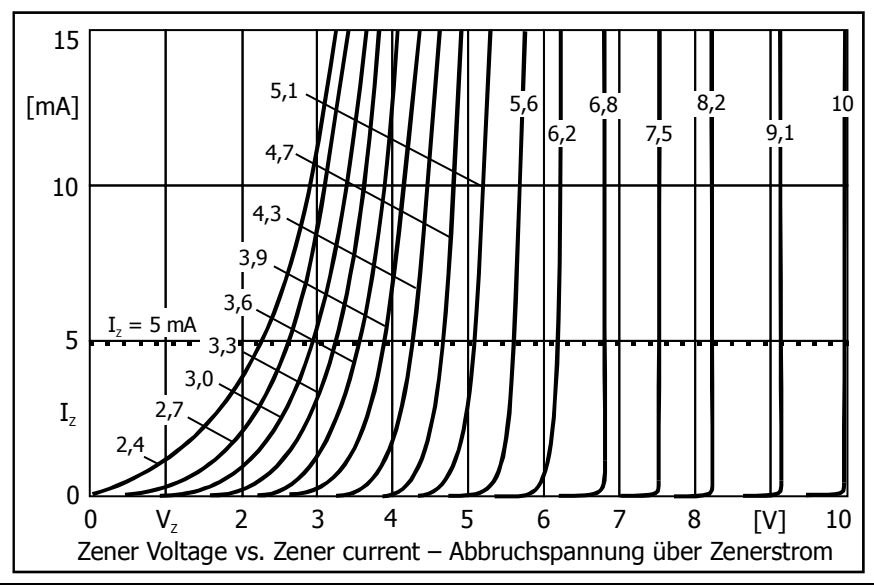
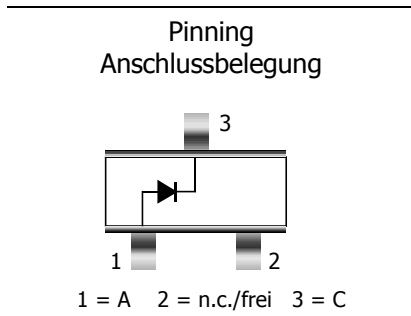
Standard Zener voltage tolerance is graded to the international E 24 (~5%) standard. Other voltage tolerances and higher Zener voltages on request.

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

		BZX84-series	
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		R_{thA}	< 420 K/W ¹⁾
Wärmewiderstand Sperrschicht – umgebende Luft			
Zener voltages see table on next page – Zener-Spannungen siehe Tabelle auf der nächsten Seite			



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	Zener voltage ²⁾ Zener-Spanng. ¹⁾ $I_Z = 5 \text{ mA}$		Dynamic resistance Inhär. diff. Widerstand $r_{zj} [\Omega]$ at $f = 1 \text{ kHz}$		Temp. Coeffic. of Z-voltage ...der Z-spanng. $\alpha_{vZ} [10^{-4}/^{\circ}\text{C}]$	Reverse voltage Sperrspannung V_R at/bei I_R		Z-current ³⁾ Z-Strom ²⁾ I_{Zmax} at $T_A = 50^{\circ}\text{C}$
		$V_{zmin} [\text{V}]$	$V_{zmax} [\text{V}]$	$I_Z = 5 \text{ mA}$	$I_Z = 1 \text{ mA}$		$V_R [\text{V}]$	$I_R [\mu\text{A}]$	
...C2V4	Z11	2.2	2.6	< 85	< 600	-8...-5	1	20	115
...C2V7	Z12	2.5	2.9	< 85	< 600	-8...-5	1	20	103
...C3V0	Z13	2.8	3.2	< 85	< 600	-8...-5	1	10	94
...C3V3	Z14	3.1	3.5	< 85	< 600	-8...-5	1	5	86
...C3V6	Z15	3.4	3.8	< 85	< 600	-8...-5	1	5	79
...C3V9	Z16	3.7	4.1	< 85	< 600	-8...-5	1	3	73
...C4V3	W9	4.0	4.6	< 80	< 600	-7...-4	1	3	65
...C4V7	Z1	4.4	5.0	< 80	< 500	-5...-2	2	3	60
...C5V1	Z2	4.8	5.4	< 60	< 480	-2...+2	2	2	56
...C5V6	Z3	5.2	6.0	< 40	< 400	-1...+4	2	1	50
...C6V2	Z4	5.8	6.6	< 10	< 150	+2...+5	4	3	45
...C6V8	Z5	6.4	7.2	< 15	< 80	+3...+6	4	2	42
...C7V5	Z6	7.0	7.9	< 15	< 80	+3...+6	5	1	38
...C8V2	Z7	7.7	8.7	< 15	< 80	+4...+7	5	0.7	34
...C9V1	Z8	8.5	9.6	< 15	< 100	+4...+7	6	0.5	31
...C10	Z9	9.4	10.6	< 20	< 150	+5...+8	7	0.2	28
...C11	Y1	10.4	11.6	< 20	< 150	+5...+8	8	0.1	26
...C12	Y2	11.4	12.7	< 25	< 150	+5...+8	8	0.1	24
...C13	Y3	12.4	14.1	< 30	< 170	+6...+9	8	0.1	21
...C15	Y4	13.8	15.6	< 30	< 200	+6...+9	10.5	0.05	19
...C16	Y5	15.3	17.1	< 40	< 200	+6...+9	11.2	0.05	18
...C18	Y6	16.8	19.1	< 45	< 225	+6...+9	12.6	0.05	16
...C20	Y7	18.8	21.2	< 55	< 225	+6...+9	14.0	0.05	14
...C22	Y8	20.8	23.3	< 55	< 250	+7...+10	15.4	0.05	13
...C24	Y9	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	Y10	25.1	28.9	< 80	< 300	+7...+10	18.9	0.05	10
...C30	Y11	28	32	< 80	< 300	+7...+10	21.0	0.05	9
...C33	Y12	31	35	< 80	< 325	+7...+10	23.1	0.05	9
...C36	Y13	34	38	< 90	< 350	+7...+10	25.1	0.05	8
...C39	Y14	37	41	< 130	< 350	+7...+10	27.3	0.05	7
...C43	Y15	40	46	< 150	< 375	+7...+10	30.1	0.05	7
...C47	Y16	44	50	< 170	< 375	+7...+10	32.9	0.05	6

 2 Tested with pulses $t_p = 5 \text{ ms}$ – Gemessen mit Impulsen $t_p = 5 \text{ ms}$

 3 Mounted on P.C. board with 3 mm^2 copper pads at each terminal
 Montage auf Leiterplatte mit 3 mm^2 Kupferbelag (Löt-pad) an jedem Anschluss