

BZX84 SERIES SOT-23 ZENERS

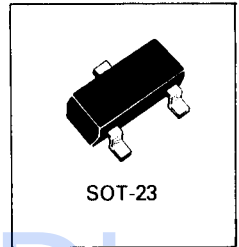
TABLE 1a

The BZX84 series of silicon voltage regulator diodes is designed for voltage reference and stabilizer applications.

The series consists of 31 types with nominal zener voltages ranging from 2.7V to 47V with a $\pm 5\%$ tolerance.

Encapsulated in the popular SOT-23 package, these devices are designed specifically for use in thin and thick film hybrid circuits in both industrial and commercial applications.

Micro-miniature equivalent to the popular type BZY88



ELECTRICAL CHARACTERISTICS (at 25°C ambient temperature).

BZX84 Type Number	Zener Voltage V_Z at $I_Z = 5\text{mA}$ Volts			Differential Resistance r_Z at $I_Z = 5\text{mA}$ Ohms	Temperature Coefficient S_Z at $I_Z = 5\text{mA}$ %/°C	Reverse Current I_R at V_R μA Volts		Device Marking
	Nom.	Min.	Max.	Max.	Typical	Max.		
C2V7	2.7	2.5	2.9	120	-0.07	20	1	W4
C3V0	3.0	2.8	3.2	120	-0.07	10	1	W5
C3V3	3.3	3.1	3.5	110	-0.06	5	1	W6
C3V6	3.6	3.4	3.8	105	-0.07	5	1	W7
C3V9	3.9	3.7	4.1	100	-0.055	3	1	W8
C4V3	4.3	4.0	4.6	90	-0.045	3	1	W9
C4V7	4.7	4.4	5.0	80	-0.025	3	2	Z1
C5V1	5.1	4.8	5.4	60	+0.02	2	2	Z2
C5V6	5.6	5.2	6.0	40	+0.03	1	2	Z3
C6V2	6.2	5.8	6.6	10	+0.04	3	4	Z4
C6V8	6.8	6.4	7.2	15	+0.045	2	4	Z5
C7V5	7.5	7.0	7.9	15	+0.05	1	5	Z6
C8V2	8.2	7.7	8.7	15	+0.055	0.7	5	Z7
C9V1	9.1	8.5	9.6	15	+0.06	0.5	6	Z8
C10	10	9.4	10.6	20	+0.065	0.2	7	Z9
C11	11	10.4	11.6	20	+0.07	0.1	8	Y1
C12	12	11.4	12.7	25	+0.075	0.1	8	Y2
C13	13	12.4	14.1	30	+0.075	0.1	9	Y3
C15	15	13.8	15.6	30	+0.075	0.05	10	Y4
C16	16	15.3	17.1	40	+0.08	0.05	11	Y5
C18	18	16.8	19.1	45	+0.08	0.05	13	Y6
C20	20	18.8	21.2	55	+0.08	0.05	14	Y7
C22	22	20.8	23.3	55	+0.08	0.05	15	Y8
C24	24	22.8	25.6	70	+0.08	0.05	17	Y9
	V_Z at $I_Z = 2\text{mA}$			r_Z at $I_Z = 2\text{mA}$	S_Z at $I_Z = 2\text{mA}$			
C27	27	25.1	28.9	80	+0.08	0.05	19	X1
C30	30	28.0	32.0	80	+0.08	0.05	21	X2
C33	33	31.0	35.0	80	+0.08	0.05	23	X3
C36	36	34.0	38.0	90	+0.08	0.05	25	X4
C39	39	37.0	41.0	130	+0.08	0.05	27	X5
C43	43	40.0	46.0	150	+0.08	0.05	30	X6
C47	47	44.0	50.0	170	+0.08	0.05	33	X7

For additional specification details at $I_Z = 1\text{mA}$ and 20mA etc. please refer to individual data sheets. Further details of SOT-23 devices are contained in the Hybrid section.