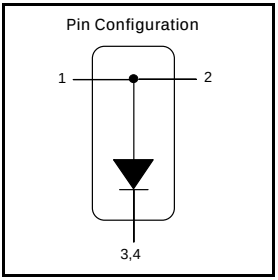
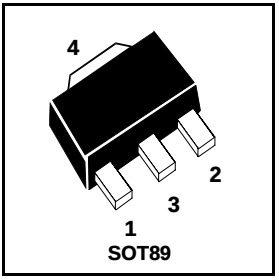
SOT89 SILICON PLANAR VOLTAGE REGULATOR DIODES

ISSUE 4 - AUGUST 1996 ✪

BZV49 SERIES





ABSOLUTE MAXIMUM RATINGS (as per Electron Coding Sytem).

PARAMETER	SYMBOL	VALUE	UNIT
Voltage Range	V_Z	3.9 to 43	V
Nominal Tolerance	C	±5	%
Maximum Forward Current	I_F	250	mA
Power Dissipation at T_{amb}=25°C	P_{tot}	1	W
Operating and Storage Temperature Range	T_j:T_{stg}	-65 to +150	°C

ELECTRICAL CHARACTERISTICS (at T_{amb} = 25°C).

Type	Zener Voltage V_Z at I_Z=5mA VOLTS			Differential Resistance r_Z at I_Z=5mA Ω	Temperature Coefficient S_Z at I_Z=5mA mV/°C		Reverse Current I_R at V_R µA	V
BZV49:	Nom.	Min.	Max.	Max.	Min	Max	Max	Max
C3V9	3.9	3.7	4.1	100	-3.5	0	3	1
C4V3	4.3	4.0	4.6	90	-3.5	0	3	1
C4V7	4.7	4.4	5.0	80	-3.5	0.2	3	2
C5V1	5.1	4.8	5.4	60	-2.7	1.2	2	2
C5V6	5.6	5.2	6.0	40	-2.0	2.5	1	2
C6V2	6.2	5.8	6.6	10	0.4	3.7	3	4
C6V8	6.8	6.4	7.2	15	1.2	4.5	2	4
C7V5	7.5	7.0	7.9	15	2.5	5.3	1	5
C8V2	8.2	7.7	8.7	15	3.2	6.2	0.7	5
C9V1	9.1	8.5	9.6	15	3.8	7.0	0.5	6
C10	10	9.4	10.6	20	4.5	8.0	0.2	7
C11	11	10.4	11.6	20	5.4	9.0	0.1	8
C15	15	13.8	15.6	30	9.2	13.0	0.05	10
C16	16	15.3	17.1	40	10.4	14.0	0.05	11
C22	22	20.8	23.3	55	16.4	20.0	0.05	15
C24	24	22.8	25.6	70	18.4	22.0	0.05	17

SELECTED RANGE SUPPLIED. OTHER VOLTAGES MAY BE OFFERED SUBJECT TO AVAILABILITY.

BZV49 SERIES

ELECTRICAL CHARACTERISTICS (at T_{amb} = 25°C).

Type	Zener Voltage V_Z at I_Z=2mA VOLTS			Differential Resistance r_Z at I_Z=2mA Ω	Temperature Coefficient S_Z at I_Z=2mA mV/°C		Reverse Current I_R at V_R μA	V
BZV49:	Nom.	Min.	Max.	Max.	Min	Max	Max	Max
C30	30	28.0	32.0	80	24.4	29.4	0.05	21
C36	36	34.0	38.0	90	30.4	37.4	0.05	25
C39	39	37.0	41.0	130	33.4	41.2	0.05	27
C43	43	40.0	46.0	150	37.6	46.6	0.05	30

Type	Zener Voltage (V) V_Z at I_Z=1mA	Differential Resistance (Ω) r_Z at I_Z=1mA	Partmarking
BZV49:	Min.	Max.	
C3V9	3.0	600	W8
C4V3	3.3	600	W9
C4V7	3.7	500	Z1
C5V1	4.2	480	Z2
C5V6	4.8	400	Z3
C6V2	5.6	150	Z4
C6V8	6.3	80	Z5
C7V5	6.9	80	Z6
C8V2	7.6	80	Z7
C9V1	8.4	100	Z8
C10	9.3	150	Z9
C11	10.2	150	Y1
C15	13.7	200	Y4
C16	15.2	200	Y5
C22	20.7	250	Y8
C24	22.7	250	Y9
	V_z at I_Z=0.5mA	r_z at I_Z=0.5mA	
C30	27.8	300	X2
C36	33.8	350	36Y
C39	36.7	350	X5
C43	39.7	375	X6