

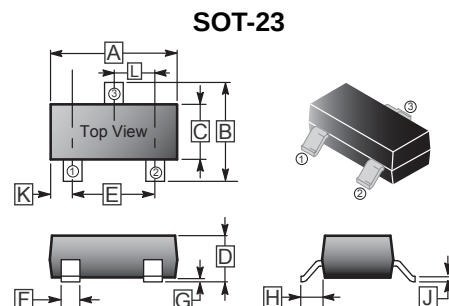
RoHS Compliant Product
A suffix of "-C" specifies halogen & lead-free

FEATURES

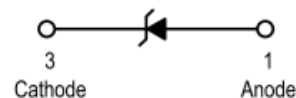
- Planar Die Construction
- 300 mW Power Dissipation on FR-5 PCB
- General Purpose, Medium Current
- Ideally Suited for Automated Assembly Process
- Zener Voltages from 2.4V – 39V
- Ultra-Small Surface Mount Package Power Dissipation

MECHANICAL DATA

- Case: SOT-23, Molded Plastic
- Terminals: Solderable per MIL-STD-202, Method 208
- Polarity: See Diagrams
- Weight: 0.008 g (Approximately)
- Marking: Marking Code (See Table On Page 2)



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	2.80	3.04	G	0.09	0.18
B	2.10	2.55	H	0.45	0.60
C	1.20	1.40	J	0.08	0.177
D	0.89	1.15	K	0.6 REF.	
E	1.80	2.00	L	0.89	1.02
F	0.30	0.50			



THERMAL CHARACTERISTICS

CHARACTERISTIC	SYMBOL	VALUE	UNITS
Forward Voltage @ $I_F = 10 \text{ mA}^2$	V_F	0.9	V
Power Dissipation ¹	P_D	300	mW
Thermal Resistance, Junction to Ambient	$R_{\theta JA}$	417	°C / W
Operating and Storage Temperature Range	T_J, T_{STG}	-65~150	°C

Notes:

1. Valid provided that device terminals are kept at ambient temperature..
2. Test with pulses. Period = 5 ms, pulse width = 300 μs

ELECTRICAL RATINGS (Rating 25°C ambient temperature unless otherwise specified)

TYPE NUMBER	MARKING CODE	ZENER VOLTAGE RANGE (NOTE1)				MAXIMUM ZENER IMPEDANCE (NOTE2)			MAXIMUM REVERSE CURRENT		TEMPERATURE COEFFICIENT OF ZENER VOLTAGE @ I _{ZT} =5mA	
		V _Z @I _{ZT}			I _{ZT} mA	Z _{zT} @I _{ZT} Ω	Z _{zK} @I _{ZK} Ω	I _{ZK} mA	I _R @V _R μA V		Min mV / °C	Max
		Min	Nom	Max								
		V	V	V								
BZX84B2V4	2Z11	2.35	2.4	2.45	5	100	600	1.0	50	1	-3.5	0
BZX84B2V7	2Z12	2.65	2.7	2.75	5	100	600	1.0	20	1	-3.5	0
BZX84B3V0	2Z13	2.94	3.0	3.06	5	95	600	1.0	10	1	-3.5	0
BZX84B3V3	2Z14	3.23	3.3	3.37	5	95	600	1.0	5	1	-3.5	0
BZX84B3V6	2Z15	3.53	3.6	3.67	5	90	600	1.0	5	1	-3.5	0
BZX84B3V9	2Z16	3.82	3.9	3.98	5	90	600	1.0	3	1	-3.5	0
BZX84B4V3	2Z17	4.21	4.3	4.39	5	90	600	1.0	3	1	-3.5	0
BZX84B4V7	2Z1	4.61	4.7	4.79	5	80	500	1.0	3	2	-3.5	0.2
BZX84B5V1	2Z2	5	5.1	5.2	5	60	480	1.0	2	2	-2.7	1.2
BZX84B5V6	2Z3	5.49	5.6	5.71	5	40	400	1.0	1	2	-2.0	2.5
BZX84B6V2	2Z4	6.08	6.2	6.32	5	10	150	1.0	3	4	0.4	3.7
BZX84B6V8	2Z5	6.66	6.8	6.94	5	15	80	1.0	2	4	1.2	4.5
BZX84B7V5	2Z6	7.35	7.5	7.65	5	15	80	1.0	1	5	2.5	5.3
BZX84B8V2	2Z7	8.04	8.2	8.36	5	15	80	1.0	0.7	5	3.2	6.2
BZX84B9V1	2Z8	8.92	9.1	9.28	5	15	100	1.0	0.5	6	3.8	7.0
BZX84B10	2Z9	9.8	10	10.2	5	20	150	1.0	0.2	7	4.5	8.0
BZX84B11	2Y1	10.78	11	11.22	5	20	150	1.0	0.1	8	5.4	9.0
BZX84B12	2Y2	11.76	12	12.24	5	25	150	1.0	0.1	8	6.0	10.0
BZX84B13	2Y3	12.74	13	13.26	5	30	170	1.0	0.1	8	7.0	11.0
BZX84B15	2Y4	14.7	15	15.3	5	30	200	1.0	0.1	10.5	9.2	13.0
BZX84B16	2Y5	15.68	16	16.32	5	40	200	1.0	0.1	11.2	10.4	14.0
BZX84B18	2Y6	17.64	18	18.36	5	45	225	1.0	0.1	12.6	12.4	16.0
BZX84B20	2Y7	19.6	20	20.4	5	55	225	1.0	0.1	14	14.4	18.0
BZX84B22	2Y8	21.56	22	22.44	5	55	250	1.0	0.1	15.4	16.4	20.0
BZX84B24	2Y9	23.52	24	24.48	5	70	250	1.0	0.1	16.8	18.4	22.0
BZX84B27	2Y10	26.46	27	27.54	2	80	300	0.5	0.1	18.9	21.4	25.3
BZX84B30	2Y11	29.4	30	30.6	2	80	300	0.5	0.1	21	24.4	29.4
BZX84B33	2Y12	32.34	33	33.66	2	80	325	0.5	0.1	23.1	27.4	33.4
BZX84B36	2Y13	35.28	36	36.72	2	90	350	0.5	0.1	25.2	30.4	37.4
BZX84B39	2Y14	38.22	39	39.78	2	130	350	0.5	0.1	27.3	33.4	41.2

Notes:

1. Test with pulses. Period = 5 ms, pulse width = 300 μs
2. f = 1 K Hz
3. Valid provided that device terminals are kept at ambient temperature.