

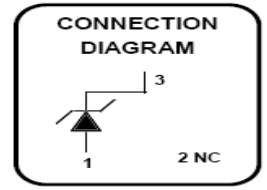
BZX84C SERIES
SURFACE MOUNT ZENER DIODE

- * Package Designed for Optimal Automated Board Assembly
- * Zener Breakdown Voltage Range – 2.4V to 39V
- * Pb-Free Package is Available

ABSOLUTE MAXIMUM RATINGS at Ta=25°C

Characteristic	Symbol	Rating	Unit
Forward Voltage at IF = 10 mA	VF	0.9	V
Power Dissipation(Note) Derate Above 25°C	PD	350 1.8	mW mW/°C
Repetitive Peak Forward Current	IFRM	250	mA
Repetitive Peak Working Current	IZRM	250	mA
Junction Temperature	Tj	150	°C
Storage Temperature	Tstg	-55-150	°C

Package: SOT-23



ELECTRICAL CHARACTERISTICS at Ta=25°C

Type	Vz1(V) at IZT1=5mA			Z _{ZT1} (Ω) at I _{ZT1} =5mA	Z _{ZT2} (Ω) at I _{ZT2} =1mA	Max. reverse leakage current		C(Pf) at Vp=0 f=1 MHz	Marking
	Nom	Min	Max			IR (uA)	VR (V)		
BZX84C2V4	2.4	2.2	2.6	100	275	50	1	450	Z11
BZX84C2V7	2.7	2.5	2.9	100	600	20	1	450	Z12
BZX84C3V3	3.3	3.1	3.5	95	600	5	1	450	Z14
BZX84C4V7	4.7	4.4	5.0	80	500	3	2	260	Z1
BZX84C5V1	5.1	4.8	5.4	60	480	2	2	225	Z2
BZX84C6V2	6.2	5.8	6.6	10	150	3	4	185	Z4
BZX84C6V8	6.8	6.4	7.2	15	80	2	4	155	Z5
BZX84C7V5	7.5	7.0	7.9	15	80	1	5	140	Z6
BZX84C9V1	9.1	8.6	9.6	15	100	0.5	6	130	Z8
BZX84C10	10	9.5	10.5	20	150	0.2	7	130	Z9
BZX84C11	11	10.45	11.55	20	150	0.1	8	130	Y1
BZX84C12	12	11.4	12.6	25	150	0.1	8	130	Y2
BZX84C15	15	14.25	15.75	30	200	0.05	10.5	110	Y4
BZX84C16	16	15.2	16.8	40	200	0.05	11.2	105	Y5
BZX84C18	18	17.1	18.9	45	225	0.05	12.6	100	Y6



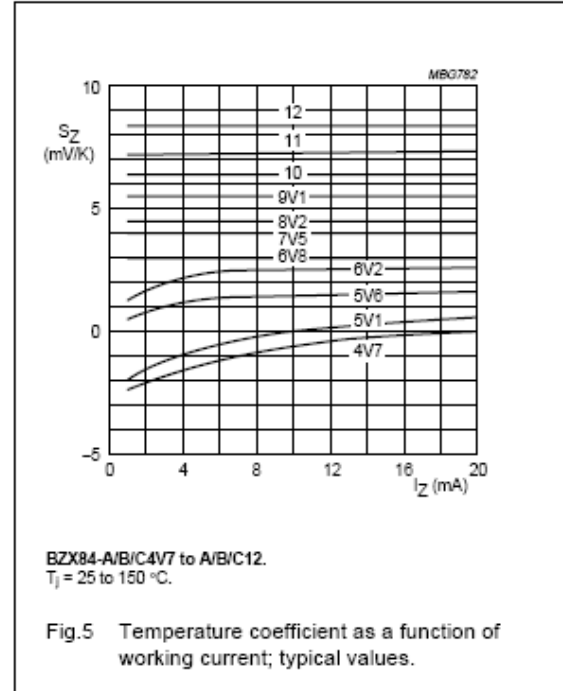
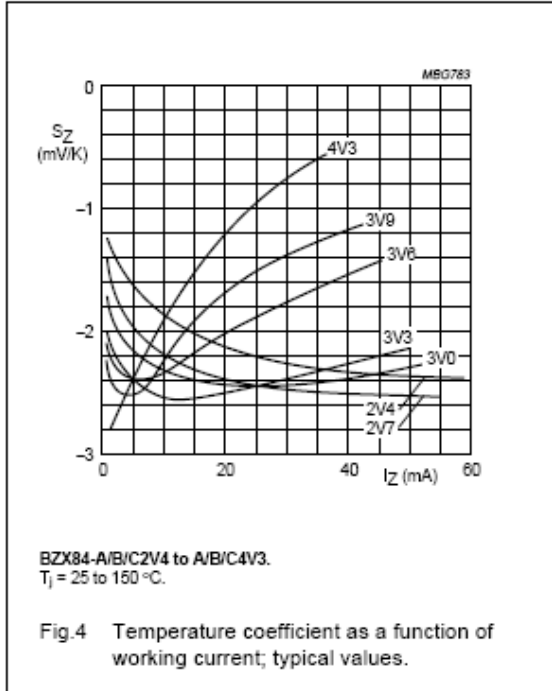
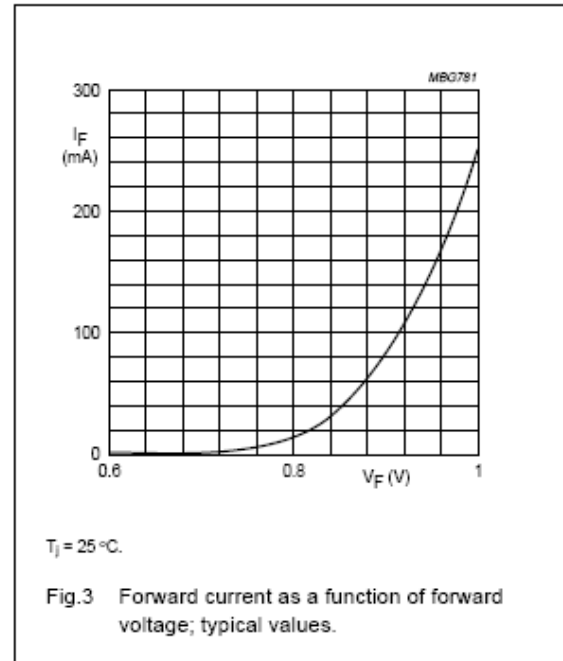
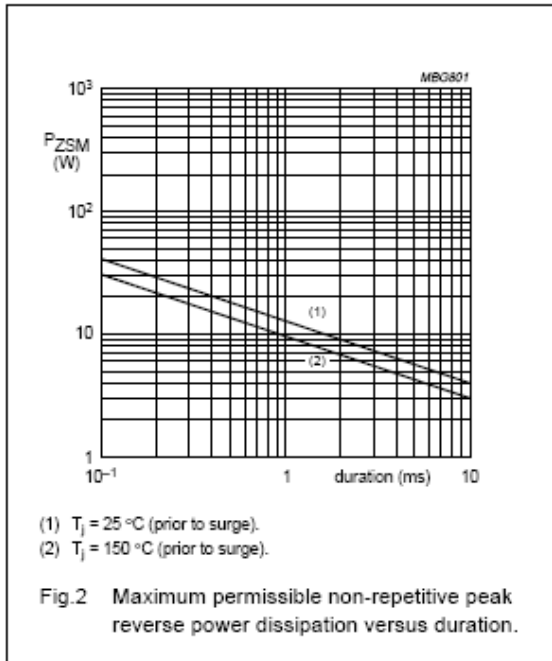
SEMICONDUCTOR
TECHNICAL DATA

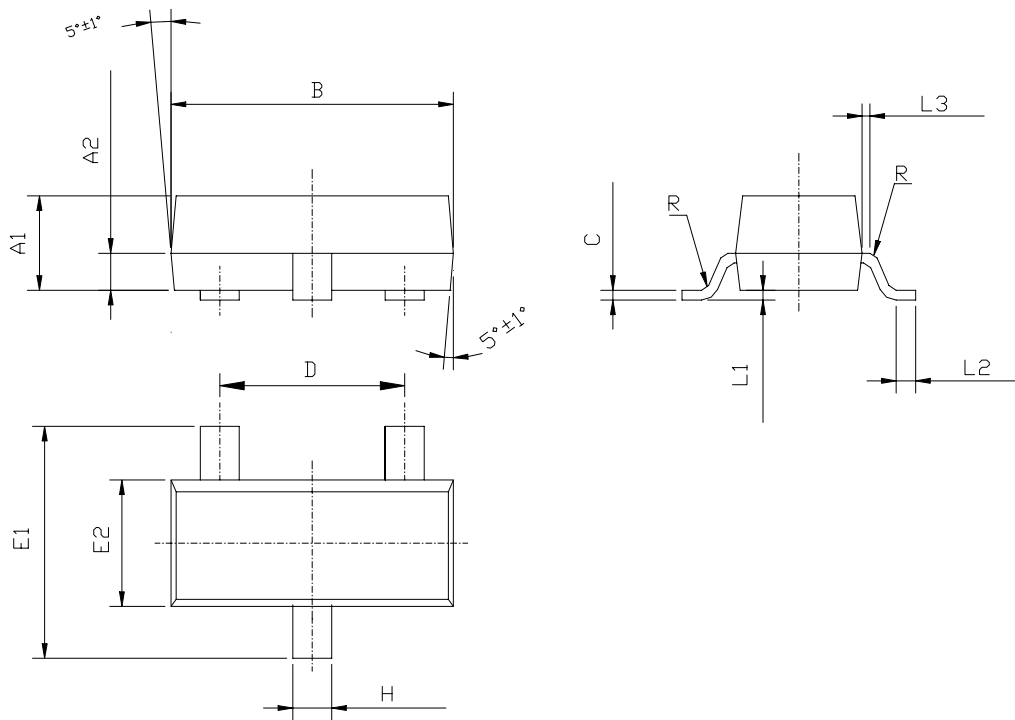
BZX84C SERIES

SURFACE MOUNT ZENER DIODE

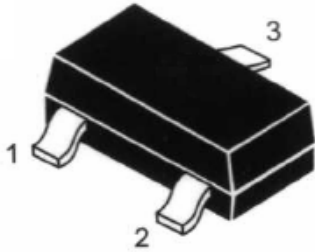
BZX84C20	20	19	21	55	225	0.05	14	85	Y7
BZX84C22	22	20.9	23.1	55	250	0.05	15.4	85	Y8
BZX84C24	24	22.8	25.2	70	250	0.05	16.8	80	Y9
BZX84C27	27	25.6	28.3	80	300	0.05	18.9	70	Y10
BZX84C30	30	28	32	80	300	0.05	21	70	Y11
BZX84C33	33	31	35	80	325	0.05	23.1	70	Y12
BZX84C36	36	34	38	90	350	0.05	25.2	70	Y13
BZX84C39	39	37	41	130	350	0.05	27.3	45	Y14



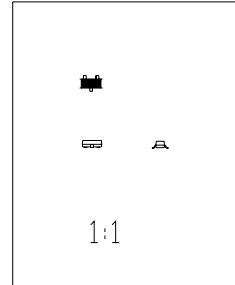




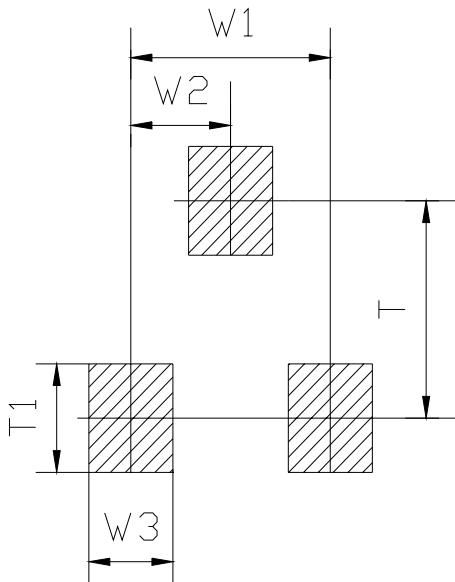
Symbol	Dimensions in Millimeters			内部结构 STYLS	管脚 PIN		
	Min	Nominal	Max		1 脚	2 脚	3 脚
A1	0.900	0.970	1.000	6	基极 BASE	发射极 EMITTER	集电极 COLLECTOR
A2	0.350	0.380	0.410		8	阳极 ANODE	不连接 NO- CONNECTION
B	2.800	2.900	3.000	9		阳极 ANODE	阳极 ANODE
C	0.085	0.100	0.150		11	阳极 ANODE	阴极 CATHODE
D	1.800	1.900	2.000	12		阴极 CATHODE	阴极 CATHODE
E1	2.200	2.400	2.600		18	不连接 NO- CONNECTION	阴极 CATHODE
E2	1.200	1.300	1.400	19		阴极 CATHODE	阳极 ANODE
H	0.300	0.400	0.500				
L1	0.000		0.100				
L2	0.200						
L3	0.030	0.080	0.130				
R	0.080TYP						



OUTSIDE



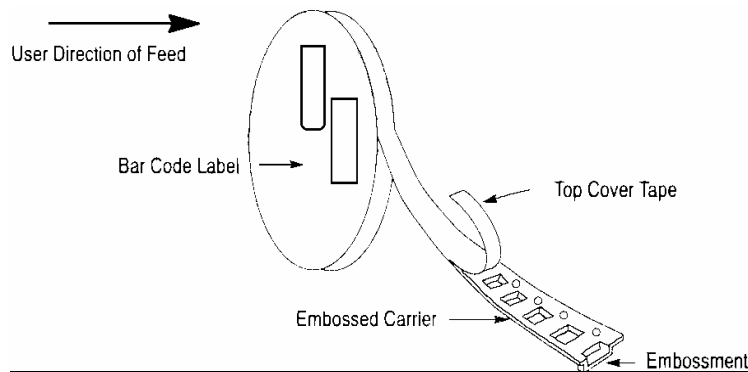
Scale 1:1 on letter size paper



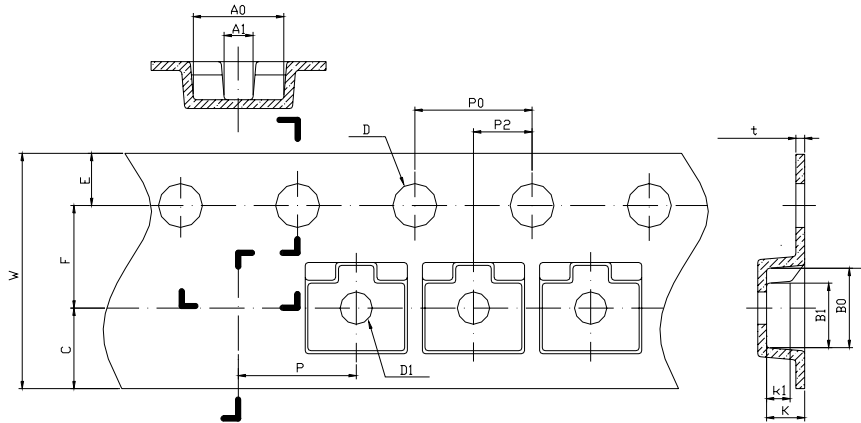
FOOTPRINTS FOR SOLDERING

Symbol	Dimensions in Millimeters	Dimensions in Inches
	Nominal	Nominal
W1	1.900	0.0748
W2	0.950	0.0374
W3	0.800	0.0315
T	2.000	0.0787
T1	1.000	0.0394

SOT-23 PACKAGING:

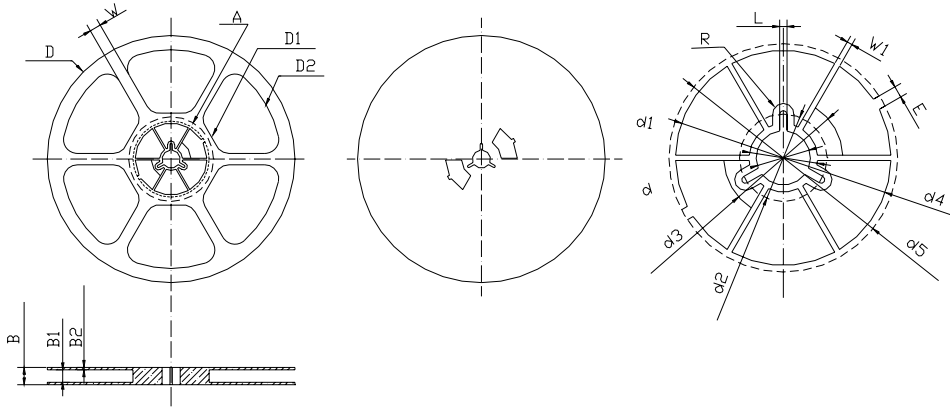


SOT-23 EMBOSSED CARRIER TAPE:



Symbol	Dimensions in Millimeters			Dimensions in Inches		
	Minimum	Nominal	Maximum	Minimum	Nominal	Maximum
A0	3.050	3.150	3.250	0.1201	0.1240	0.1280
A1	0.900	1.000	1.100	0.0354	0.0394	0.0433
B0	2.669	2.769	2.869	0.1051	0.1090	0.1130
B1	2.100	2.200	2.300	0.0827	0.0866	0.0906
C	2.750TYP			0.1083TYP		
D	1.500	1.500	1.600	0.0591	0.0591	0.0630
D1	0.900	1.000	1.100	0.0354	0.0394	0.0433
E	1.650	1.750	1.850	0.0650	0.0689	0.0728
F	3.450	3.500	3.550	0.1358	0.1378	0.1398
K	1.119	1.219	1.319	0.0441	0.0480	0.0519
K1	0.850TYP			0.03346TYP		
P	3.900	4.000	4.100	0.1535	0.1575	0.1614
P0	3.900	4.000	4.100	0.1535	0.1575	0.1614
P010	39.800	40.000	40.200	1.5669	1.5748	1.5827
P2	1.950	2.000	2.050	0.0768	0.0787	0.0807
t	0.216	0.229	0.242	0.0085	0.0090	0.0095
W	7.900	8.000	8.300	0.3110	0.3150	0.3268

SOT-23 REEL DATA:



Symbol	Dimensions in Millimeters			Dimensions in Inches		
	Minimum	Nominal	Maximum	Minimum	Nominal	Maximum
B	-	-	12.500	-	-	0.4921
B1	8.900	9.000	9.100	0.3504	0.3543	0.3583
B2	1.700	1.750	1.800	0.0669	0.0689	0.0709
D	ϕ 177.000	ϕ 178.000	ϕ 179.000	Φ 6.9685	Φ 7.0079	Φ 7.0472
D1	Φ 67.600 TYP			Φ 2.6614 TYP		
D2	Φ 157.600 TYP			Φ 6.2047 TYP		
d	Φ 12.800	Φ 13.000	Φ 13.200	Φ 0.5039	Φ 0.5118	Φ 0.5197
d1	Φ 16.40 TYP			Φ 0.6457 TYP		
d2	Φ 21.000 TYP			Φ 0.8268 TYP		
d3	Φ 25.200 TYP			Φ 0.9922 TYP		
d4	Φ 50.600	Φ 51.600	Φ 52.600	Φ 1.9921	Φ 2.0315	Φ 2.0709
d5	Φ 53.800	Φ 54.800	Φ 55.800	Φ 2.1181	Φ 2.1575	Φ 2.1969
E	2.800 TYP			0.1102 TYP		
L	1.750 TYP			0.0689 TYP		
R	2.575 TYP			0.1014 TYP		
W	15.000 TYP			0.5906 TYP		
W1	1.300 TYP			0.0512 TYP		