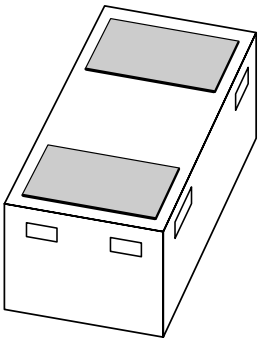
DATA SHEET



BZX884 series
Voltage regulator diodes

Product data sheet
Supersedes data of 2003 May 15

2004 Mar 26

NXP founded by Philips

Table 1 Per type BZX884-B/C2V4 to B/C24

T_j = 25 °C unless otherwise specified.

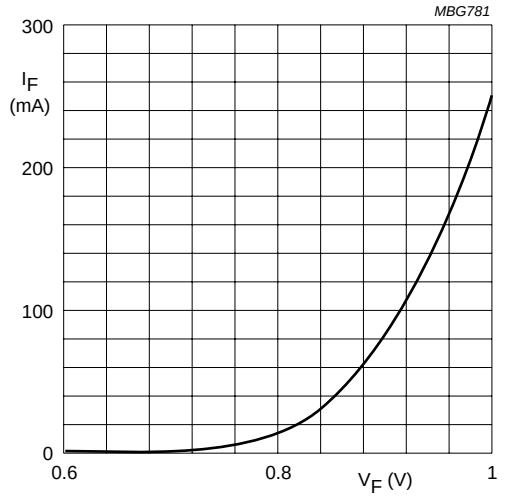
BZX884-B or C XXX	WORKING VOLTAGE V_Z (V) at I_Z = 5 mA				DIFFERENTIAL RESISTANCE r_{dif} (Ω)				TEMP. COEFF. S_Z (mV/K) at I_{Ztest} = 5 mA (see Figs 3 and 4)	DIODE CAP. C_d (pF) at f = 1 MHz; V_R = 0 V	NON-REPETITIVE PEAK REVERSE CURRENT I_{ZSM} (A) at t_p = 100 μs; T_{amb} = 25 °C
	Tol. ±2% (B)		Tol. ±5% (C)		at I_{Ztest} = 1 mA		at I_{Ztest} = 5 mA				
	MIN.	MAX.	MIN.	MAX.	TYP.	MAX.	TYP.	MAX.	TYP.	MAX.	MAX.
2V4	2.35	2.45	2.28	2.52	275	400	70	100	−1.3	450	6.0
2V7	2.65	2.75	2.57	2.84	300	450	75	100	−1.4	440	6.0
3V0	2.94	3.06	2.85	3.15	325	500	80	95	−1.6	425	6.0
3V3	3.23	3.37	3.14	3.47	350	500	85	95	−1.8	410	6.0
3V6	3.53	3.67	3.42	3.78	375	500	85	90	−1.9	390	6.0
3V9	3.82	3.98	3.71	4.10	400	500	85	90	−1.9	370	6.0
4V3	4.21	4.39	4.09	4.52	410	600	80	90	−1.7	350	6.0
4V7	4.61	4.79	4.47	4.94	425	500	50	80	−1.2	325	6.0
5V1	5.00	5.20	4.85	5.36	400	480	40	60	−0.5	300	6.0
5V6	5.49	5.71	5.32	5.88	80	400	15	40	1.0	275	6.0
6V2	6.08	6.32	5.89	6.51	40	150	6	10	2.2	250	6.0
6V8	6.66	6.94	6.46	7.14	30	80	6	15	3.0	215	6.0
7V5	7.35	7.65	7.13	7.88	15	80	2	10	3.6	170	4.0
8V2	8.04	8.36	7.79	8.61	20	80	2	10	4.3	150	4.0
9V1	8.92	9.28	8.65	9.56	20	100	2	10	5.2	120	3.0
10	9.80	10.20	9.50	10.50	20	150	2	10	6.0	110	3.0
11	10.78	11.22	10.45	11.55	25	150	2	10	6.9	110	2.5
12	11.76	12.24	11.40	12.60	25	150	2	10	7.9	105	2.5
13	12.74	13.26	12.35	13.65	25	170	2	10	8.8	105	2.5
15	14.70	15.30	14.25	15.75	25	200	3	15	10.7	100	2.0
16	15.68	18.32	15.20	16.80	50	200	10	40	12.4	90	1.5
18	17.64	18.36	17.10	18.90	50	225	10	45	14.4	80	1.5
20	19.60	20.40	19.00	21.00	60	225	15	55	16.4	70	1.5
22	21.56	22.44	20.90	23.10	60	250	20	55	18.4	60	1.25
24	23.52	24.48	22.80	25.20	60	250	25	70	20.4	55	1.25

Table 2 Per type BZX884-B/C27 to B/C75

T_j = 25 °C unless otherwise specified.

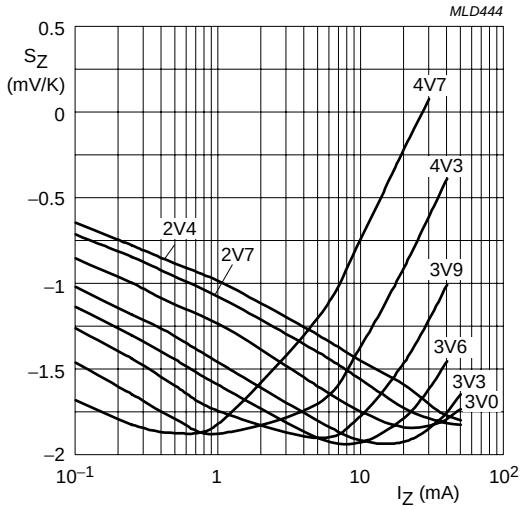
BZX884-B or C XXX	WORKING VOLTAGE V_Z (V) at I_Z = 2 mA				DIFFERENTIAL RESISTANCE r_{dif} (Ω)				TEMP. COEFF. S_Z (mV/K) at I_{Ztest} = 2 mA (see Figs 3 and 4)	DIODE CAP. C_d (pF) at f = 1 MHz; V_R = 0 V	NON-REPETITIVE PEAK REVERSE CURRENT I_{ZSM} (A) at t_p = 100 μs; T_{amb} = 25 °C
	Tol. ±2% (B)		Tol. ±5% (C)		at I_{Ztest} = 0.5 mA		at I_{Ztest} = 2 mA				
	MIN.	MAX.	MIN.	MAX.	TYP.	MAX.	TYP.	MAX.	TYP.	MAX.	MAX.
27	26.46	27.54	25.65	28.35	65	300	25	80	23.4	50	1.0
30	29.40	30.60	28.50	31.50	70	300	30	80	26.6	50	1.0
33	32.34	33.66	31.35	34.65	75	325	35	80	29.7	45	0.9
36	35.28	36.72	34.20	37.80	80	350	35	90	33.0	45	0.8
39	38.22	39.78	37.05	40.95	80	350	40	130	36.4	45	0.7
43	42.14	43.86	40.85	45.15	85	375	45	150	41.2	40	0.6
47	46.06	47.94	44.65	49.35	85	375	50	170	46.1	40	0.5
51	49.98	52.02	48.45	53.55	90	400	60	180	51.0	40	0.4
56	54.88	57.12	53.20	58.80	100	425	70	200	57.0	40	0.3
62	60.76	63.24	58.90	65.10	120	450	80	215	64.4	35	0.3
68	66.64	69.36	64.60	71.40	150	475	90	240	71.7	35	0.25
75	73.50	76.50	71.25	78.75	170	500	95	255	80.2	35	0.2

GRAPHICAL DATA



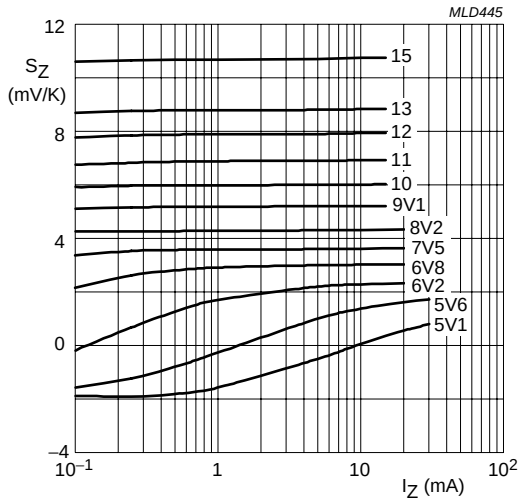
T_j = 25 °C.

Fig.2 Forward current as a function of forward voltage; typical values.



BZX884-B/C2V4 to B/C4V7.
T_j = 25 to 150 °C.

Fig.3 Temperature coefficient as a function of working current; typical values.

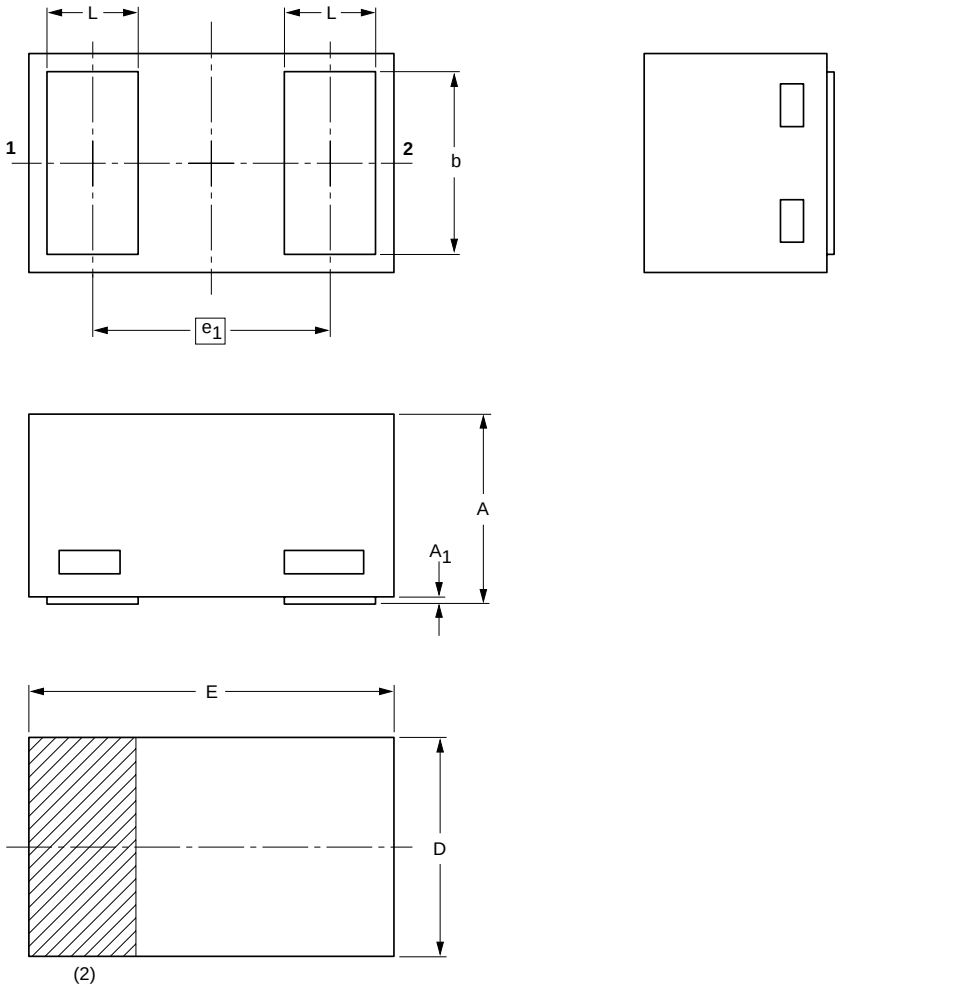


BZX884-B/C5V1 to B/C15.
T_j = 25 to 150 °C.

Fig.4 Temperature coefficient as a function of working current; typical values.

PACKAGE OUTLINE

Leadless ultra small plastic package; 2 terminals; body 1.0 x 0.6 x 0.5 mm **SOD882**



DIMENSIONS (mm are the original dimensions)

UNIT	A(1)	A1 max.	b	D	E	e1	L
mm	0.50 0.46	0.03	0.55 0.47	0.62 0.55	1.02 0.95	0.65	0.30 0.22

Notes

1. Including plating thickness
2. The marking bar indicates the cathode

OUTLINE VERSION	REFERENCES				EUROPEAN PROJECTION	ISSUE DATE
	IEC	JEDEC	JEITA			
SOD882						~~03-04-16~~ 03-04-17

SOLDERING

Reflow soldering is the only recommended soldering method.

DATA SHEET STATUS

DOCUMENT STATUS[1]	PRODUCT STATUS[2]	DEFINITION
Objective data sheet	Development	This document contains data from the objective specification for product development.
Preliminary data sheet	Qualification	This document contains data from the preliminary specification.
Product data sheet	Production	This document contains the product specification.

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