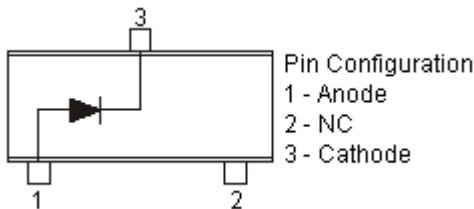
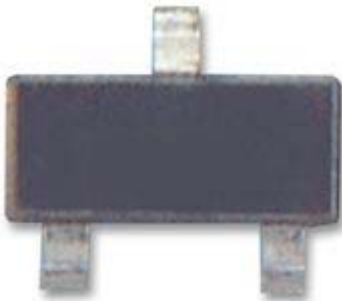


Silicon Planar Voltage Regulator Diode

Feature:

Low voltage general purpose voltage regulator diode.



Absolute Maximum Ratings ($T_a = 25^{\circ}\text{C}$)

Description	Symbol	Value	Unit
Working Voltage Tolerance		± 5	%
Repetitive Peak Forward Current	I_{FRM}	250	mA
Repetitive Peak Working Current	I_{ZRM}		
Power Dissipation upto $T_a = 25^{\circ}\text{C}$	$*P_D$	300	mW
Power Dissipation upto $T_c = 25^{\circ}\text{C}$	$**P_D$	250	
Junction Temperature	T_j	150	$^{\circ}\text{C}$
Storage Temperature	T_{stg}	- 65 to + 150	

Thermal Resistance

Junction to Ambient	$*R_{th(j-a)}$	420	K/W
---------------------	----------------	-----	-----

* Device mounted on a ceramic alumna.

** Device mounted on an FR5 printed circuit board.

Forward Voltage at $V_F < 0.9\text{V}$ at 10mA and $< 1.5\text{V}$ at 200mA.

Electrical Characteristics (Ta=25°C unless specified otherwise)

Working Voltage ***V _Z (± 5%) (V) at I _Z test = 5mA		Differential Resistance rdiff (Ω) at I _Z test = 5mA	Temperature Coefficient S _Z (mV/K) at I _Z test = 5mA		Differential Resistance rdiff (Ω) at I _Z test = 1mA	I _R at V _R μA		Marking	Part Numbers
min	max	max	min	max	Max	max	(V)		
9.40	10.60	20	4.5	8.0	150	0.2	7.0	Z9	BZX84C10
10.40	11.60	20	5.4	9.0	150	0.1	8	Y1	BZX84C11
11.40	12.70	25	6.0	10	150	0.1	8	Y2	BZX84C12
12.40	14.10	30	7.0	11	170	0.1	8	Y3	BZX84C13
13.80	15.60	30	9.2	13	200	0.05	10.5	Y4	BZX84C15
15.30	17.10	40	10.4	14	200	0.05	11.2	Y5	BZX84C16
16.80	19.10	45	12.4	16	225	0.05	12.6	Y6	BZX84C18
18.80	21.20	55	14.4	18	225	0.05	14.0	Y7	BZX84C20
20.80	23.30	55	16.4	20	250	0.05	15.4	Y8	BZX84C22
22.80	25.60	70	18.4	22	250	0.05	16.8	Y9	BZX84C24
at I _Z test = 2mA		at I _Z test = 2mA	at I _Z test = 2mA		at I _Z test = 0.5mA				
25.10	28.90	80	21.4	25.3	300	0.05	18.9	Y10	BZX84C27
28.00	32.00	80	24.4	29.4	300	0.05	21.0	Y11	BZX84C30
31.00	35.00	80	27.4	33.4	325	0.05	23.1	Y12	BZX84C33
34.00	38.00	90	30.4	37.4	350	0.05	25.2	Y13	BZX84C36
37.00	41.00	130	33.4	41.2	350	0.05	27.3	Y14	BZX84C39
40.00	46.00	150	37.6	46.6	375	0.05	30.1	Y15	BZX84C43
44.00	50.00	170	42.0	51.8	375	0.05	32.9	Y16	BZX84C47
4.40	5.00	80	- 3.5	0.2	500	3.0	2.0	Z1	BZX84C4V7
48.00	54.00	180	46.6	57.2	400	0.05	35.7	Y17	BZX84C51
4.80	5.40	60	- 2.7	1.2	480	2.0	2.0	Z2	BZX84C5V1
5.20	6.00	40	- 2.0	2.5	400	1.0	2.0	Z3	BZX84C5V6
5.80	6.60	10	0.4	3.7	150	3.0	4.0	Z4	BZX84C6V2
7.00	7.90	15	2.5	5.3	80	1.0	5.0	Z6	BZX84C7V5
7.70	8.70	15	3.2	6.2	80	0.7	5.0	Z7	BZX84C8V2
8.50	9.60	15	3.8	7.0	100	0.5	6.0	Z8	BZX84C9V1

*** Pulse Test 20ms ≤tp ≤50ms

Notes:

International Sales Offices:



AUSTRALIA – Farnell

Tel No: ++61 1300 361 005
Fax No: ++61 1300 361 225



FINLAND – Farnell

Tel No: ++358 9 560 7780
Fax No: ++358 9 345 5411



ITALY – Farnell

Tel No: ++39 02 93 995 200
Fax No: ++39 02 93 995 300



SPAIN – Farnell

Tel No: 901 20 20 80
Fax No: 901 20 20 90



AUSTRIA – Farnell

Tel No: ++43 662 2180 680
Fax No: ++43 662 2180 670



FRANCE – Farnell

Tel No: ++33 474 68 99 99
Fax No: ++33 474 68 99 90



MALAYSIA – Farnell-Newark

Tel No: ++60 3 7873 8000
Fax No: ++60 3 7873 7000



SWEDEN – Farnell

Tel No: ++46 8 730 50 00
Fax No: ++46 8 83 52 62



BELGIUM – Farnell

Tel No: ++32 3 475 2810
Fax No: ++32 3 227 3648



GERMANY – Farnell

Tel No: ++49 89 61 39 39 39
Fax No: ++49 89 613 59 01



NETHERLANDS – Farnell

Tel No: ++31 30 241 7373
Fax No: ++31 30 241 7333



SWITZERLAND – Farnell

Tel No: ++44 204 64 64
Fax No: ++44 204 64 54



BRAZIL – Farnell-Newark

Tel No: ++55 11 4066 9400
Fax No: ++55 11 4066 9410



HONG KONG – Farnell-Newark

Tel No: ++852 2268 9888
Fax No: ++852 2268 9899



NEW ZEALAND – Farnell

Tel No: 0800 90 80 80
Fax No: 0800 90 80 81



UK – Farnell

Tel No: ++44 8701 200 200
Fax No: ++44 8701 200 201



CHINA – Farnell-Newark

Tel No: ++86 10 6238 5152
Fax No: ++86 10 6238 5022



HUNGARY – Farnell

Tel No: ++44 870 1200 208
Fax No: ++44 870 1200 209



NORWAY – Farnell

Tel No: 800 146 70
Fax No: 800 146 76



UK – CPC

++44 8701 202 530
++44 8701 202 531



CZECH REPUBLIC – Farnell

Tel No: ++44 870 1200 208
Fax No: ++44 870 1200 209



INDIA – Farnell

Tel No: ++44 870 1200 208
Fax No: ++44 870 1200 209



PORTUGAL – Farnell

Tel No: ++34 93 475 8804
Fax No: ++34 93 474 5288



USA – Newark

Tel No: 800 463 9275



DENMARK – Farnell

Tel No: ++45 44 53 66 44
Fax No: ++45 44 53 66 06



IRELAND – Farnell

Tel No: ++353 1 830 9277
Fax No: ++353 1 830 9016



RUSSIA – Farnell

Tel No: ++44 870 1200 208
Fax No: ++44 870 1200 209



SINGAPORE – Farnell-Newark

Tel No: ++65 6788 0200
Fax No: ++65 6788 0300



ESTONIA – Farnell

Tel No: ++358 9 560 7780
Fax No: ++358 9 345 5411



ISRAEL – Farnell

Tel No: ++180 937 0015
Fax No: ++180 937 0014



EXPORT – Farnell

Tel No: ++44 8701 200 208
Fax No: ++44 8701 200 209

For enquiries from all other markets

<http://www.farnell.com>
<http://www.newark.com>
<http://www.cpc.co.uk>

Disclaimer This data sheet and its contents (the "Information") belong to the Premier Farnell Group (the "Group") or are licensed to it. No licence is granted for the use of it other than for information purposes in connection with the products to which it relates. No licence of any intellectual property rights is granted. The Information is subject to change without notice and replaces all data sheets previously supplied. The Information supplied is believed to be accurate but the Group assumes no responsibility for its accuracy or completeness, any error in or omission from it or for any use made of it. Users of this data sheet should check for themselves the Information and the suitability of the products for their purpose and not make any assumptions based on information included or omitted. Liability for loss or damage resulting from any reliance on the Information or use of it (including liability resulting from negligence or where the Group was aware of the possibility of such loss or damage arising) is excluded. This will not operate to limit or restrict the Group's liability for death or personal injury resulting from its negligence. SPC Multicomp is the registered trademark of the Group. © Premier Farnell plc 2008.