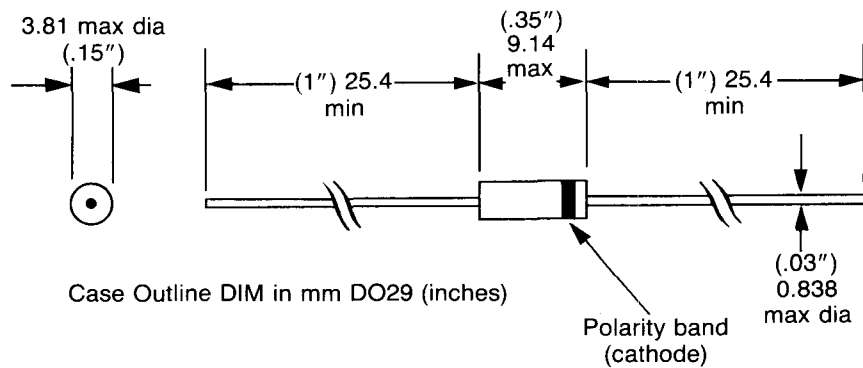


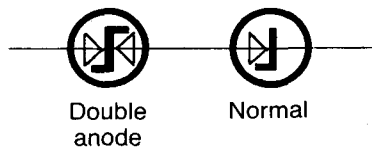
1W Voltage Regulator Diodes

A range of medium power zener and avalanche diodes to BS 9305-F-078 in a hermetically sealed DO29 glass package in both unipolar and bipolar configurations.

$P_{\text{max cont}}$	_____	1W
P_{surge}	_____	400W; 1mS expo
V_z	_____	0.7 to 400V
$T_{\text{op \& stg}}$	_____	-55 to +175°C



Available in the following configurations



Z4 Series

Z0 Series

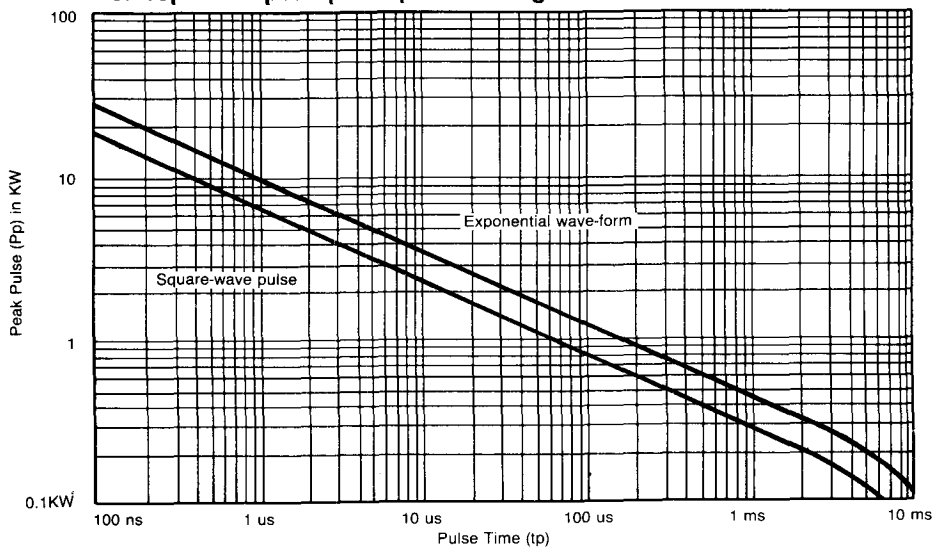
Electrical characteristics at 25°C

Type	+ 5% Voltage Tol		Iz mA	Rz ohms		Max IR at VR		Izsm Amps	Temp Coef %/°C
				Typ.	Max	µA	Volts		
Z4B3.0	2.8	3.2	100	2	14	300	1.0	83	-0.08
Z4B3.3	3.1	3.5	100	2	13	300	1.0	78	-0.07
Z4B3.6	3.4	3.8	100	2	12	250	1.0	69	-0.06
Z4B3.9	3.7	4.1	100	2	11	150	1.5	64	-0.05
Z4B4.3	4.0	4.6	100	2	10	100	1.5	58	-0.04
Z4B4.7	4.4	5.0	100	2	9	100	1.5	53	-0.03
Z4B5.1	4.8	5.4	100	2	8	50	1.5	49	+0.02
Z4B5.6	5.2	6.0	50	1.5	7	50	1.5	45	+0.02
Z4B6.2	5.8	6.6	50	1.0	7	50	4.3	40	+0.03
Z4B6.8	6.4	7.2	50	0.3	6	30	4.7	37	+0.04
Z4B7.5	7.0	7.9	50	0.5	6	30	5.1	33	+0.05
Z4B8.2	7.7	8.7	50	1.0	7	10	5.6	30.5	+0.06
Z4B9.1	8.5	9.6	50	2	8	10	6.2	27.5	+0.065
Z4B10	9.4	10.6	50	2	8	10	6.8	25.0	+0.07
Z4B11	10.4	11.6	25	4	9	10	7.5	22.7	+0.07
Z4B12	11.4	12.7	25	5	9	10	8.2	20.8	+0.075
Z4B13	12.4	14.1	25	6	10	10	9.1	19.2	+0.075
Z4B15	13.8	15.6	25	8	10	10	10	16.7	+0.08
Z4B16	15.3	17.1	25	10	12	10	11	15.6	+0.08
Z4B18	16.8	19.1	25	12	15	10	12	13.9	+0.08
Z4B20	18.8	21.2	25	12	15	10	12	12.5	+0.085
Z4B22	20.0	23.3	10	20	27	10	15	11.4	+0.09
Z4B24	22.7	25.9	10	21	30	10	16	10.4	+0.09
Z4B27	25.1	28.9	10	23	32	10	18	9.3	+0.095
Z4B30	28	32	10	25	34	10	20	8.3	+0.095
Z4B33	31	35	10	27	6	10	22	7.58	+0.10
Z4B36	34	38	10	30	3	10	24	6.94	+0.10
Z4B39	37	41	10	34	45	10	27	6.41	+0.10
Z4B43	40	46	10	45	60	10	30	5.81	+0.105
Z4B47	44	50	10	50	70	10	33	5.32	+0.105
Z4B51	48	54	5	68	90	10	36	4.90	+0.105
Z4B56	52	60	5	75	100	10	39	4.46	+0.105
Z4B62	58	66	5	83	110	10	43	4.03	+0.11
Z4B68	64	72	5	90	120	10	47	3.68	+0.11
Z4B75	70	79	5	98	130	10	51	3.33	+0.11
Z4B82	77	87	5	130	175	10	56	3.05	+0.11
Z4B91	85	96	5	150	200	10	62	2.75	+0.11
Z4B100	94	106	2.5	270	350	10	68	2.50	+0.11
Z4B110	104	116	2.5	340	450	10	75	2.27	+0.11
Z4B120	114	127	2.5	420	550	10	82	2.08	+0.11
Z4B130	124	141	2.5	490	650	10	91	1.92	+0.11
Z4B150	138	156	2.5	600	800	10	100	1.67	+0.11
Z4B160	153	171	2.5	750	1K	10	110	1.56	+0.11
Z4B180	168	191	2.5	900	1.2K	10	120	1.39	+0.11
Z4B200	188	212	2.5	1K	1.4K	10	130	1.25	+0.11
Z4B400	380	420	1.0	2.5K	5.0K	10	260	0.63	+0.11

Z4 Series

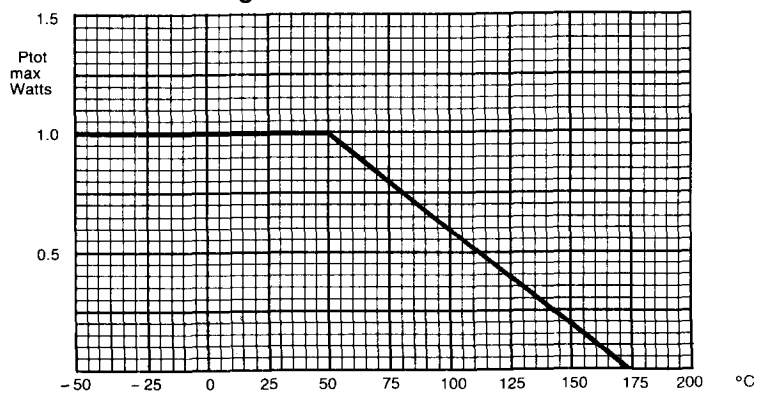
Z0 Series

Non-repetitive peak pulse power rating curve



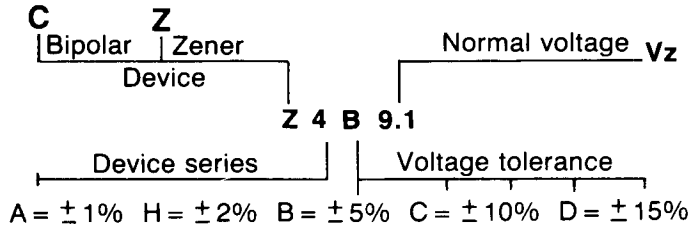
Note: Peak power defined as peak voltage times peak current

Power Derating Curve



Maximum continuous power dissipation plotted against ambient temperature. Power derating 8mW/°C from 50°C when diode is connected into p.c.b. with 10mm lead length.

Code Interpretation



For BS device specify conforming to BS9305-F-078 issue 2.
Full specification available on request.

Other types available

IN1875 Thru IN1888
IN3016 Thru IN3051
IN3537
IN3675 Thru IN3710
IN3821 Thru IN3830
IN4158 Thru IN4193
IN4323 Thru IN4358
IN4400 Thru IN4435
IN4628 Thru IN4677
IN4728 Thru IN4764
IN4831 Thru IN4860

Mechanical characteristics

CASE: Hermetically sealed DO29 outline
FINISH: All external surfaces are corrosion resistant and leads solderable
IDENTIFICATION: Body marked with Type No. and logo
POLARITY: Cathode marked with band
WEIGHT: 0.47 grammes approximately

Electrical Characteristics

FORWARD VOLTAGE V_f 1.1v max at $I_f \leq 1A$
 V_z measured with pulse $\leq 20mS$
 R_z determined with DC plus 10% superimposed AC @ 1KHz
All electrical characteristics 25°C unless otherwise stated.