1ZB6.8-1ZB390

Zener Diodes

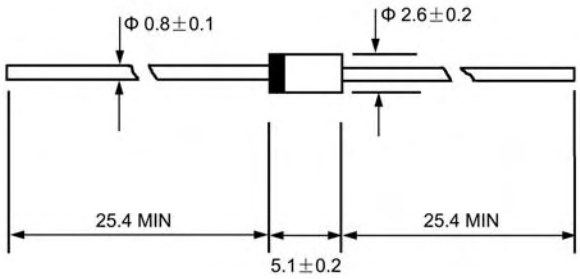


POWER DISSIPATION: 1.0 W

DO - 41

Features

- ◇ Silicon planar power zener diodes
- ◇ For use in stabilizing and clipping curcuits with high power rating.
- ◇ Standard zener voltage tolerance is ±10%. Add suffix "A" for ±5% tolerance. Other zener voltage and tolerances are available upon request.



Dimensions in millimeters

Mechanical Data

- ◇ Case:DO-41
- ◇ Terminals: Solderable per MIL-STD-202, method 208
- ◇ Polarity: Cathode band
- ◇ Marking: Type number
- ◇ Approx. Weight: 0.34grams.

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25℃ ambient temperature unless otherwise specified.

	SYMBOL	VALUE	UNIT
Zener current (see Table "Characteristics")			
Power dissipation at T_{amb}=25℃	P_{tot}	1.0[1)]	W
Junction temperature	T_J	-40---+150	℃
Storage temperature range	T_s	-40---+150	℃

NOTES: (1) Valid provided that leads at a distance of 10 mm from case are kept at ambient temperature.

ELECTRICAL CHARACTERISTICS (T_A=25℃)

Type	Nominal Zener Voltage					Temperature Coefficient of Zener Voltage αV_Z mV/℃		Forward Voltage		Reverse Current	
	Zener Voltage V_z V			Zener Impedance Z_{ZT} Ω	Measurement Current I_{ZT}			V_F V	Measurement Current I_F	I_R μ A	Measurement Voltage V_R
	Min.	Typ.	Max.	Max.	mA	Typ.	Max.	Max.	A	Max.	V
1ZB6.8	6.2	6.8	7.4	60	10	3.0	4.0	1.2	0.2	10	3.0
1ZB7.5	6.8	7.5	8.3	30	10	4.0	5.0	1.2	0.2	10	4.5
1ZB8.2	7.4	8.2	9.1	30	10	4.0	6.0	1.2	0.2	10	4.9
1ZB9.1	8.2	9.1	10.1	30	10	5.0	8.0	1.2	0.2	10	5.5
1ZB10	9.0	10	11.0	30	10	6.0	9.0	1.2	0.2	10	6.0
1ZB11	9.9	11	12.1	30	10	7.0	11	1.2	0.2	10	7.0
1ZB12	10.8	12	13.2	30	10	8.0	13	1.2	0.2	10	8.0
1ZB13	11.7	13	14.3	30	10	9.0	14	1.2	0.2	10	9.0
1ZB15	13.5	15	16.5	30	10	11	17	1.2	0.2	10	10
1ZB16	14.4	16	17.6	30	10	12	19	1.2	0.2	10	11
1ZB18	16.2	18	19.8	30	10	14	23	1.2	0.2	10	13
1ZB20	18.0	20	22.0	30	10	16	26	1.2	0.2	10	14
1ZB22	19.8	22	24.2	30	10	18	28	1.2	0.2	10	16
1ZB24	21.6	24	26.4	30	10	20	32	1.2	0.2	10	17
1ZB27	24.3	27	29.7	30	10	23	36	1.2	0.2	10	19
1ZB30	27.0	30	33.0	30	10	25	40	1.2	0.2	10	21
1ZB33	29.7	33	36.3	30	10	26	41	1.2	0.2	10	26.4
1ZB36	32.4	36	39.6	30	9.0	28	45	1.2	0.2	10	28.8
1ZB39	35.1	39	42.9	35	8.0	30	48	1.2	0.2	10	31.2
1ZB43	38.7	43	47.3	40	7.0	33	53	1.2	0.2	10	34.4
1ZB47	42.3	47	51.7	65	6.0	38	60	1.2	0.2	10	37.6
1ZB51	45.9	51	56.1	65	6.0	43	68	1.2	0.2	10	40.8
1ZB56	50.4	56	61.6	85	5.0	48	77	1.2	0.2	10	44.8
1ZB68	61.2	68	74.8	120	4.0	57	90	1.2	0.2	10	54.4
1ZB75	67.5	75	82.5	150	4.0	66	104	1.2	0.2	10	60
1ZB82	73.8	82	90.2	170	3.0	71	113	1.2	0.2	10	65.4
1ZB91	81.9	91	100.1	240	3.0	79	127	1.2	0.2	10	72.8
1ZB100	90	100	110	300	3.0	87	138	1.2	0.2	10	80
1ZB110	99	110	121	300	3.0	96	152	1.2	0.2	10	88
1ZB120	108	120	132	350	2.5	106	171	1.2	0.2	10	96
1ZB130	117	130	143	400	2.5	116	182	1.2	0.2	10	104
1ZB150	135	150	165	450	2.0	136	212	1.2	0.2	10	120
1ZB160	144	160	176	450	2.0	146	232	1.2	0.2	10	128
1ZB180	162	180	198	500	1.5	161	255	1.2	0.2	10	144
1ZB200	180	200	220	500	0.5	170	269	1.2	0.2	10	160
1ZB200-Y	190	200	210			170	269				160
1ZB200-Z	200	210	220			178	286				168
1ZB220	198	220	242	5000	0.5	200	309	1.2	0.2	10	176
1ZB220-Y	210	220	230			200	309				176
1ZB220-Z	220	230	240			207	320				184
1ZB240	216	240	264	5000	0.5	215	325	1.2	0.2	10	192
1ZB240-Y	230	240	250			215	325				216
1ZB240-Z	240	250	260			225	338				225
1ZB270	243	270	297	5000	0.5	243	385	1.2	0.2	10	216
1ZB270-X	250	260	270			221	350				234
1ZB270-Y	260	270	280			228	362				243
1ZB270-Z	270	280	290			236	374				252
1ZB300	270	300	330	5000	0.5	270	428	1.2	0.2	10	240
1ZB300-X	280	290	300			244	388				261
1ZB300-Y	290	300	310			253	402				270
1ZB300-Z	300	310	320			261	415				279
1ZB330	297	330	363	5000	0.5	296	470	1.2	0.2	10	264
1ZB330-X	310	320	330			270	428				288
1ZB330-Y	320	330	340			278	441				297
1ZB330-Z	330	340	350			287	455				306
1ZB360	324	360	396	10000	0.5	323	513	1.2	0.2	10	288
1ZB390	351	390	429	10000	0.5	350	555	1.2	0.2	10	312

Ratings AND Charactieristic Curves

FIG.1 -- AT Y_Z - V_Z

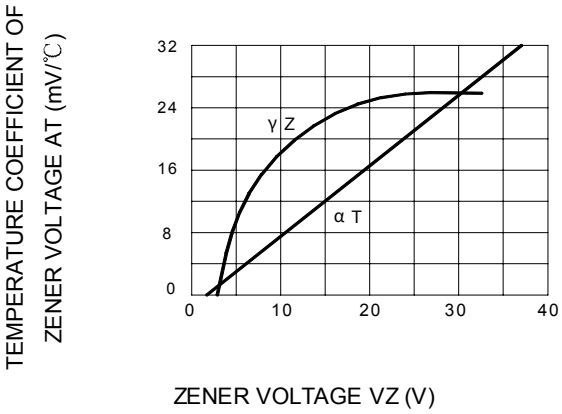


FIG.2 -- T_A MAX - P

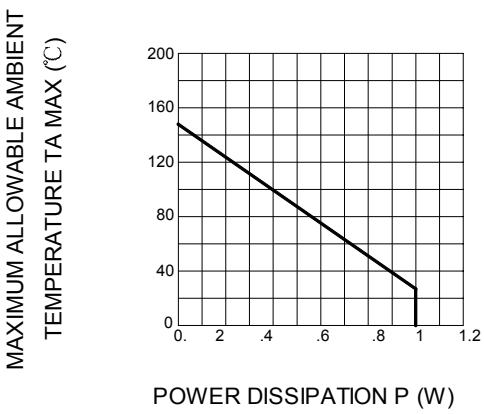


FIG.3 -- P_{RSM} - tw

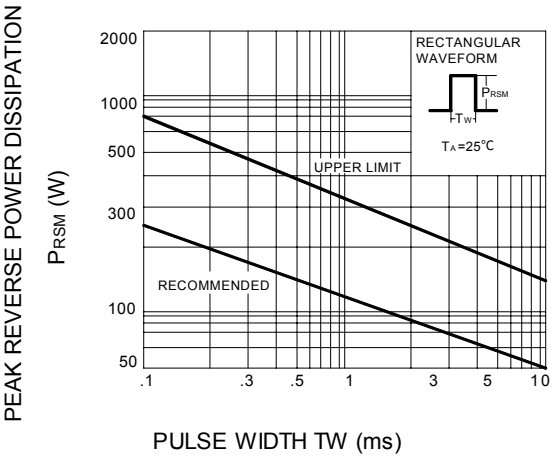


FIG.4 -- $R_{\theta JA}$ - T

