

ZENER 0.5W VOLTAGE REGULATOR CHIP/DIE**CONFIGURATION: Zener 0.5W Voltage Regulator**

- Die fabricated on a MIL-PRF-19500 JANKC qualified manufacturing line
- Class H and class K element evaluation per MIL-PRF-19500/117
- All ratings are @ $T_c = 25^\circ\text{C}$ unless otherwise specified.
- Operating and storage temperature: -65°C to $+175^\circ\text{C}$

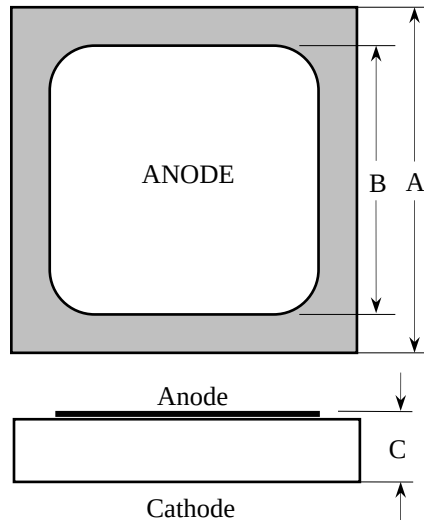
ELECTRICAL CHARACTERISTICS

PART NUMBER	NOMINAL ZENER VOLTAGE $V_Z @ I_{ZT}$ NOTE (1)	ZENER TEST CURRENT I_{ZT}	MAX ZENER CURRENT I_{ZM}	MAX ZENER IMP $Z_{ZT} @ I_{ZT}$	MAX ZENER IMP $Z_{ZK} @ 250 \mu\text{A}$	FORWARD VOLTAGE V_F NOTE (2)	MAX REVERSE CURRENT $I_R @ V_R$ NOTE (3)			TEMP. COEFF. OF ZENER VOLTAGE α_{VZ}
							I_{R1}	I_{R2}	V	
	V	mA	mA	Ω	Ω	V	μA	μA	V	%/ $^\circ\text{C}$
1N962B	11	11.5	35	9.5	700	1.1	1.0	10	8.4	+0.073
1N963B	12	10.5	32	11.5	700	1.1	1.0	10	9.1	+0.076
1N964B	13	9.5	30	13	700	1.1	0.5	10	9.9	+0.079
1N965B	15	8.5	26	16	700	1.1	0.5	10	11	+0.082
1N966B	16	7.8	25	17	700	1.1	0.5	10	12	+0.083
1N967B	18	7.0	21	21	750	1.1	0.5	10	14	+0.085
1N968B	20	6.2	19	25	750	1.1	0.5	10	15	+0.086
1N969B	22	5.6	17	29	750	1.1	0.5	10	17	+0.087
1N970B	24	5.2	16	33	750	1.1	0.5	10	18	+0.088
1N971B	27	4.6	14	41	750	1.1	0.5	10	21	+0.090
1N972B	30	4.2	13	49	1000	1.1	0.5	10	23	+0.091
1N973B	33	3.8	12	58	1000	1.1	0.5	10	25	+0.092
1N974B	36	3.4	11	70	1000	1.1	0.5	10	27	+0.093
1N975B	39	3.2	9.1	80	1000	1.1	0.5	10	30	+0.094
1N976B	43	3.0	8.8	93	1000	1.1	0.5	10	33	+0.095
1N977B	47	2.7	7.9	105	1500	1.1	0.5	10	36	+0.095
1N978B	51	2.5	7.4	125	1500	1.1	0.5	10	39	+0.096
1N979B	56	2.2	6.9	150	2000	1.1	0.5	10	43	+0.096
1N980B	62	2.0	6.0	185	2000	1.1	0.5	10	47	+0.097
1N981B	68	1.8	5.5	230	2000	1.1	0.5	10	52	+0.097
1N982B	75	1.7	5.1	270	2000	1.1	0.5	10	56	+0.098
1N983B	82	1.5	4.6	330	3000	1.1	0.5	10	62	+0.098
1N984B	91	1.4	4.2	400	3000	1.1	0.5	10	69	+0.099
1N985B	100	1.3	3.7	500	3000	1.1	0.5	10	76	+0.110
1N986B	110	1.1	3.3	750	4000	1.3	0.5	10	84	+0.110
1N987B	120	1.0	3.1	900	4500	1.3	0.5	10	91	+0.110
1N988B	130	0.95	2.7	1100	5000	1.3	0.5	10	99	+0.110
1N989B	150	0.85	2.4	1500	6000	1.3	0.5	10	114	+0.110
1N990B	160	0.80	2.2	1700	6500	1.3	0.5	10	122	+0.110
1N991B	180	0.68	2.0	2200	7100	1.3	0.5	10	137	+0.110
1N992B	200	0.65	1.8	2500	8000	1.3	0.5	10	152	+0.110

- 1./ V_Z Tolerance $\pm 5\%$
 2./ V_F maximum at 200 mA dc
 3./ I_{R2} at $T_A = 150^\circ\text{C}$

**TECHNICAL DATA
DATASHEET 6005, REV A**

PACKAGE DIMENSIONS (inches/mm)



Ltr	Dimensions			
	Inches		Millimeters	
	Min	Max	Min	Max
A	.023	.027	0.584	0.686
B	.015	.019	0.381	0.483
C	.008	.012	0.203	0.305

NOTES:

1. Dimensions are in inches.
2. Millimeter equivalents are given for general information only.
3. The die thickness is .010 (0.25 mm) $\pm$.002 inches ($\pm$ 0.05 mm).
Anode metallization: Al, thickness = 45,000 Å nominal;
Cathode metallization: Ti/Au, thickness = (200 Å / 4,350 Å) nominal

JANHCD1N962B thru JANHCD1N992B
JANKCD1N962B thru JANKCD1N992B

ZENER 0.5W VOLTAGE REGULATOR
CHIP/DIE

SENSITRON
SEMICONDUCTOR

TECHNICAL DATA

DATASHEET 6005, REV A

PART ORDERING INFORMATION:

JAN_xCD1N_{XXXX}B

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Quality Level Part Number

Suffix	Part Number	Description
H	JANHCD1N962B	Class H Level
K	JANKCD1N962B	Class K Level

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