

TECHNICAL DATA
DATA SHEET 5070, REV. B.1

Zener 5W Voltage Regulator

- Hermetic, non-cavity glass package
- Metallurgically bonded
- Operating and Storage Temperature: -65°C to +175°C
- All parts are 100% hot solder dipped
- JAN/ JANTX/ JANTXV available per MIL-PRF-19500/356
- JANS Plus removes atypical/out of family V_z

AVAILABLE AS
1N
JAN, JANTX, JANTXV
JANS
JAN EQUIVALENT*
SJ49XX*, SX49XX*, SV49XX*
SS49XX*

5W Zener Diodes

Qualified per MIL-PRF-19500/356

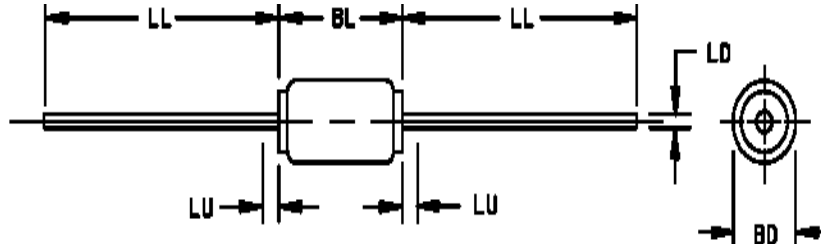
SERIES TYPE	V_z NOM	TEST CURRENT I_z	MAX ZENER IMPEDANCE		VOLTAGE REGULATION V_z	SURGE CURRENT I_{zSM}	MAX REVERSE LEAKAGE CURRENT@ V		TEMP. COEFF α_{V_z}	MAX CONTINUOUS CURRENT I_{zM}
			Z_z	Z_{zK}			V_R	I_{R1}		
5W	V	mA	Ω	Ω	V	A	V	μA	% /°C	mA
1N4958/US	10	125	2	125	.8	20	7.6	25	.07	475
1N4959/US	11	125	2.5	130	.8	19	8.4	10	.07	430
1N4960/US	12	100	2.5	140	.8	18	9.1	10	.07	395
1N4961/US	13	100	3	145	.9	16	9.9	10	.08	365
1N4962/US	15	75	3.5	150	1.0	12	11.4	5	.08	315
1N4963/US	16	75	3.5	155	1.1	10	12.2	5	.08	294
1N4964/US	18	65	4	160	1.2	9.0	13.7	5	.085	264
1N4965/US	20	65	4.5	165	1.5	8.0	15.2	2	.085	237
1N4966/US	22	50	5	170	1.8	7.0	16.7	2	.085	216
1N4967/US	24	50	5	175	2.0	6.5	18.2	2	.09	198
1N4968/US	27	50	6	180	2.0	6.0	20.6	2	.09	176
1N4969/US	30	40	8	190	2.5	5.5	22.8	2	.09	158
1N4970/US	33	40	10	200	2.8	5.0	25.1	2	.095	144
1N4971/US	36	30	11	220	3.0	4.5	27.4	2	.095	132
1N4972/US	39	30	14	230	3.0	4.0	29.7	2	.095	122
1N4973/US	43	30	20	240	3.3	3.5	32.7	2	.095	110
1N4974/US	47	25	25	250	3.5	3.2	35.8	2	.095	100
1N4975/US	51	25	27	270	4.0	3.0	38.8	2	.095	92
1N4976/US	56	20	35	320	4.4	2.8	42.6	2	.095	84
1N4977/US	62	20	42	400	5.0	2.5	47.1	2	.100	76
1N4978/US	68	20	50	500	5.5	2.2	51.7	2	.100	70
1N4979/US	75	20	55	620	6.0	2.0	56	2	.100	63
1N4980/US	82	15	80	720	6.6	1.8	62.2	2	.100	58.0
1N4981/US	91	15	90	760	7.5	1.6	69.2	2	.100	52.5
1N4982/US	100	12	110	800	8.0	1.4	76.0	2	.100	47.5
1N4983/US	110	12	125	1,000	9.0	1.2	83.6	2	.100	43.0
1N4984/US	120	10	170	1,150	10	1.0	91.2	2	.100	39.5
1N4985/US	130	10	190	1,250	11	.8	98.8	2	.105	36.6
1N4986/US	150	8	330	1,500	13	.75	114.0	2	.105	31.6
1N4987/US	160	8	350	1,650	14	.70	121.6	2	.105	29.4
1N4988/US	180	5	450	1,750	16	.60	136.8	2	.110	26.4
1N4989/US	200	5	500	1,850	18	.50	152.0	2	.110	23.6

*Sensitron equivalent diodes are manufactured and screened to MIL-PRF-19500 flow and guidelines starting from wafer fabrication through assembly and testing using our specification 7700-4093.

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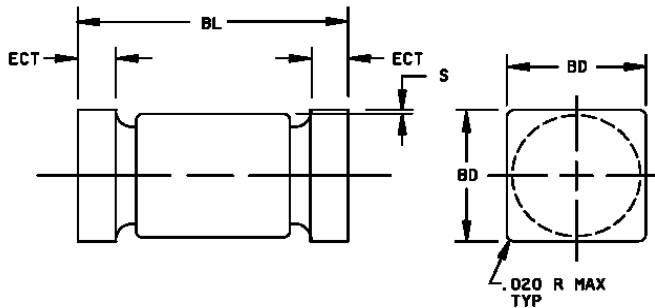
PACKAGE DIMENSIONS:

MECHANICAL DIMENSIONS
Zener 5W Package, AXIAL Version
In Inches / mm



Dimensions					
Ltr	Inches		Millimeters		Notes
	Min	Max			
BL	.130	.300	3.30	4.95	
BD	.090	.145	2.92	4.70	
LL	1.00	1.300	25.40	33.02	
LU		.050		1.27	4
LD	.037	.043	0.94	1.89	3

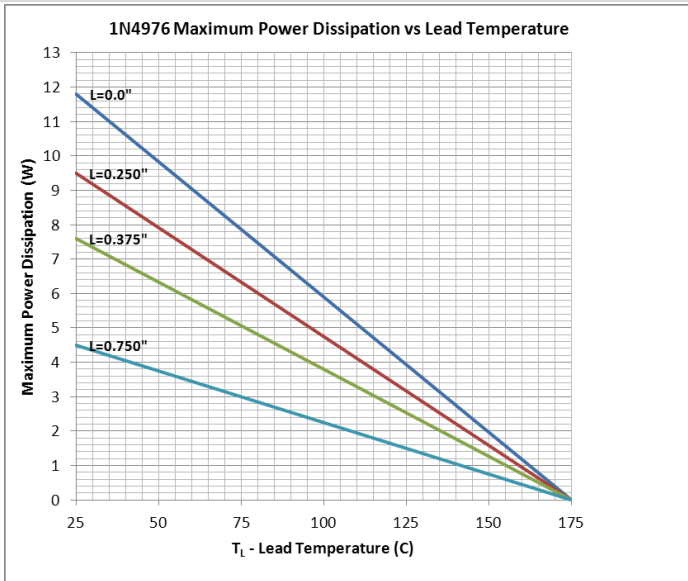
MECHANICAL DIMENSIONS
Zener 5W Package, MELF (/US version)
In Inches / mm



Dimensions					
Ltr	Inches		Millimeters		
	Min	Max	Min	Max	
BL	.200	.225	5.08	5.72	
ECT	.019	.028	0.48	0.71	
S	.003	---	0.08	---	
BD	.137	.148	3.48	3.76	

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GRAPHS:



PART ORDERING INFORMATION

The following part numbers can be purchased in either axial or surface mount devices and screened and tested to the military screening flow. The parts are marked in accordance with the testing performed, example:

Sensitron Screening Level	*Part Number-- Leaded Package (example for 1N4958)
1N	1N4958
JAN	JAN1N4958
JANTX	JANTX1N4958
JANTXV	JANTXV1N4958
JANS	JANS1N4958
SJ	SJ4958
SX	SX4958
SV	SV4958
SS	SS4958

*Parts can also be ordered Tape & Reel

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