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With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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FEATURES

- ZENER VOLTAGE 12.8V
- TEMPERATURE COEFFICIENT RANGE: 0.01%/°C to 0.001%/°C
- N_D YIELDS MAXIMUM-RMS NOISE FOR ANY BANDWIDTH

MAXIMUM RATINGS

Junction and Storage Temperatures: -65°C to +175°C
DC Power Dissipation: 400 mW
Power Derating: 3.20 mW/°C above 50°C

*** ELECTRICAL CHARACTERISTICS**

@ 25°C, unless otherwise specified

JEDEC TYPE NUMBER	TEST CURRENT I _{ZT}	MAX. VOLTAGE CHANGE WITH TEMPERATURE ΔV _{ZT}	TEMPERATURE RANGE °C	EFFECTIVE TEMPERATURE COEFFICIENT α _{VZ}	MAXIMUM DYNAMIC IMPEDANCE Z _{DT}	MAXIMUM NOISE DENSITY N _D
	(Note 1 & 5)	(Note 2 & 5)		(Note 3)	(Note 4)	
	mA	VOLTS		± %/°C	OHMS	μV/V cps
1N4896	0.5	0.096	+25 to +100	0.01	400	0.8
1N4896A	0.5	0.198	-55 to +100	0.01	400	0.8
1N4897	0.5	0.048	+25 to +100	0.005	400	0.8
1N4897A	0.5	0.099	-55 to +100	0.005	400	0.8
1N4898	0.5	0.019	+25 to +100	0.002	400	0.8
1N4898A	0.5	0.040	-55 to +100	0.002	400	0.8
1N4899	0.5	0.010	+25 to +100	0.001	400	0.8
1N4899A	0.5	0.020	-55 to +100	0.001	400	0.8
1N4900	1.0	0.096	+25 to +100	0.01	200	0.4
1N4900A	1.0	0.198	-55 to +100	0.01	200	0.4
1N4901	1.0	0.048	+25 to +100	0.005	200	0.4
1N4901A	1.0	0.099	-55 to +100	0.005	200	0.4
1N4902	1.0	0.019	+25 to +100	0.002	200	0.4
1N4902A	1.0	0.040	-55 to +100	0.002	200	0.4
1N4903	1.0	0.010	+25 to +100	0.001	200	0.4
1N4903A	1.0	0.020	-55 to +100	0.001	200	0.4
1N4904	2.0	0.096	+25 to +100	0.01	100	0.25
1N4904A	2.0	0.198	-55 to +100	0.01	100	0.25
1N4905	2.0	0.048	+25 to +100	0.005	100	0.25
1N4905A	2.0	0.099	-55 to +100	0.005	100	0.25
1N4906	2.0	0.019	+25 to +100	0.002	100	0.25
1N4906A	2.0	0.040	-55 to +100	0.002	100	0.25
1N4907	2.0	0.010	+25 to +100	0.001	100	0.25
1N4907A	2.0	0.020	-55 to +100	0.001	100	0.25
1N4908	4.0	0.096	+25 to +100	0.01	50	0.22
1N4908A	4.0	0.198	-55 to +100	0.01	50	0.22
1N4909	4.0	0.048	+25 to +100	0.005	50	0.22
1N4909A	4.0	0.099	-55 to +100	0.005	50	0.22
1N4910	4.0	0.019	+25 to +100	0.002	50	0.22
1N4910A	4.0	0.040	-55 to +100	0.002	50	0.22
1N4911	4.0	0.010	+25 to +100	0.001	50	0.22
1N4911A	4.0	0.020	-55 to +100	0.001	50	0.22
1N4912	7.5	0.096	+25 to +100	0.01	25	0.20
1N4912A	7.5	0.198	-55 to +100	0.01	25	0.20
1N4913	7.5	0.048	+25 to +100	0.005	25	0.20
1N4913A	7.5	0.099	-55 to +100	0.005	25	0.20
1N4914	7.5	0.019	+25 to +100	0.002	25	0.20
1N4914A	7.5	0.040	-55 to +100	0.002	25	0.20
1N4915	7.5	0.010	+25 to +100	0.001	25	0.20
1N4915A	7.5	0.020	-55 to +100	0.001	25	0.20

**12.8 VOLT LOW NOISE
TEMPERATURE
COMPENSATED
ZENER REFERENCE
DIODES**

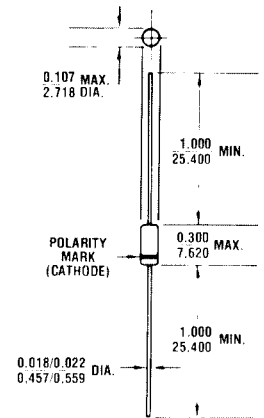


FIGURE 1

All dimensions in INCH
m.m.

MECHANICAL CHARACTERISTICS

CASE: Hermetically sealed glass case. DO-7.

FINISH: All external surfaces are corrosion resistant and leads solderable.

THERMAL RESISTANCE: 300°C/W (Typical) junction to lead at 0.375-inches from body.

POLARITY: Diode to be operated with the banded end positive with respect to the opposite end.

WEIGHT: 0.2 grams.

MOUNTING POSITION: Any.

1N4896 thru 1N4915A

NOTE 1 Nominal voltage for all types is 12.8 Volts $\pm 5\%$.

NOTE 2 Referred to as the 'box' measurement method, the ΔV_{ZT} is the maximum voltage variance that will occur as the voltage is scanned thru all temperatures between the temperature range limits.

NOTE 3 The effective temperature coefficients are tabulated in $\%/^{\circ}\text{C}$ primarily for information only since temperature compensated diodes inherently have a non-linear voltage-temperature characteristic.

NOTE 4 The dynamic Zener impedance Z_{ZT} is derived from the resulting a.c. voltage developed when a 60 cps, rms a.c. current equal to 10% of the D.C. Zener current I_{ZT} is superimposed on I_{ZT}

NOTE 5 Voltage measurements to be performed 15 seconds after application of DC current.

NOTE 6 To specify radiation hardened devices, use "RH" prefix instead of "IN", i.e. RH4896A instead of IN4896A.

NOTE 7 Consult factory for TX, TXV or JANS equivalent SCDs.

Noise Density (N_D) is specified in Microvolts-rms per square root cycle. Actual measurement is performed using a 1 to 3 KHz frequency bandpass at the Zener test current (I_{ZT}) @ 25°C ambient temperature.

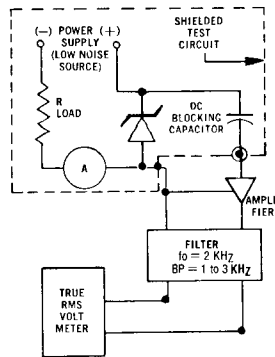


FIGURE 2 NOISE DENSITY MEASUREMENT CIRCUIT

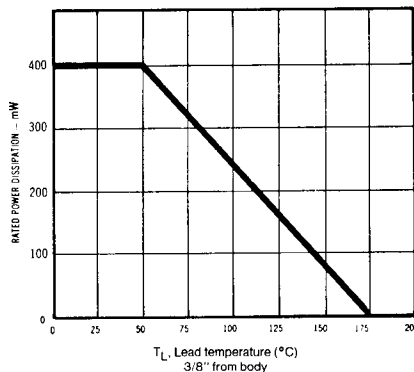


FIGURE 3 POWER DERATING CURVE