

# TYPES 1N708 THRU 1N726, 1N708A THRU 1N726A SILICON VOLTAGE-REGULATOR DIODES

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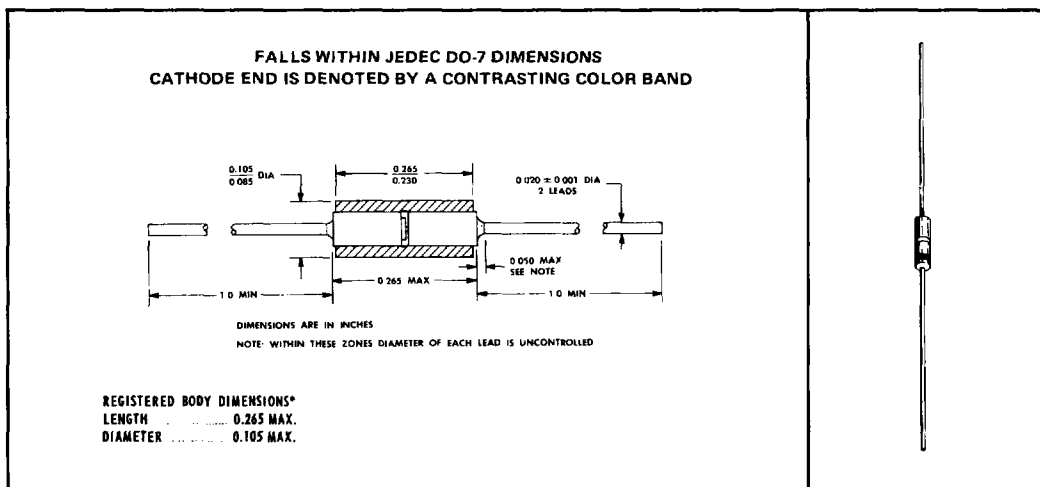
V<sub>Z</sub> . . . 5.6 V to 33 V

P<sub>D</sub> . . . 400 mW

- Available in 5% and 10% Tolerances
- Rugged Double-Plug Construction

## mechanical data

Double-plug construction affords integral positive contacts by means of a thermal compression bond. Moisture-free stability is ensured through hermetic sealing. The coefficients of thermal expansion of the glass case and the dumet plugs are closely matched to allow extreme temperature excursions. Hot-solder-dipped leads are standard.



## absolute maximum ratings

Continuous Power Dissipation at (or below) 50°C Free-Air Temperature (See Note 1)	400 mW† 250 mW*
Operating Free-Air Temperature Range	-65°C to 175°C*
Storage Temperature Range	-65°C to 175°C*
Lead Temperature 1/16 Inch from Case for 10 Seconds	230°C

NOTE 1: For operation above 50°C free-air temperature refer to Dissipation Derating Curve, Figure 1.  
† This value is guaranteed by Texas Instruments in addition to the JEDEC registered value which is also shown.  
\* JEDEC registered data. This data sheet contains all applicable registered data in effect at the time of publication.

# TYPES 1N708 THRU 1N726, 1N708A THRU 1N726A SILICON VOLTAGE-REGULATOR DIODES

\*electrical characteristics at 25°C free-air temperature

CHARACTERISTICS							
PARAMETER	V <sub>Z</sub> Regulator Voltage					Z <sub>s</sub> Small-Signal Regulator Impedance	TEST CURRENT
TEST CONDITIONS	I <sub>R</sub> = I <sub>Z</sub> (T)					I <sub>R</sub> = I <sub>Z</sub> (T), I <sub>r</sub> = 10% I <sub>Z</sub> (T), f = 60 Hz	I <sub>Z</sub> (T)
LIMIT	NOMINAL ‡	1N708-1N726		1N708A-1N726A		MAX	
UNIT	V	V	V	V	V	Ω	mA
1N708, A	5.6	5.04	6.16	5.32	5.88	3.6	25
1N709, A	6.2	5.58	6.82	5.89	6.51	4.1	25
1N710, A	6.8	6.12	7.48	6.46	7.14	4.7	25
1N711, A	7.5	6.75	8.25	7.13	7.87	5.3	25
1N712, A	8.2	7.38	9.02	7.79	8.61	6	25
1N713, A	9.1	8.19	10.01	8.65	9.55	7	12
1N714, A	10	9.00	11.00	9.50	10.50	8	12
1N715, A	11	9.90	12.10	10.45	11.55	9	12
1N716, A	12	10.80	13.20	11.40	12.60	10	12
1N717, A	13	11.70	14.30	12.35	13.65	11	12
1N718, A	15	13.50	16.50	14.25	15.75	13	12
1N719, A	16	14.40	17.60	15.20	16.80	15	12
1N720, A	18	16.20	19.80	17.10	18.90	17	12
1N721, A	20	18.00	22.00	19.00	21.00	20	4
1N722, A	22	19.80	24.20	20.90	23.10	24	4
1N723, A	24	21.60	26.40	22.80	25.20	28	4
1N724, A	27	24.30	29.70	25.65	28.35	35	4
1N725, A	30	27.00	33.00	28.50	31.50	42	4
1N726, A	33	29.70	36.30	31.35	34.65	50	4

\*JEDEC registered data

‡Tolerance is ±10% for the 1N708 through 1N726 series, ±5% for the 1N708A through 1N726A series.

## THERMAL INFORMATION

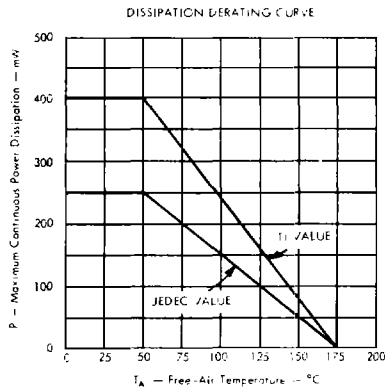


FIGURE 1

10