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TYPES 1N3506 THRU 1N3530
SILICON VOLTAGE-REGULATOR DIODES

BULLETIN NO. DL-S 7311048, MARCH 1973

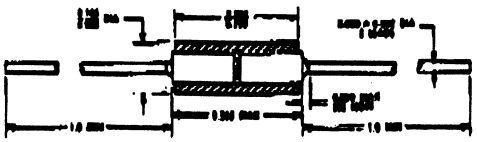
V_Z . . . 3.3 V to 33 V, P_D . . . 400 mW

- **5% Tolerance**
- **Rugged Double-Plug Construction**

mechanical data

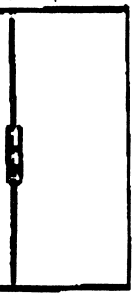
These voltage regulator diodes have been designed using the best of both silicon material processing and packaging technologies. The silicon die is a planar oxide-passivated structure which has additional true-glass passivation over the junction. The double-plug package, proven by years of volume production, ensures the best in mechanical integrity and the lowest possible junction temperature when compared to the thermal characteristics of whisker packages. Because of this rugged double-plug (heat-sink) package, these devices offer very conservatively rated power dissipation capabilities.

FALLS WITHIN JEDEC DO-7* DIMENSIONS
CATHODE END IS DENOTED BY A CONTRASTING COLOR BAND



DIMENSIONS ARE IN INCHES

NOTE: WITHIN THESE ZONES DIAMETER OF EACH LEAD IS UNCONTROLLED



***absolute maximum ratings**

TYPE	I_{ZM} Steady-State Regulator Current ($T_A \leq 50°C$, See Note 1)	I_{RSM} Nonrepetitive Reverse Surge Current ($T_A \leq 25°C$, See Note 2)	P_D Continuous Power Dissipation ($T_A \leq 50°C$, See Note 3)	T_{stg} Storage Temperature Range
	mA	mA	mW	°C
1N3506	120	1000	400	−65 to 200
1N3507	110	1000		
1N3508	100	1000		
1N3509	90	990		
1N3510	85	980		
1N3511	75	960		
1N3512	70	950		
1N3513	65	910		
1N3514	60	870		
1N3515	50	810		
1N3516	45	740		
1N3517	40	650		
1N3518	38	540		
1N3519	35	450		
1N3520	32	400		
1N3521	30	350		
1N3522	26	250		
1N3523	24	200		
1N3524	21	175		
1N3525	19	150		
1N3526	17	130		
1N3527	15	115		
1N3528	14	110		
1N3529	13	100		
1N3530	12	95		

NOTES: 1. The I_{ZM} currents shown are nominal and do not represent absolute limits. The actual steady-state current-voltage product must not exceed the power rating in Figure 1.
2. These values apply for 10 square-wave surges of 8.3 ms duration at one-minute intervals.
3. Derate linearly to 200°C free air temperature at the rate of 2.67 mW/°C. See Dissipation Derating Curve, Figure 1.

*JEDEC registered data. This data sheet contains all applicable registered data in effect at the time of publication.

Quality Semi-Conductors