

50 WATT ZENER DIODES (TO-3 AND DO-5 CASE)

FEATURES:

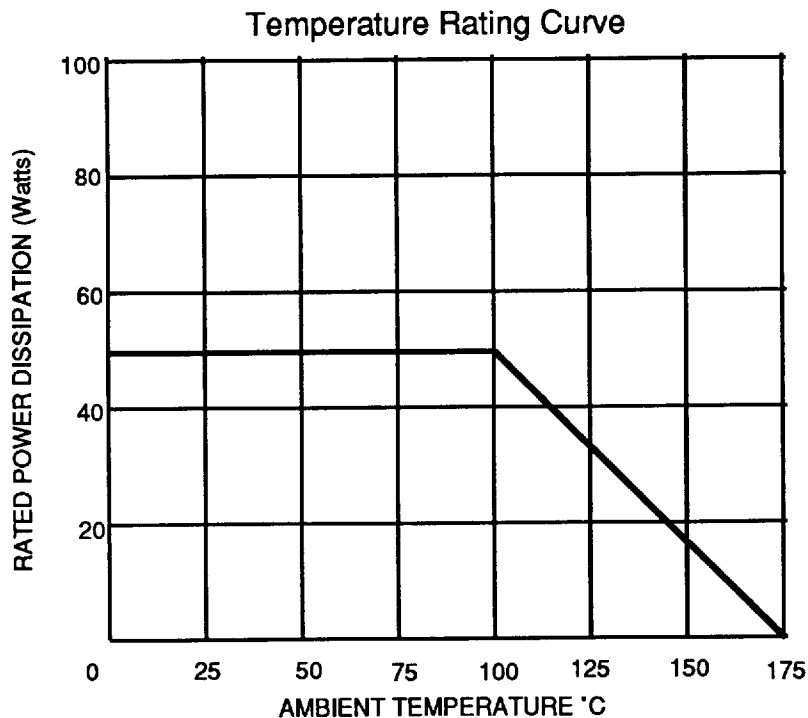
- Hermetic Seal
- High Temperature Operation
- Metallurgically Bonded
- Complete Characteristic Listing
- Low Thermal Impedance

DESCRIPTION

This series of high grade voltage regulator diodes is designed to meet the electrical and environmental requirements of the commercial, military, and industrial, computer and home instrument electronics markets.

ABSOLUTE MAXIMUM RATINGS:

- 50W @ 100°C Cast Temp.
- Derate .67w/°C from 100°C
- Storage and Operating -65°C to 175°C
- Thermal Imp 1.5°C/w



ZENER DIODES 50 WATT RATING

TYPE NUMBER		NOMINAL ZENER VOLTAGE V _Z VOLTS	MAX. ZENER IMPEDANCE				MAX. REVERSE LEAKAGE			MAX. ZENER CURRENT I _{ZM} mA	TYP. TEMP. COEFF. @ I _{ZT} %/°C
TO-3 CASE	DO-5 CASE		Z _{ZT} @	I _{ZT}	Z _{ZK} @	I _{ZK}	I _R @	V _{R1} *	V _{R2} **		
1N2804	1N3305	6.8	0.2	1850	70	5	150	4.5	4.3	6600	.040
1N2805	1N3306	7.5	0.3	1700	70	5	75	5.0	4.7	5900	.045
1N2806	1N3307	8.2	0.4	1500	70	5	50	5.4	5.2	5200	.048
1N2807	1N3308	9.1	0.5	1370	70	5	25	6.1	5.7	4800	.051
1N2808	1N3309	10	0.6	1200	80	5	10	6.7	6.3	4300	.055
1N2809	1N3310	11	0.8	1100	80	5	5	8.4	8.0	3900	.060
1N2810	1N3311	12	1.0	1000	80	5	5	9.1	8.6	3600	.065
1N2811	1N3312	13	1.1	960	80	5	5	9.9	9.4	3300	.065
1N2812	1N3313	14	1.2	890	80	5	5	10.6	10.1	3000	.070
1N2813	1N3314	15	1.4	830	80	5	5	11.4	10.8	2800	.070
1N2814	1N3315	16	1.6	780	80	5	5	12.2	11.5	2650	.070
1N2815	1N3316	17	1.8	740	80	5	5	13.0	12.2	2500	.075
1N2816	1N3317	18	2.0	700	80	5	5	13.7	13.0	2300	.075
1N2817	1N3318	19	2.2	660	80	5	5	14.4	13.7	2200	.075
1N2818	1N3319	20	2.4	630	80	5	5	15.2	14.4	2100	.075
1N2819	1N3320	22	2.5	570	80	5	5	16.7	15.8	1900	.080
1N2820	1N3321	24	2.6	520	80	5	5	18.2	17.3	1750	.080
1N2821	1N3322	25	2.7	500	90	5	5	19.0	18.0	1550	.080
1N2822	1N3323	27	2.8	460	90	5	5	20.6	19.4	1500	.085
1N2823	1N3324	30	3.0	420	90	5	5	22.8	21.6	1400	.085
1N2824	1N3325	33	3.2	380	90	5	5	25.1	23.8	1300	.085
1N2825	1N3326	36	3.5	350	90	5	5	27.4	25.9	1150	.085
1N2826	1N3327	39	4.0	320	90	5	5	29.7	28.1	1050	.090
1N2827	1N3328	43	4.5	290	90	5	5	32.7	31.0	975	.090
1N2828	1N3329	45	4.5	280	100	5	5	34.2	32.4	930	.090
1N2829	1N3330	47	5.0	270	100	5	5	35.8	33.8	880	.090
1N2830	1N3331	50	5.0	250	100	5	5	38.0	36.0	830	.090
1N2831	1N3332	51	5.2	245	100	5	5	38.8	36.7	810	.090
1N2832	1N3333	52	5.5	240	100	5	5	39.5	37.4	790	.090
1N2832	1N3334	56	6	220	110	5	5	42.6	40.3	740	.090
1N2833	1N3335	62	7	200	120	5	5	47.1	44.8	660	.090
1N2834	1N3336	68	8	180	140	5	5	51.7	49.0	600	.090
1N2835	1N3337	75	9	170	150	5	5	56.0	54.0	540	.090
1N2836	1N3338	82	11	150	160	5	5	62.2	59.0	490	.090
1N2837	1N3339	91	15	140	180	5	5	69.2	65.5	420	.090
1N2838	1N3340	100	20	120	200	5	5	76.0	72.0	400	.090
1N2839	1N3341	105	25	120	210	5	5	79.8	75.6	380	.095
1N2840	1N3342	110	30	110	220	5	5	83.6	79.2	365	.095
1N2841	1N3343	120	40	100	240	5	5	91.2	86.4	335	.095
1N2842	1N3344	130	50	95	275	5	5	98.8	93.6	310	.095
1N2843	1N3345	140	60	90	325	5	5	106.4	100.8	290	.095
1N2844	1N3346	150	75	85	400	5	5	114.0	108.0	270	.095
1N2844	1N3347	160	80	80	450	5	5	121.6	115.2	250	.095
1N2845	1N3348	175	85	70	500	5	5	133.0	126.0	230	.095
1N2845	1N3349	180	90	68	525	5	5	136.8	129.6	220	.095
1N2846	1N3350	200	100	65	600	5	5	152.0	144.0	200	.100
1N4557	1N4549	3.9	0.16	3200	400	5	150	0.5	0.5	11900	-.025
1N4558	1N4550	4.3	0.16	2900	500	5	150	0.5	0.5	10650	-.025
1N4559	1N4551	4.7	0.12	2650	600	5	100	1.0	1.0	9700	.010
1N4560	1N4552	5.1	0.12	2450	650	5	20	1.0	1.0	8900	.015
1N4561	1N4553	5.6	0.12	2250	900	5	20	1.0	1.0	8100	.030
1N4562	1N4554	6.2	0.14	2000	1000	5	20	2.0	2.0	7300	.045
1N4563	1N4555	6.8	0.16	1850	200	5	10	2.0	2.0	6650	.045
1N4564	1N4556	7.5	0.24	1650	100	5	10	3.0	3.0	6050	.053

NON SUFFIX LETTER TYPES V_Z = ± 20%, ADD SUFFIX LTR "A" FOR ± 10%, SUFFIX LTR "B" FOR ± 5%

STANDARD POLARITY IS ANODE TO CASE. ADD SUFFIX LTR "R" FOR REVERSE POLARITY

* V_{R1} TEST VOLTAGE FOR "B" ± 5% TOLERANCE DEVICE

** V_{R2} TEST VOLTAGE FOR "A" ± 10% TOLERANCE DEVICE

NO I_R SPECIFIED FOR ± 20% TOLERANCE DEVICE