

# 1 WATT, Metal (Case DO-13)

JEDEC TYPE NUMBER †	NOMINAL ZENER VOLTAGE $V_Z$ VOLTS	TEST CURRENT $I_{ZT}$ mA	MAXIMUM ZENER IMPEDANCE			MAXIMUM REVERSE LEAKAGE CURRENT				MAXIMUM DC ZENER CURRENT $I_{ZM}$ mA	TYPICAL TEMPERATURE COEFFICIENT @ $I_{ZT}$ %/°C
			$Z_{ZT}$ @ $I_{ZT}$ Ohms	$Z_{ZK}$ Ohms	@ $I_{ZK}$ mA	$I_R$ @ 25°C $\mu A$	$V_{R1}^*$ VOLTS	$I_R$ @ 25°C $\mu A$	@ $V_{R2}^{**}$ VOLTS		
1N3016	6.8	37	3.5	700	1.0	150	5.2	150	4.9	130	.040
1N3017	7.5	34	4.0	700	0.5	75	5.7	75	5.4	120	.045
1N3018	8.2	31	4.5	700	0.5	50	6.2	50	5.9	105	.048
1N3019	9.1	28	5.0	700	0.5	25	6.9	25	6.6	95	.051
1N3020	10	25	7	700	0.25	10	7.6	10	7.2	85	.055
1N3021	11	23	8	700	0.25	5	8.4	5	8.0	75	.060
1N3022	12	21	9	700	0.25	5	9.1	5	8.6	70	.065
1N3023	13	19	10	700	0.25	5	9.9	5	9.4	65	.065
1N3024	15	17	14	700	0.25	5	11.4	5	10.8	56	.070
1N3025	16	15.5	16	700	0.25	5	12.2	5	11.5	53	.070
1N3026	18	14	20	750	0.25	5	13.7	5	13.0	46	.075
1N3027	20	12.5	22	750	0.25	5	15.2	5	14.4	42	.075
1N3028	22	11.5	23	750	0.25	5	16.7	5	15.8	38	.080
1N3029	24	10.5	25	750	0.25	5	18.2	5	17.3	35	.080
1N3030	27	9.5	35	750	0.25	5	20.6	5	19.4	30	.085
1N3031	30	8.5	40	1000	0.25	5	22.8	5	21.6	28	.085
1N3032	33	7.5	45	1000	0.25	5	25.1	5	23.8	26	.085
1N3033	36	7.0	50	1000	0.25	5	27.4	5	25.9	24	.085
1N3034	39	6.5	60	1000	0.25	5	29.7	5	28.1	20	.090
1N3035	43	6.0	70	1500	0.25	5	32.7	5	31.0	19	.090
1N3036	47	5.5	80	1500	0.25	5	35.8	5	33.8	17	.090
1N3037	51	5.0	95	1500	0.25	5	38.8	5	36.7	16	.090
1N3038	56	4.5	110	2000	0.25	5	42.6	5	40.3	15	.090
1N3039	62	4.0	125	2000	0.25	5	47.1	5	44.6	13	.090
1N3040	68	3.7	150	2000	0.25	5	51.7	5	49.0	12	.090
1N3041	75	3.3	175	2000	0.25	5	56.0	5	54.0	11	.090
1N3042	82	3.0	200	3000	0.25	5	62.2	5	59.0	10	.090
1N3043	91	2.8	250	3000	0.25	5	69.2	5	65.5	9	.090
1N3044	100	2.5	350	3000	0.25	5	76.0	5	72.0	8	.090
1N3045	110	2.3	450	4000	0.25	5	83.6	5	79.2	7.2	.095
1N3046	120	2.0	550	4500	0.25	5	91.2	5	86.4	7.0	.095
1N3047	130	1.9	700	5000	0.25	5	98.8	5	93.6	6.0	.095
1N3048	150	1.7	1000	6000	0.25	5	114.0	5	108.0	5.5	.095
1N3049	160	1.6	1100	6500	0.25	5	121.6	5	115.2	5.2	.095
1N3050	180	1.4	1200	7000	0.25	5	136.8	5	129.6	4.6	.095
1N3051	200	1.2	1500	8000	0.25	5	152.0	5	144.0	4.0	.100

Derating Factor above 25°C: 6.67 mW/°C

† Non Suffix  $V_Z = \pm 20\%$

A Suffix  $V_Z = \pm 10\%$

B Suffix  $V_Z = \pm 5\%$

Standard Polarity – Cathode to Case

\* $V_{R1}$  – Test Voltage for 5% Tolerance Device

\*\* $V_{R2}$  – Test Voltage for 10% Tolerance Device

No Leakage Specified for 20% Tolerance Device

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			$Z_{ZT}$ @ $I_{ZT}$ Ohms	$Z_{ZK}$ Ohms	@ $I_{ZK}$ mA	$I_R$ @ 25°C $\mu A$	$V_{R1}^*$ VOLTS	
1N3821	3.3	76	10	400	1.0	100	1	276
1N3822	3.6	69	10	400	1.0	100	1	252
1N3823	3.9	64	9	400	1.0	50	1	238
1N3824	4.3	58	9	400	1.0	10	1	213
1N3825	4.7	53	8	500	1.0	10	1	194
1N3826	5.1	49	7	550	1.0	10	1	178
1N3827	5.6	45	5	600	1.0	10	2	162
1N3828	6.2	41	2	700	1.0	10	3	146
1N3829	6.8	37	1.5	500	1.0	10	3	133
1N3830	7.5	34	1.5	250	1.0	10	3	121

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