

## 1N6309 – 1N6355

### ZENER 500mW VOLTAGE REGULATOR

PACKAGE STYLE: Zener 500mW (Suffix "US" denotes melf/surface mount packaging)

- All ratings are @ Tc = 25 °C unless otherwise specified.
- Operating -55 °C to +175 °C and storage -65 °C to +175 °C

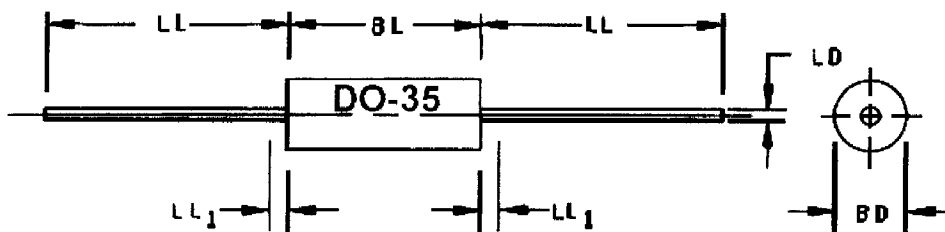
Type	VZ2 nom at IZ2	VZ1 IZ1 250 µA	IZ2 test current	ZZT at IZ2	ZZK at 250 µA	IZM	VZ(reg)	VR	IR1 at +25°C	IR2 at TA = +150°C	αvz
	V	minV	mA	Ω	Ω	mA	V	V	µA	µA	%/°C
1N6309	2.4	1.1	20	30	1200	177	1.50	1.0	100	200	-.085
1N6310	2.7	1.2	20	3029	1300	157	1.50	1.0	60	150	-.080
1N6311	3.0	1.3	20	27	1400	141	1.50	1.0	30	100	-.075
1N6312	3.3	1.5	20	25	1400	128	1.60	1.0	5	20	-.070
1N6313	3.6	1.5	20	23	1400	117	1.60	1.0	3	12	-.065
1N6314	3.9	1.8	20	20	1700	108	1.60	1.0	2	12	-.060
1N6315	4.3	2.0	20	17	1700	99	0.90	1.0	2	12	-.045 /+ .032
1N6316	4.7	2.4	20	14	1500	90	0.50	1.5	5	12	-.028 /+ .032
1N6317	5.1	2.8	20	8	1300	83	0.40	2.0	5	12	- .020/+ .035
1N6318	5.6	3.3	20	3	1200	76	0.40	2.5	5	10	+0.050
1N6319	6.2	4.3	20	3	800	68	0.30	3.5	5	10	+0.060
1N6320	6.8	6.0	20	3	400	63	0.35	4.0	2	50	+0.062
1N6321	7.5	6.6	20	4	400	57	0.40	5.0	2	30	+0.068
1N6322	8.2	7.5	20	5	400	52	0.40	6.0	1	10	+0.075
1N6323	9.1	8.4	20	6	500	47	0.50	7.0	1.00	10	+0.076
1N6324	10.0	9.1	20	6	500	43	0.50	8.0	1.00	10	+0.079
1N6325	11.0	10.0	20	7	550	39	0.50	8.5	1.00	10	+0.082
1N6326	12.0	11.0	20	7	550	35	0.55	9.0	1.00	10	+0.083
1N6327	13.0	11.9	9.5	8	550	33	0.55	9.9	0.05	10	+0.083
1N6328	15.0	13.8	8.5	10	600	28	0.70	11.0	0.05	10	+0.084
1N6329	16.0	14.7	7.8	12	600	27	0.75	12.0	0.05	10	+0.084
1N6330	18.0	16.6	7.0	14	600	24	0.85	14.0	0.05	10	+0.085
1N6331	20.0	18.5	6.2	18	500	21	0.95	15.0	0.05	10	+0.086
1N6332	22.0	20.4	5.6	20	500	19	1.05	17.0	0.05	10	+0.087
1N6333	24.0	22.3	5.2	24	500	18	1.15	18.0	0.05	10	+0.088
1N6334	27.0	25.2	4.6	27	500	16	1.30	21.0	0.05	10	+0.090
1N6335	30.0	28.0	4.2	32	500	14	1.45	23.0	0.05	10	+0.091
1N6336	33.0	30.9	3.8	40	600	13	1.60	25.0	0.05	10	+0.092
1N6337	36.0	33.7	3.4	50	600	12.0	1.75	27.0	0.05	10	+0.093
1N6338	39.0	36.6	3.2	55	700	11.0	1.90	30	0.05	10	+0.094
1N6339	43.0	40.4	3.0	65	800	9.9	2.10	33	0.05	10	+0.095
1N6340	47.0	44.2	2.7	75	900	9.0	2.25	36	0.05	10	+0.095



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Type	VZ2 nom at IZ2	VZ1 IZ1 250 $\mu$ A	IZ2 test curren t	ZZT at IZ2	ZZK at 250 $\mu$ A	IZM	VZ(reg)	VR	IR1 at +25°C	IR2 at TA= +150°C	$\alpha$ vz
	V	minV	mA	$\Omega$	$\Omega$	mA	V	V	$\mu$ A	$\mu$ A	%/°C
1N6341	51.0	48.0	2.5	85	1,000	8.3	2.50	39	0.05	10	+0.96
1N6342	56.0	52.7	2.2	100	1,200	7.6	2.70	43	0.05	10	+0.97
1N6343	62.0	58.4	2.0	125	1,300	6.8	2.90	47	0.05	10	+0.99
1N6344	68.0	64.1	1.8	155	1,500	6.3	3.20	52	0.05	10	+1.01
1N6345	75.0	70.8	1.7	180	1,600	5.7	3.40	56	0.05	10	+1.03
1N6346	82.0	77.4	1.5	220	1,800	5.2	3.80	62	0.05	10	+1.05
1N6347	91.0	86.0	1.4	270	2,100	4.7	4.20	69	0.05	10	+1.08
1N6348	100.0	94.5	1.3	340	2,400	4.3	4.40	76	0.05	10	+1.10
1N6349	110.0	104.0	1.1	500	2,800	3.9	4.80	84	0.05	10	+1.10
1N6350	120.0	113.0	1.0	600	3,200	3.5	5.20	91	0.05	10	+1.10
1N6351	130.0	122	0.95	850	4,100	3.3	5.60	99	0.05	10	+1.10
1N6352	150.0	141	0.85	1,000	4,500	2.8	7.00	114	0.05	10	+1.10
1N6353	160.0	151	0.80	1,200	5,000	2.7	7.50	122	0.05	10	+1.10
1N6354	180.0	170	0.68	1,500	5,600	2.4	9.00	137	0.05	10	+1.10
1N6355	200.0	189	0.65	1,800	6,500	2.1	12.00	152	0.05	10	+1.10

**MECHANICAL DIMENSIONS: Zener 500mW Package: In Inches / mm**



Ltr	Dimensions				Notes
	Inches		Millimeters		
	Min	Max	Min	Max	
BD	.060	.090	1.52	2.29	
BL	.120	.200	3.05	5.08	5
LD	.018	.022	0.46	0.56	
LL	1.000	1.500	25.40	38.10	
LL1		.050		1.27	3