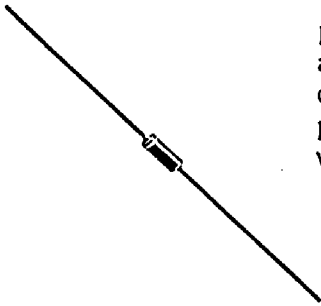


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1N5333 (SILICON)
thru
1N5388



5.0 Watt surmetic 40 silicon zener diodes (silicon oxide passivated) with tight limits and better operating characteristics that reflect the superior capabilities of silicon-oxide-passivated junctions. An axial-lead, transfer-molded plastic package that offers protection in all common environmental conditions.

MAXIMUM RATINGS

Junction and Storage Temperature: -65 to +200°C
Lead Temperature not less than 1/16" from the case for 10 seconds: 230°C
DC Power Dissipation: 5.0 W @ $T_L = 75^\circ\text{C}$, Lead Length = 3/8"
(Derate 40 mW/°C above 75°C)

MECHANICAL CHARACTERISTICS

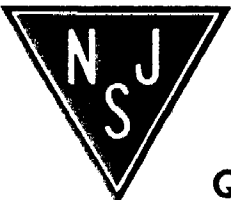
CASE: Void-free, transfer-molded, thermosetting plastic
FINISH: All external surfaces are corrosion resistant. Leads are readily solderable
POLARITY: Cathode indicated by color band. When operated in zener mode, cathode will be positive with respect to anode.

NOTE 1 - TOLERANCE AND VOLTAGE DESIGNATION

TOLERANCE DESIGNATION - The JEDEC type numbers show indicate a tolerance of $\pm 20\%$ with guaranteed limits on only V_Z , I_Z , and V_F as shown in the electrical characteristics table. Units with guaranteed limits on all seven parameters are indicated by suffix "A" for $\pm 10\%$ tolerance and suffix "B" for $\pm 5.0\%$ units.

NJ Semi-Conductors reserves the right to change test conditions, parameter limits and package dimensions without notice. Information furnished by NJ Semi-Conductors is believed to be both accurate and reliable at the time of going to press. However, NJ Semi-Conductors assumes no responsibility for any errors or omissions discovered in its use. NJ Semi-Conductors encourages customers to verify that datasheets are current before placing orders.

Quality Semi-Conductors



ELECTRICAL CHARACTERISTICS (TA = 25°C unless otherwise noted) $V_Z = 1.2$ Max $I_Z = 1.0$ A for all types

JEDEC Type No. (Note 1 & 2)	Nominal Zener Voltage $V_Z @ I_{ZT}$ Volts (Note 3)	Test Current I_{ZT} mA	Max Zener Impedance A & B Suffix Only		Max Reverse Leakage Current			Applies to all Suffix	A & B Suffix Only	Maximum Regulator Current I_{ZM} mA
			$Z_{ZT} @ I_{ZT}$ Ohms (Note 3)	$Z_{ZK} @ I_{ZK} = 1.0$ mA Ohms (Note 3)	I_R @ mA	V_R Volts				
						Non & A Suffix	B-Suffix	(Note 6)		
1N5333	3.3	380	3.0	400	300	1.0	1.0	20.0	0.85	1440
1N5334	3.6	350	2.5	500	150	1.0	1.0	18.7	0.80	1320
1N5335	3.9	320	2.0	500	50	1.0	1.0	17.6	0.54	1220
1N5336	4.3	290	2.0	500	10	1.0	1.0	16.4	0.49	1100
1N5337	4.7	260	2.0	450	5.0	1.0	1.0	15.3	0.44	1010
1N5338	5.1	240	1.5	400	1.0	1.0	1.0	14.4	0.39	930
1N5339	5.6	220	1.0	400	1.0	2.0	2.0	13.4	0.25	865
1N5340	6.0	200	1.0	300	1.0	3.0	3.0	12.7	0.19	790
1N5341	6.2	200	1.0	200	1.0	3.0	3.0	12.4	0.10	765
1N5342	6.8	175	1.0	200	10	4.9	5.2	11.5	0.15	700
1N5343	7.5	175	1.5	200	10	5.4	5.7	10.7	0.15	630
1N5344	8.2	150	1.5	200	10	5.9	6.2	10.0	0.20	580
1N5345	8.7	150	2.0	200	10	6.3	6.6	9.5	0.20	545
1N5346	9.1	150	2.0	150	7.5	6.6	6.9	9.2	0.22	520
1N5347	10	125	2.0	125	5.0	7.2	7.6	8.6	0.22	475
1N5348	11	125	2.5	125	5.0	8.0	8.4	8.0	0.25	430
1N5349	12	100	2.5	125	2.0	8.6	9.1	7.5	0.25	395
1N5350	13	100	2.5	100	1.0	9.4	9.9	7.0	0.25	365
1N5351	14	100	2.5	75	1.0	10.1	10.6	6.7	0.25	340
1N5352	15	75	2.5	75	1.0	10.8	11.5	6.3	0.25	315
1N5353	16	75	2.5	75	1.0	11.5	12.2	6.0	0.30	295
1N5354	17	70	2.5	75	0.5	12.2	12.9	5.8	0.35	280
1N5355	18	65	2.5	75	0.5	13.0	13.7	5.5	0.40	264
1N5356	19	65	3.0	75	0.5	13.7	14.4	5.3	0.40	250
1N5357	20	65	3.0	75	0.5	14.4	15.2	5.1	0.40	237
1N5358	22	50	3.5	75	0.5	15.8	16.7	4.7	0.45	216
1N5359	24	50	3.5	100	0.5	17.3	18.2	4.4	0.55	198
1N5360	25	50	4.0	110	0.5	18.0	19.0	4.3	0.55	190
1N5361	27	50	5.0	120	0.5	19.4	20.6	4.1	0.60	176
1N5362	28	50	6.0	130	0.5	20.1	21.2	3.9	0.60	170
1N5363	30	40	8.0	140	0.5	21.6	22.8	3.7	0.60	158
1N5364	33	40	10	150	0.5	23.8	25.1	3.5	0.60	144
1N5365	36	30	11	160	0.5	25.9	27.4	3.3	0.65	132
1N5366	39	30	14	170	0.5	28.1	29.7	3.1	0.65	122
1N5367	43	30	20	190	0.5	31.0	32.7	2.8	0.70	110
1N5368	47	25	25	210	0.5	33.8	35.8	2.7	0.80	100
1N5369	51	25	27	230	0.5	36.7	38.8	2.5	0.90	93.0
1N5370	56	20	33	280	0.5	40.3	42.6	2.3	1.00	86.0
1N5371	60	20	40	350	0.5	43.0	45.5	2.2	1.20	79.0
1N5372	62	20	42	400	0.5	44.6	47.1	2.1	1.35	76.0
1N5373	68	20	44	500	0.5	49.0	51.7	2.0	1.50	70.0
1N5374	75	20	45	620	0.5	54.0	56.0	1.9	1.60	63.0
1N5375	82	15	65	720	0.5	59.0	62.2	1.8	1.80	58.0
1N5376	87	15	75	760	0.5	63.0	66.0	1.7	2.00	54.5
1N5377	91	15	75	760	0.5	65.5	69.2	1.6	2.20	52.5
1N5378	100	12	90	800	0.5	72.0	76.0	1.5	2.50	47.5
1N5379	110	12	125	1000	0.5	79.2	83.6	1.4	2.50	43.0
1N5380	120	10	170	1150	0.5	86.4	91.2	1.3	2.50	39.5
1N5381	130	10	190	1250	0.5	93.6	98.8	1.2	2.50	36.6
1N5382	140	8.0	230	1500	0.5	101	106	1.2	2.50	34.0
1N5383	150	8.0	330	1500	0.5	108	114	1.1	3.00	31.6
1N5384	160	8.0	350	1650	0.5	115	122	1.1	3.00	29.4
1N5385	170	8.0	380	1750	0.5	122	129	1.0	3.00	28.0
1N5386	180	5.0	430	1750	0.5	130	137	1.0	4.00	26.4
1N5387	190	5.0	450	1850	0.5	137	144	0.9	5.00	25.0
1N5388	200	5.0	480	1850	0.5	144	152	0.9	5.00	23.6