

# New Jersey Semi-Conductor Products, Inc.

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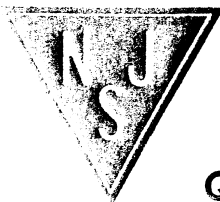
JEDEC PART NUMBER (NOTE 2)	NOMINAL ZENER VOLTAGE $V_z @ I_{ZT}$ (NOTE 3) VOLTS	ZENER TEST CURRENT $(I_{ZT})$ mA	ZENER IMPEDANCE $Z_{ZT} @ I_{ZT}$ (NOTE 4) OHMS	MAX. REVERSE LEAKAGE CURRENT		TYPICAL ZENER VOLTAGE TEMP. COEFF. %/°C	MAX. DC ZENER CURRENT $(I_{ZM}) @ 75°C$ (NOTE 5) mA	MAX POWER DISSIPATION WATTS
				μA	VOLTS			
				1N4158A	6.8			
1N4159A	7.5	34.0	4	300	5.7	0.040	125.0	1
1N4160A	8.2	31.0	4.5	200	6.2	0.050	115.0	1
1N4161A	9.1	28.0	5	100	6.9	0.060	105.0	1
1N4162A	10	25.0	7	40	7.6	0.070	95.0	1
1N4163A	11	23.0	8	10	9.1	0.070	85.0	1
1N4164A	12	21.0	9	10	9.9	0.070	80.0	1
1N4165A	13	19.0	10	10	10.6	0.070	74.0	1
1N4166A	15	17.0	14	10	11.4	0.080	63.0	1
1N4167A	16	15.5	16	5	12.1	0.080	60.0	1
1N4168A	18	14.0	20	5	13.7	0.080	52.0	1
1N4169A	20	12.5	22	5	15.2	0.080	47.0	1
1N4170A	22	11.5	23	5	16.7	0.090	43.0	1
1N4171A	24	10.5	25	5	18.2	0.090	40.0	1
1N4172A	27	9.5	35	1	20.5	0.090	35.0	1
1N4173A	30	8.5	40	1	22.8	0.090	31.0	1
1N4174A	33	7.5	45	1	25.1	0.095	28.0	1
1N4175A	36	7.0	50	1	27.3	0.095	26.0	1
1N4176A	39	6.5	60	1	30.4	0.095	24.0	1
1N4177A	43	6.0	70	1	34.2	0.095	22.0	1
1N4178A	47	5.5	80	1	38.0	0.095	20.0	1
1N4179A	51	5.0	95	1	42.5	0.095	17.0	1
1N4180A	56	4.5	110	1	45.6	0.095	15.0	1
1N4181A	62	4.0	125	1	47.1	0.095	14.5	1
1N4182A	68	3.7	150	1	53.2	0.095	14.0	1
1N4183A	75	3.3	175	1	57.0	0.095	12.0	1
1N4184A	82	3.0	200	1	60.8	0.100	11.0	1
1N4185A	91	2.8	250	1	68.4	0.100	10.0	1
1N4186A	100	2.5	350	1	76.0	0.100	9.5	1
1N4187A	110	2.3	450	1	83.6	0.100	8.5	1
1N4188A	120	2.0	550	1	91.2	0.100	8.0	1
1N4189A	130	1.9	700	1	98.8	0.100	7.2	1
1N4190A	150	1.7	1000	1	114.0	0.100	6.3	1
1N4191A	160	1.6	1100	1	121.0	0.100	5.9	1
1N4192A	180	1.4	1200	1	137.0	0.100	5.2	1
1N4193A	200	1.2	1500	1	152.0	0.100	4.7	1

The devices shown have a standard tolerance for the Zener voltage of +/-10%.

*"B" suffix is 5% tolerance*

## NOTES

- ♦ ELECTRICAL CHARACTERISTICS MEASURED AT A JUNCTION TEMPERATURE ( $T_j$ ) OF 25°C UNLESS OTHERWISE STATED
- ♦ JEDEC PART NUMBERS REFER TO PACKAGED DEVICES.
- ♦  $V_z$  MEASURED AT JUNCTION AND CASE TEMPERATURE BOTH AT 25°C
- ♦ ZENER IMPEDANCE IS DERIVED FROM 60HZ AC VOLTAGE WHICH RESULTS WHEN AN AC CURRENT RMS VALUE EQUAL TO 10% OF D.C ZENER CURRENT IS SUPERIMPOSED ON  $I_{ZT}$
- ♦  $I_{ZM}$  VALUES DERIVED FOR A ±5%  $V_z$  TOLERANCE
- ♦  $I_{ZM}$  IS THE VALUE OF ZENER CURRENT AT WHICH POINT MAX POWER DISSIPATION RESULTS



**Quality Semi-Conductors**