

Electrical Characteristics @ 25°C (Unless Otherwise Noted)

JEDEC Type Number (Note1)	Zener Voltage V_Z @ I_{ZT} (Note4)	Test Current	Maximum Dynamic Impedance (Note2) Z_{ZT} @ I_{ZT}	Maximum Knee Impedance Z_{ZK} @ I_{ZK}	Maximum Regulator Current $T_A=50^\circ\text{C}$	Knee Current	Maximum Reverse Current I_R @ V_R		Maximum Surge Current (Note3)
	V_Z (V)	I_{ZT} (mA)	Z_{ZT} (Ohms)	Z_{ZK} (Ohms)	I_{ZM} (mA)	I_{ZK} (mA)	I_R (μA)	V_R (V)	I_{ZSM} (mA)
1N4728A	3.3	76.0	10.0	400	276	1.00	100	1.0	1380
1N4729A	3.6	69.0	10.0	400	252	1.00	100	1.0	1260
1N4730A	3.9	64.0	9.0	400	234	1.00	50	1.0	1190
1N4731A	4.3	58.0	9.0	400	217	1.00	10	1.0	1070
1N4732A	4.7	53.0	8.0	500	193	1.00	10	1.0	970
1N4733A	5.1	49.0	7.0	550	178	1.00	10	1.0	890
1N4734A	5.6	45.0	5.0	600	162	1.00	10	2.0	810
1N4735A	6.2	41.0	2.0	700	146	1.00	10	3.0	730
1N4736A	6.8	37.0	3.5	700	133	1.00	10	4.0	660
1N4737A	7.5	34.0	4.0	700	121	0.50	10	5.0	605
1N4738A	8.2	31.0	4.5	700	110	0.50	10	6.0	550
1N4739A	9.1	28.0	5.0	700	100	0.50	10	7.0	500
1N4740A	10.0	25.0	7.0	700	91	0.25	10	7.6	454
1N4741A	11.0	23.0	8.0	700	83	0.25	5	8.4	414
1N4742A	12.0	21.0	9.0	700	76	0.25	5	9.1	380
1N4743A	13.0	19.0	10.0	700	69	0.25	5	9.9	344
1N4744A	15.0	17.0	14.0	700	61	0.25	5	11.4	304
1N4745A	16.0	15.5	16.0	700	57	0.25	5	12.2	285
1N4746A	18.0	14.0	20.0	750	50	0.25	5	13.7	250
1N4747A	20.0	12.5	22.0	750	45	0.25	5	15.2	225
1N4748A	22.0	11.5	23.0	750	41	0.25	5	16.7	205
1N4749A	24.0	10.5	25.0	750	38	0.25	5	18.2	190
1N4750A	27.0	9.5	35.0	750	34	0.25	5	20.6	170
1N4751A	30.0	8.5	40.0	1000	30	0.25	5	22.8	150

Note:

1. The JEDEC type numbers shown with an A suffix have a 5% tolerance on nominal zener voltage. No suffix signifies a 10% tolerance, C signifies 2%, and D signifies 1% tolerance.
2. The Zener impedance is derived from the 60 HZ ac voltage that results when an ac current having an rms value equal to 10% of the dc Zener current (I_{ZT} or I_{ZK}) is superimposed on I_{ZT} or I_{ZK} . Zener impedance is measured at two points to ensure a sharp knee on the breakdown curve and eliminate unstable units.
3. The reverse surge current is measured at 25°C ambient using a 1/2 square wave or equivalent sine wave pulse 1/120 second duration superimposed on I_{ZT} .
4. Zener voltage (V_Z) is measured at $T_L=25^\circ\text{C}$ (+8,-2°C) and 90 seconds after application of dc current.

Characteristic Curve

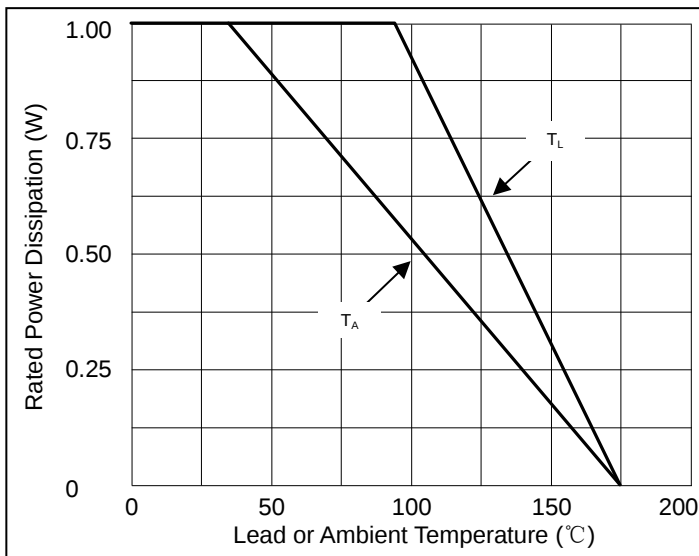


Fig.1 Power Derating Curve

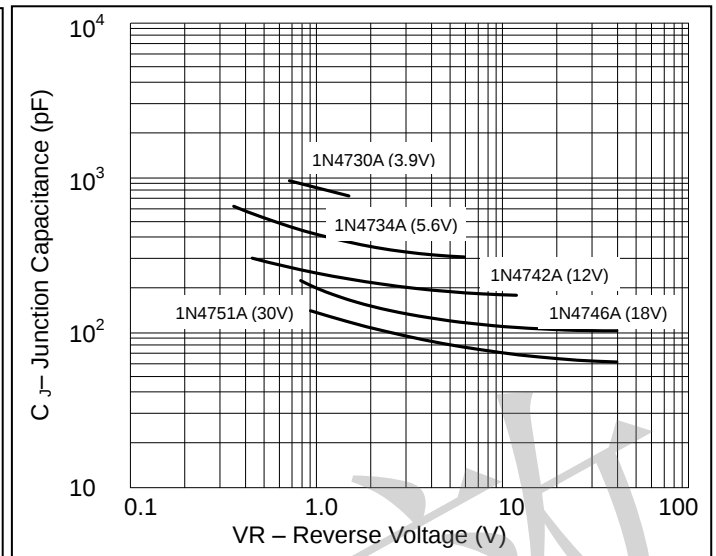


Fig.2 Capacitance vs. Voltage for Representative Types

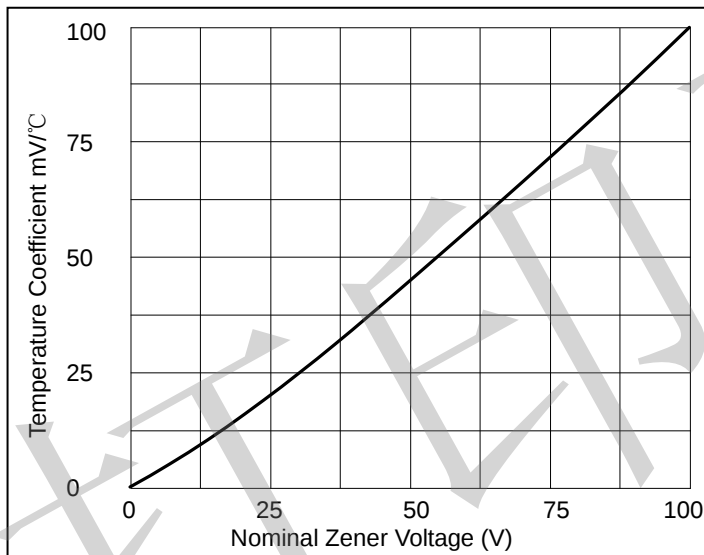


Fig.3 Temp Coefficient vs. Zener Voltage