

1N4728A thru 1N4764A

T-11-13

\*ELECTRICAL CHARACTERISTICS (T<sub>A</sub> = 25°C unless otherwise noted) V<sub>F</sub> = 1.2 V Max, I<sub>F</sub> = 200 mA for all types.

JEDEC Type No. (Note 1)	Nominal Zener Voltage V <sub>Z</sub> @ I <sub>ZT</sub> Volts (Notes 2 and 3)	Test Current I <sub>ZT</sub> mA	Maximum Zener Impedance (Note 4)			Leakage Current		Surge Current @ T <sub>A</sub> = 25°C I <sub>S</sub> - mA (Note 5)
			Z <sub>ZT</sub> @ I <sub>ZT</sub> Ohms	Z <sub>ZK</sub> @ I <sub>ZK</sub> Ohms	I <sub>ZK</sub> mA	I <sub>R</sub> μA Max	V <sub>R</sub> Volts	
⇒ 1N4728A	3.3	76	10	400	1	100	1	1380
1N4729A	3.6	69	10	400	1	100	1	1260
1N4730A	3.9	64	9	400	1	50	1	1190
⇒ 1N4731A	4.3	58	9	400	1	10	1	1070
⇒ 1N4732A	4.7	53	8	500	1	10	1	970
⇒ 1N4733A	5.1	49	7	550	1	10	1	890
⇒ 1N4734A	5.6	45	5	600	1	10	2	810
⇒ 1N4735A	6.2	41	2	700	1	10	3	730
⇒ 1N4736A	6.8	37	3.5	700	1	10	4	660
1N4737A	7.5	34	4	700	0.5	10	5	605
⇒ 1N4738A	8.2	31	4.5	700	0.5	10	6	550
⇒ 1N4739A	9.1	28	5	700	0.5	10	7	500
⇒ 1N4740A	10	25	7	700	0.25	10	7.6	454
⇒ 1N4741A	11	23	8	700	0.25	5	8.4	414
⇒ 1N4742A	12	21	9	700	0.25	5	9.1	380
⇒ 1N4743A	13	19	10	700	0.25	5	9.9	344
⇒ 1N4744A	15	17	14	700	0.25	5	11.4	304
⇒ 1N4745A	16	15.5	16	700	0.25	5	12.2	285
⇒ 1N4746A	18	14	20	750	0.25	5	13.7	250
⇒ 1N4747A	20	12.5	22	750	0.25	5	15.2	225
1N4748A	22	11.5	23	750	0.25	5	16.7	205
⇒ 1N4749A	24	10.5	25	750	0.25	5	18.2	190
⇒ 1N4750A	27	9.5	35	750	0.25	5	20.6	170
⇒ 1N4751A	30	8.5	40	1000	0.25	5	22.8	150
1N4752A	33	7.5	45	1000	0.25	5	25.1	135
1N4753A	36	7	50	1000	0.25	5	27.4	125
1N4754A	39	6.5	60	1000	0.25	5	29.7	115
1N4755A	43	6	70	1500	0.25	5	32.7	110
1N4756A	47	5.5	80	1500	0.25	5	35.8	95
1N4757A	51	5	95	1500	0.25	5	38.8	90
1N4758A	56	4.5	110	2000	0.25	5	42.6	80
1N4759A	62	4	125	2000	0.25	5	47.1	70
1N4760A	68	3.7	150	2000	0.25	5	51.7	65
1N4761A	75	3.3	175	2000	0.25	5	56	60
1N4762A	82	3	200	3000	0.25	5	62.2	55
1N4763A	91	2.8	250	3000	0.25	5	69.2	50
1N4764A	100	2.5	350	3000	0.25	5	76	45

⇒ Preferred part

\*Indicates JEDEC Registered Data.

**NOTE 1. TOLERANCE AND TYPE NUMBER DESIGNATION**

The JEDEC type numbers listed have a standard tolerance on the nominal zener voltage of ±5%. C for ±2%, D for ±1%.

**NOTE 2. SPECIALS AVAILABLE INCLUDE:**

Nominal zener voltages between the voltages shown and lighter voltage tolerances. For detailed information on price, availability, and delivery, contact your nearest Motorola representative.

**NOTE 3. ZENER VOLTAGE (V<sub>Z</sub>) MEASUREMENT**

Motorola guarantees the zener voltage when measured at 90 seconds while maintaining the lead temperature (T<sub>L</sub>) at 30°C ± 1°C, 3/8" from the diode body.

**NOTE 4. ZENER IMPEDANCE (Z<sub>Z</sub>) DERIVATION**

The zener impedance is derived from the 60 cycle ac voltage, which results when an ac current having an rms value equal to 10% of the dc zener current (I<sub>ZT</sub> or I<sub>ZK</sub>) is superimposed on I<sub>ZT</sub> or I<sub>ZK</sub>.

**NOTE 5. SURGE CURRENT (I<sub>S</sub>) NON-REPETITIVE**

The rating listed in the electrical characteristics table is maximum peak, non-repetitive, reverse surge current of 1/2 square wave or equivalent sine wave pulse of 1/120 second duration superimposed on the test current, I<sub>ZT</sub>, per JEDEC registration; however, actual device capability is as described in Figure 5 of the General Data — DO-41 Glass.