



Zeners

1N4728A - 1N4752A

Absolute Maximum Ratings*

$T_A = 25^\circ\text{C}$ unless otherwise noted

Symbol	Parameter	Value	Units
P_D	Power Dissipation Derate above 50°C	1.0 6.67	W mW/ $^\circ\text{C}$
T_{STG}	Storage Temperature Range	-65 to +200	$^\circ\text{C}$
T_J	Operating Junction Temperature	+ 200	$^\circ\text{C}$
$R_{\theta JL}$	Thermal resistance Junction to Lead	53.5	$^\circ\text{C/W}$
$R_{\theta JA}$	Thermal resistance Junction to Ambient	100	$^\circ\text{C/W}$
	Lead Temperature (1/16" from case for 10 seconds)	+ 230	$^\circ\text{C}$
	Surge Power**	10	W

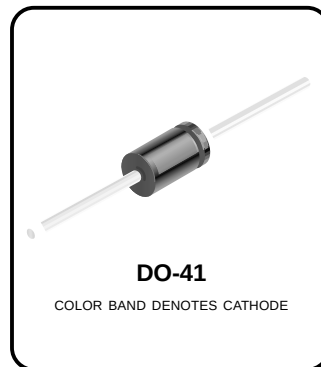
*These ratings are limiting values above which the serviceability of the diode may be impaired.

**Non-recurrent square wave PW = 8.3 ms, TA = 55 degrees C.

NOTES:

- 1) These ratings are based on a maximum junction temperature of 200 degrees C.
- 2) These are steady state limits. The factory should be consulted on applications involving pulsed or low duty cycle operations.

Tolerance: A = 5%



Electrical Characteristics

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Device	V_Z (V)	Z_Z (Ω) @ I_{ZT} (mA)	Z_{ZK} (Ω) @ I_{ZK} (mA)	V_R (V) @ I_R (μA)	I_{SURGE} (mA)	I_{ZM} (mA)
1N4728A	3.3	10 76	400 1.0	1.0 100	1380	276
1N4729A	3.6	10 69	400 1.0	1.0 100	1260	252
1N4730A	3.9	9.0 64	400 1.0	1.0 50	1190	234
1N4731A	4.3	9.0 58	400 1.0	1.0 10	1070	217
1N4732A	4.7	8.0 53	500 1.0	1.0 10	970	193
1N4733A	5.1	7.0 49	550 1.0	1.0 10	890	178
1N4734A	5.6	5.0 45	600 1.0	2.0 10	810	162
1N4735A	6.2	2.0 41	700 1.0	3.0 10	730	146
1N4736A	6.8	3.5 37	700 1.0	4.0 10	660	133
1N4737A	7.5	4.0 34	700 0.5	5.0 10	605	121
1N4738A	8.2	4.5 31	700 0.5	6.0 10	550	110
1N4739A	9.1	5.0 28	700 0.5	7.0 10	500	100
1N4740A	10	7.0 25	700 0.25	7.6 10	454	91
1N4741A	11	8.0 23	700 0.25	8.4 5.0	414	83
1N4742A	12	9.0 21	700 0.25	9.1 5.0	380	76
1N4743A	13	10 19	700 0.25	9.9 5.0	344	69
1N4744A	15	14 17	700 0.25	11.4 5.0	304	61
1N4745A	16	16 15.5	700 0.25	12.2 5.0	285	57
1N4746A	18	20 14	750 0.25	13.7 5.0	250	50
1N4747A	20	22 12.5	750 0.25	15.2 5.0	225	45
1N4748A	22	23 11.5	750 0.25	16.7 5.0	205	41
1N4749A	24	25 10.5	750 0.25	18.2 5.0	190	38
1N4750A	27	35 9.5	750 0.25	20.6 5.0	170	34
1N4751A	30	40 8.5	1000 0.25	22.8 5.0	150	30
1N4752A	33	45 7.5	1000 0.25	25.1 5.0	135	27

V_F Forward Voltage = 1.2 V Maximum @ $I_F = 200$ mA for all 1N4700 series

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