

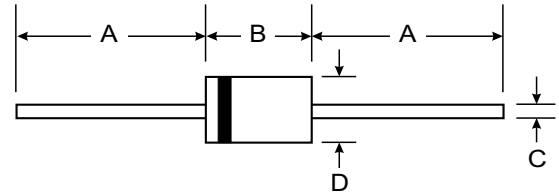
**RoHS****1N4728A THRU Z1400A**

ZENER DIODES

 V_Z : 3.3 - 400 Volts **P_D : 1 Watt**

FEATURES :

- * Complete voltage range 3.3 to 400 Volts
- * High peak reverse power dissipation
- * High reliability
- * Low leakage current



MECHANICAL DATA

- * Case : DO-41 Molded plastic
- * Epoxy : UL94V-O rate flame retardant
- * Lead : Axial lead solderable per MIL-STD-202, method 208 guaranteed
- * Polarity : Color band denotes cathode end
- * Mounting position : Any
- * Weight : 0.335 gram

DO-41		
Dim	Min	Max
A	25.40	—
B	4.06	5.21
C	0.71	0.864
D	2.00	2.72
All Dimensions in mm		

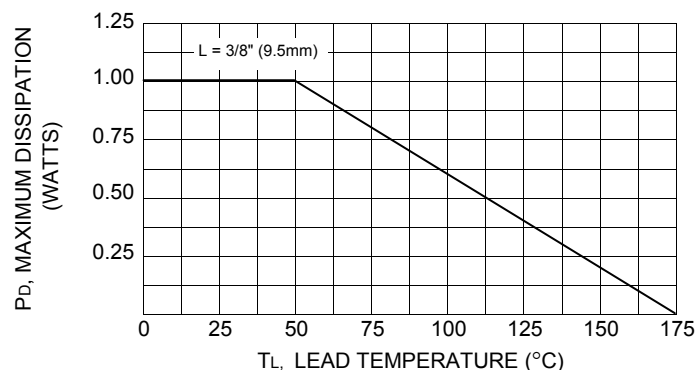
MAXIMUM RATINGS

Rating at 25 °C ambient temperature unless otherwise specified

Rating	Symbol	Value	Unit
DC Power Dissipation at $T_L = 50\text{ }^{\circ}\text{C}$ (Note1)	P_D	1.0	Watt
Maximum Forward Voltage at $I_F = 200\text{ mA}$	V_F	1.2	Volts
Maximum Thermal Resistance Junction to Ambient Air (Note2)	$R_{\theta JA}$	170	K / W
Junction Temperature Range	T_J	- 55 to + 175	$^{\circ}\text{C}$
Storage Temperature Range	T_{STG}	- 55 to + 175	$^{\circ}\text{C}$

Notes :

- (1) T_L = Lead temperature at 3/8 " (9.5mm) from body
- (2) Valid provided that leads are kept at ambient temperature at a distance of 10 mm from case.

Fig. 1 POWER TEMPERATURE DERATING CURVE

ELECTRICAL CHARACTERISTICS

Rating at = 25 °C ambient temperature unless otherwise specified

TYPE	Nominal Zener Voltage		Maximum Zener Impedance			Maximum Reverse Leakage Current		Maximum DC Zener Current
	V _Z @ I _{ZT}	I _{ZT}	Z _{ZT} @ I _{ZT}	Z _{ZK} @ I _{ZK}	I _{ZK}	I _R @ V _R		I _{ZM}
	(V)	(mA)	(Ω)	(Ω)	(mA)	(μA)	(V)	(mA)
1N4728A	3.3	76.0	10	400	1.0	100	1.0	276
1N4729A	3.6	69.0	10	400	1.0	100	1.0	252
1N4730A	3.9	64.0	9.0	400	1.0	50	1.0	234
1N4731A	4.3	58.0	9.0	400	1.0	10	1.0	217
1N4732A	4.7	53.0	8.0	500	1.0	10	1.0	193
1N4733A	5.1	49.0	7.0	550	1.0	10	1.0	178
1N4734A	5.6	45.0	5.0	600	1.0	10	2.0	162
1N4735A	6.2	41.0	2.0	700	1.0	10	3.0	146
1N4736A	6.8	37.0	3.5	700	1.0	50	4.0	133
1N4737A	7.5	34.0	4.0	700	0.5	50	5.0	121
1N4738A	8.2	31.0	4.5	700	0.5	50	6.0	110
1N4739A	9.1	28.0	5.0	700	0.5	50	7.0	100
1N4740A	10	25.0	7.0	700	0.25	50	7.6	91
1N4741A	11	23.0	8.0	700	0.25	50	8.4	83
1N4742A	12	21.0	9.0	700	0.25	5.0	9.1	76
1N4743A	13	19.0	10	700	0.25	5.0	9.9	69
1N4744A	15	17.0	14	700	0.25	5.0	11.4	61
1N4745A	16	15.5	16	700	0.25	5.0	12.2	57
1N4746A	18	14.0	20	750	0.25	5.0	13.7	50
1N4747A	20	12.5	22	750	0.25	5.0	15.2	45
1N4748A	22	11.5	23	750	0.25	5.0	16.7	41
1N4749A	24	10.5	25	750	0.25	5.0	18.2	38
1N4750A	27	9.5	35	750	0.25	5.0	20.6	34
1N4751A	30	8.5	40	1000	0.25	5.0	22.8	30
1N4752A	33	7.5	45	1000	0.25	5.0	25.1	27
1N4753A	36	7.0	50	1000	0.25	5.0	27.4	25
1N4754A	39	6.5	60	1000	0.25	5.0	29.7	23
1N4755A	43	6.0	70	1500	0.25	5.0	32.7	22
1N4756A	47	5.5	80	1500	0.25	5.0	35.8	19
1N4757A	51	5.0	95	1500	0.25	5.0	38.8	18
1N4758A	56	4.5	110	2000	0.25	5.0	42.6	16
1N4759A	62	4.0	125	2000	0.25	5.0	47.1	14
1N4760A	68	3.7	150	2000	0.25	5.0	51.7	13
1N4761A	75	3.3	175	2000	0.25	5.0	56.0	12
1N4762A	82	3.0	200	3000	0.25	5.0	62.2	11
1N4763A	91	2.8	250	3000	0.25	5.0	69.2	10
1N4764A	100	2.5	350	3000	0.25	5.0	76.0	9.0
Z1110A	110	2.3	450	4000	0.25	5.0	83.6	8.6
Z1120A	120	2.0	550	4500	0.25	5.0	91.2	7.8
Z1130A	130	1.9	700	5000	0.25	5.0	98.8	7.0
Z1150A	150	1.7	1000	6000	0.25	5.0	114.0	6.4
Z1160A	160	1.6	1100	6500	0.25	5.0	121.6	5.8
Z1180A	180	1.4	1200	7000	0.25	5.0	136.8	5.2
Z1200A	200	1.2	1500	8000	0.25	5.0	152.0	4.7

Note :

- (1) The type number listed have a standard tolerance on the nominal zener voltage of $\pm 10\%$.
A standard tolerance of $\pm 5\%$ on individual units is also available and is indicated by suffixing "A" to the standard type number.

ELECTRICAL CHARACTERISTICS Rating at 25 °C ambient temperature unless otherwise specified

TYPE	Nominal Zener Voltage		Maximum Zener Impedance			Maximum Reverse Leakage Current		Maximum DC Zener Current
	V _Z @ I _{ZT}	I _{ZT}	Z _{ZT} @ I _{ZT}	Z _{ZK} @ I _{ZK}	I _{ZK}	I _R @ V _R		I _{ZM}
	(V)	(mA)	(Ω)	(Ω)	(mA)	(μ A)	(V)	(mA)
Z1240A	240	0.93	1800	8500	0.25	5.0	182.4	3.8
Z1250A	250	0.90	2000	9000	0.25	5.0	190	3.6
Z1270A	270	0.82	2100	9000	0.25	5.0	205	3.3
Z1300A	300	0.75	2300	9500	0.25	5.0	228	3.0
Z1330A	330	0.70	2500	9500	0.25	5.0	250	2.8
Z1380A	380	0.60	2700	9500	0.25	5.0	288	2.4
Z1400A	400	0.55	2800	9500	0.25	5.0	304	2.3

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