

# 1N4728AE...Z1200A

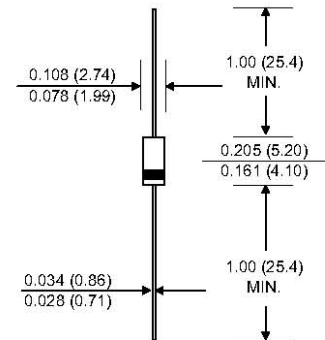
## Silicon Planar Power Zener Diodes

for use in stabilizing and clipping circuits with high power rating.

### Mechanical Data

- Case: Molded plastic, DO-41
- Epoxy: UL 94V-0 rate flame retardant
- Lead: Axial leads solderable per MIL-STD-202 method 208 guaranteed
- Polarity: Color band denotes cathode end
- Mounting position: Any

### DO - 41



Dimensions in inches and ( millimeters )

### Absolute Maximum Ratings ( $T_a = 25\text{ }^\circ\text{C}$ )

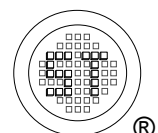
Parameter	Symbol	Value	Unit
Power Dissipation	$P_{\text{tot}}$	1 <sup>1)</sup>	W
Junction Temperature	$T_j$	175	$^\circ\text{C}$
Storage Temperature Range	$T_{\text{stg}}$	- 55 to + 175	$^\circ\text{C}$

<sup>1)</sup> Valid provided that leads at a distance of 10 mm from case are kept at ambient temperature.

### Characteristics at $T_a = 25\text{ }^\circ\text{C}$

Parameter	Symbol	Max.	Unit
Thermal Resistance Junction to Ambient Air	$R_{\text{thA}}$	170 <sup>1)</sup>	K/W
Forward Voltage at $I_F = 200\text{ mA}$	$V_F$	1.2	V

<sup>1)</sup> Valid provided that leads at a distance of 10 mm from case are kept at ambient temperature.



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## Characteristics at $T_a = 25\text{ }^\circ\text{C}$

Type	Zener Voltage Range			Dynamic Resistance			Reverse Current		Maximum Surge Current <sup>1)</sup>	Maximum Regulator Current
	$V_{Znom}$	$V_{ZT}$	at $I_{ZT}$	$Z_{ZT}$	$Z_{ZK}$	at $I_{ZK}$	$I_R$	at $V_R$		
	(V)	(V)	(mA)	Max.( $\Omega$ )	Max.( $\Omega$ )	(mA)	Max.( $\mu$ A)	(V)	$I_{ZSM}$ (mA)	$I_{ZM}$ (mA)
1N4728AE	3.3	3.13...3.47	76	10	400	1	100	1	1380	276
1N4729AE	3.6	3.42...3.78	69	10	400	1	100	1	1260	252
1N4730AE	3.9	3.7...4.1	64	9	400	1	50	1	1190	234
1N4731AE	4.3	4.08...4.52	58	9	400	1	10	1	1070	217
1N4732AE	4.7	4.46...4.94	53	8	500	1	10	1	970	193
1N4733AE	5.1	4.84...5.36	49	7	550	1	10	1	890	178
1N4734AE	5.6	5.32...5.88	45	5	600	1	10	2	810	162
1N4735AE	6.2	5.89...6.51	41	2	700	1	10	3	730	146
1N4736AE	6.8	6.46...7.14	37	3.5	700	1	10	4	660	133
1N4737AE	7.5	7.12...7.88	34	4	700	0.5	10	5	605	121
1N4738AE	8.2	7.79...8.61	31	4.5	700	0.5	10	6	550	110
1N4739AE	9.1	8.64...9.56	28	5	700	0.5	10	7	500	100
1N4740AE	10	9.5...10.5	25	7	700	0.25	10	7.6	454	91
1N4741AE	11	10.45...11.55	23	8	700	0.25	5	8.4	414	83
1N4742AE	12	11.4...12.6	21	9	700	0.25	5	9.1	380	76
1N4743AE	13	12.35...13.65	19	10	700	0.25	5	9.9	344	69
1N4744AE	15	14.25...15.75	17	14	700	0.25	5	11.4	304	61
1N4745AE	16	15.2...16.8	15.5	16	700	0.25	5	12.2	285	57
1N4746AE	18	17.1...18.9	14	20	750	0.25	5	13.7	250	50
1N4747AE	20	19...21	12.5	22	750	0.25	5	15.2	225	45
1N4748AE	22	20.9...23.1	11.5	23	750	0.25	5	16.7	205	41
1N4749AE	24	22.8...25.2	10.5	25	750	0.25	5	18.2	190	38
1N4750AE	27	25.65...28.35	9.5	35	750	0.25	5	20.6	170	34
1N4751AE	30	28.5...31.5	8.5	40	1000	0.25	5	22.8	150	30
1N4752AE	33	31.35...34.65	7.5	45	1000	0.25	5	25.1	135	27
1N4753AE	36	34.2...37.8	7	50	1000	0.25	5	27.4	125	25
1N4754AE	39	37.05...40.95	6.5	60	1000	0.25	5	29.7	115	23
1N4755AE	43	40.85...45.15	6	70	1500	0.25	5	32.7	110	22
1N4756AE	47	44.65...49.35	5.5	80	1500	0.25	5	35.8	95	19
1N4757AE	51	48.45...53.55	5	95	1500	0.25	5	38.8	90	18
1N4758AE	56	53.2...58.8	4.5	110	2000	0.25	5	42.6	80	16
1N4759AE	62	58.9...65.1	4	125	2000	0.25	5	47.1	70	14
1N4760AE	68	64.6...71.4	3.7	150	2000	0.25	5	51.7	65	13
1N4761AE	75	71.25...78.75	3.3	175	2000	0.25	5	56	60	12
1N4762AE	82	77.9...86.1	3	200	3000	0.25	5	62.2	55	11
1N4763AE	91	86.45...95.55	2.8	250	3000	0.25	5	69.2	50	10
1N4764AE	100	95...105	2.5	350	3000	0.25	5	76	45	9
Z1110A	110	104.5...115.5	2.3	450	4000	0.25	5	83.6	40	8.6
Z1120A	120	114...126	2	550	4500	0.25	5	91.2	37	7.8
Z1130A	130	123.5...136.5	1.9	700	5000	0.25	5	98.8	34	7
Z1150A	150	142.5...157.5	1.7	1000	6000	0.25	5	114	30	6.4
Z1160A	160	152...168	1.6	1100	6500	0.25	5	121.6	28	5.8
Z1180A	180	171...189	1.4	1200	7000	0.25	5	136.8	25	5.2
Z1200A	200	190...210	1.2	1900	9990	0.25	5	152	22	4.7

<sup>1)</sup> The reverse surge current is a non-repetitive, 8.3ms pulse width square wave or equivalent sine-wave superimposed on  $I_{ZT}$  per JEDEC method.

