1N4728 THRU 1N4764

SILICON ZENER DIODES

康 比 電 子
HORNBY ELECTRONIC

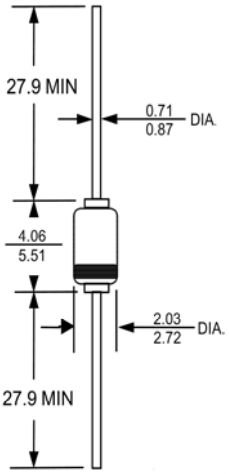
REVERSE VOLTAGE: **6.2 VOLTS**

POWER DISSIPATION: **1.0 WATTS**

FEATURES

· Planar Die construction
· 1.0 W Power Dissipation
· Ideally Suited for Automated Assembly Processes
· Standard Zener voltage tolerance is ±10%. Add suffix "A" for ±5% tolerance. Other tolerances and other, non-standard Zener voltages are available upon request.

DO-41G



Dimensions in inches and (millimeters)

MECHANICAL DATA

Case: Molded glass DO-41G
Lead: Axial leads, solderable per MIL-STD-202, method 208 guaranteed
Polarity: Color band denotes cathode end
Mounting position: Any
Weight: approx. 0.35 g

Absolute Maximum Ratings

Tamb = 25 °C, unless otherwise specified

Parameter	Symbol	Value	Unit
Power Dissipation at Tamb=25℃	P_D	1000	mWatt
Zener Current	I_Z	P_D/V_Z	mAmp
Junction Temperature	T_J	200	℃
Storage Temperature Range	Tstg	-65 to +200	℃

Thermal Characteristics

Tamb = 25 °C, unless otherwise specified

Parameter	Symbol	Value	Unit
Junction Ambient at l = 9.5 mm (3/8 "), T_L=constant	R_{thJA}	170	K/W

Electrical Characteristics

Tamb = 25 °C, unless otherwise specified

Parameter	Symbol	Min.	Typ.	Max.	Unit
Forward Voltage at I_F = 200 mA	V_F			1.2	Volt

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Electrical Characteristics

Tamb = 25 °C, unless otherwise specified

Type	Zener Voltage Range (Note 1)		Maximum Zener Impedance (Note 1)			Reverse leakage Current		Maximum Regulator Current (Note 2)	Surge Current At T_A=25℃
	V_Z	I_{ZT}	R_{ZT} @ I_{ZT}	R_{ZK} @ I_{ZK}	I_{ZK}	I_R	V_R	I_{ZM}	I_R
	V	mA	Omh (MAX)	Omh (MAX)	mA	uA (MAX)	V	mA	mA
1N4728	3.3	76	10	400	1.0	150	1.0	276	1375
1N4729	3.6	69	10	400	1.0	100	1.0	252	1260
1N4730	3.9	64	9	400	1.0	100	1.0	234	1190
1N4731	4.3	58	9	400	1.0	50	1.0	217	1070
1N4732	4.7	53	8	500	1.0	10	1.0	193	970
1N4733	5.1	49	7	550	1.0	10	1.0	178	890
1N4734	5.6	45	5	600	1.0	10	2.0	162	810
1N4735	6.2	41	2	700	1.0	10	3.0	146	730
1N4736	6.8	37	3.5	700	1.0	10	4.0	133	660
1N4737	7.5	34	4	700	0.5	10	5.0	121	605
1N4738	8.2	31	4.5	700	0.5	10	6.0	110	550
1N4739	9.1	28	5	700	0.5	10	7.0	100	500
1N4740	10	25	7	700	0.25	10	7.6	91	454
1N4741	11	23	8	700	0.25	5	8.4	83	414
1N4742	12	21	9	700	0.25	5	9.1	76	380
1N4743	13	19	10	700	0.25	5	9.9	69	344
1N4744	15	17	14	700	0.25	5	11.4	61	304
1N4745	16	16	16	700	0.25	5	12.2	57	285
1N4746	18	14	20	750	0.25	5	13.7	50	250
1N4747	20	13	22	750	0.25	5	15.2	45	225
1N4748	22	12	23	750	0.25	5	16.7	41	205
1N4749	24	10	25	750	0.25	5	18.2	38	190
1N4750	27	9.5	35	750	0.25	5	20.6	34	170
1N4751	30	8.5	40	1000	0.25	5	22.8	30	150
1N4752	33	7.5	45	1000	0.25	5	25.1	27	135
1N4753	36	7.0	50	1000	0.25	5	27.4	25	125
1N4754	39	6.5	60	1000	0.25	5	29.7	23	115
1N4755	43	6.0	70	1500	0.25	5	32.7	22	110
1N4756	47	5.5	80	1500	0.25	5	35.8	19	95
1N4757	51	5.0	95	1500	0.25	5	38.8	18	90
1N4758	56	4.5	110	2000	0.25	5	42.6	16	80
1N4759	62	4.0	125	2000	0.25	5	47.1	14	70
1N4760	68	3.7	150	2000	0.25	5	51.7	13	65
1N4761	75	3.3	175	2000	0.25	5	56.0	12	60
1N4762	82	3.0	200	3000	0.25	5	62.2	11	55
1N4763	91	2.8	250	3000	0.25	5	69.2	10	50
1N4764	100	2.5	350	3000	0.25	5	76.0	9	45

NOTES:

1- Based on dc-measurement at thermal equilibrium while maintaining the lead temperature (T_L) at 30 °C + 1 °C, 9.5 mm (3/8 ") from the diode body

2- Valid provided that electrodes at a distance of 10 mm from case are kept at ambient temperature

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RATINGS AND CHARACTERISTIC CURVES

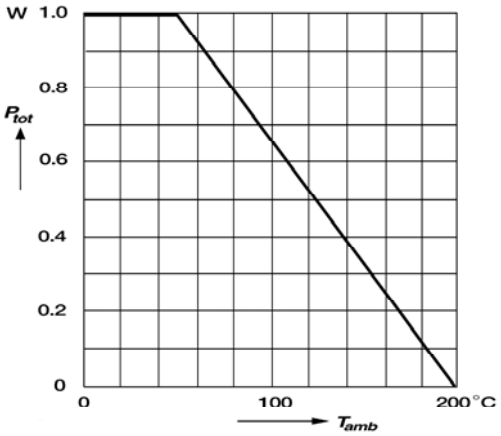

Figure 1. Admissible Power Dissipation vs. Ambient Temperature