



1N4728A THRU 1N4764A

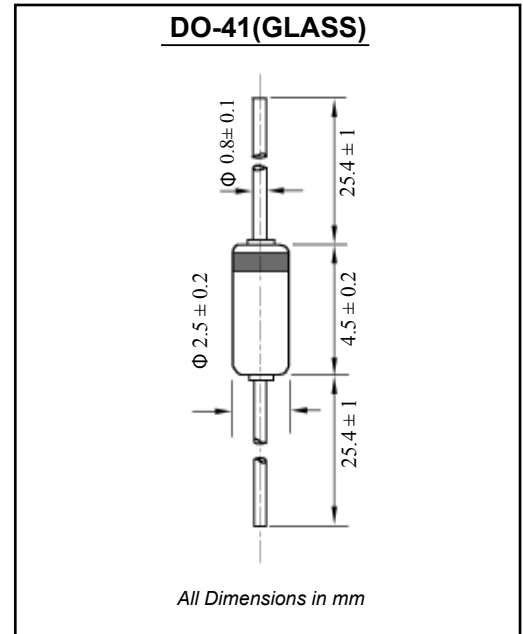
1W EPITAXIAL ZENER DIODE

FEATURES

- Low profile package
- Built-in strain relief
- Low inductance
- High temperature soldering : 260°C /10 seconds at terminals
- Glass package has Underwriters Laboratory Flammability Classification
- In compliance with EU RoHS 2002/95/EC directives

MECHANICAL DATA

- Case: Molded Glass DO-41G
- Terminals: Axial leads, solderable per MIL-STD-750, Method 2026 guaranteed
- Polarity: Color band denotes positive end
- Mounting position: Any
- Weight: 0.012 ounce, 0.336 gram



ABSOLUTE MAXIMUM RATINGS(LIMITING VALUES)(TA=25°C)

	Symbols	Value	Units
Zener current see table "Characteristics"			
Power dissipation at TA=50°C	P _{tot}	1 ¹⁾	W
Junction temperature	T _J	175	°C
Storage temperature range	T _{STG}	-65 to +175	°C

1)Valid provided that a distance of 8mm from case are kept at ambient temperature

ELECTRICAL CHARACTERISTICS(TA=25°C)

	Symbols	Min	Typ	Max	Units
Thermal resistance junction to ambient	R _{thA}			170 ¹⁾	°C/W
Forward voltage at I _F =200mA	V _F			1.2	V

1) Valid provided that a distance at 8mm from case are kept at ambient temperature



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Type	Nominal Zener Voltage ³⁾	Test Current	Maximum Zener Impedance ¹⁾			Maximum reverse leakage current		Surge current	Maximum regulator Current ²⁾
	at I_{ZT} V_Z V	I_{ZT} mA	at I_{ZT} Z_{ZT} Ω	Z_{ZK} Ω	at I_{ZK} mA	I_R μ A	at V_R V	at $T_A=0.25$ I_R mA	I_{ZM} mA
1N4728	3.3	76	10	400	1.0	100	1.0	1380	276
1N4729	3.6	69	10				1.0	1260	252
1N4730	3.9	64	9				50	1.0	1190
1N4731	4.3	58	9	500	1.0	10	1.0	1070	217
1N4732	4.7	53	8				1.0	970	193
1N4733	5.1	49	7				550	1.0	890
1N4734	5.6	45	5	600	1.0	10	2.0	810	162
1N4735	6.2	41	2				3.0	730	146
1N4736	6.8	37	3.5				4.0	660	133
1N4737	7.5	34	4.0	700	5.0	10	5.0	605	121
1N4738	8.2	31	4.5				6.0	550	110
1N4739	9.1	28	5.0				7.0	500	100
1N4740	10	25	7	750	0.25	5	7.6	454	91
1N4741	11	23	8				8.4	414	83
1N4742	12	21	9				9.1	380	76
1N4743	13	19	10	1000	0.25	5	9.9	344	69
1N4744	15	17	14				11.4	304	61
1N4745	16	15.5	16				12.2	285	57
1N4746	18	14	20	1500	0.25	5	13.7	250	50
1N4747	20	12.5	22				15.2	225	45
1N4748	22	11.5	23				16.7	205	41
1N4749	24	10.5	25	2000	0.25	5	18.2	190	38
1N4750	27	9.5	35				20.6	170	34
1N4751	30	8.5	40				22.8	150	30
1N4752	33	7.5	45	3000	0.25	5	25.1	135	27
1N4753	36	7.0	50				27.4	125	25
1N4754	39	6.5	60				29.7	115	23
1N4755	43	6.0	70	1500	0.25	5	32.7	110	22
1N4756	47	5.5	80				35.8	95	19
1N4757	51	5.0	95				38.8	90	18
1N4758	56	4.5	110	2000	0.25	5	42.6	80	16
1N4759	62	4.0	125				47.1	70	14
1N4760	68	3.7	150				51.7	65	13
1N4761	75	3.3	175	3000	0.25	5	56.0	60	12
1N4762	82	3.0	200				62.2	55	11
1N4763	91	2.8	250				69.2	50	10
1N4764	100	2.5	350				76.0	45	9

Notes: 1) The Zener impedance is derived from the 1KHz AC voltage which results when an AC current having an RMS value equal to 10% of the Zener current (I_{ZT} or I_{ZK}) is superimposed on I_{ZT} or I_{ZK} . Zener impedance is measured at two points to insure a sharp knee on the breakdown curve and to eliminate unstable units.

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

3) Measured under thermal equilibrium and DC test conditions.



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RATINGS AND CHARACTERISTIC CURVES

FIG.1 – BREAKDOWN CHARACTERISTICS

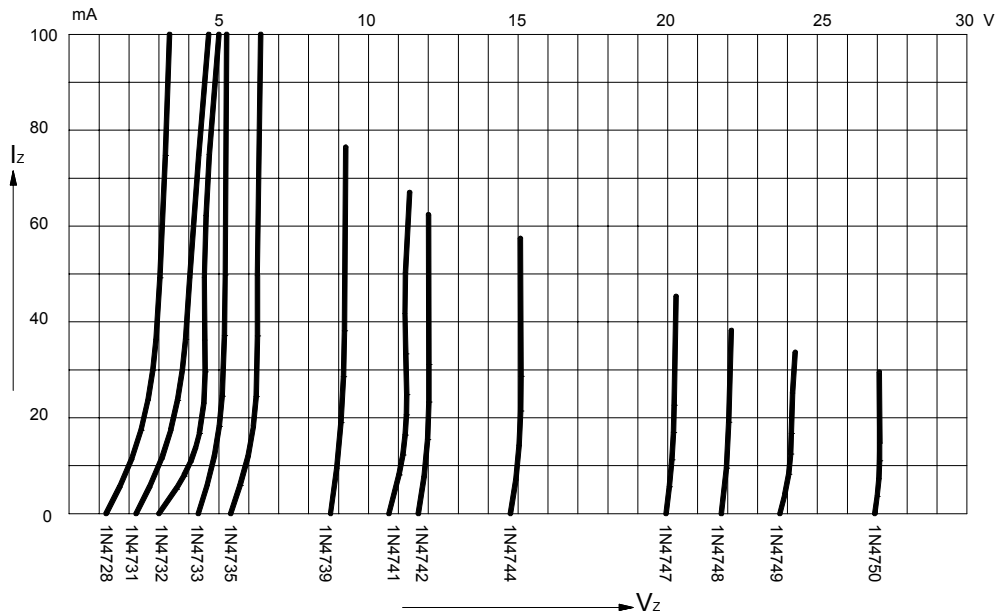


FIG.2 – ADMISSIBLE POWER DISSIPATION VERSUS AMBIENT TEMPERATURE

