

**DL47-SERIES  
ZENER DIODES**

Zener Voltage: 3.3-100V Peak Pulse Power: 1000mW



**Features**

- Low zener impedance
- Low regulation factor
- Glass passivated junction
- High temperature soldering guaranteed: 260° C/10S at terminals
- This is a Pb – Free Device
- All SMC parts are traceable to the wafer lot
- Additional testing can be offered upon request

**Circuit Diagram**



**Mechanical Data**

- Case: DL-41 molded glass body
- Terminals: Plated leads, solderable per MIL-STD 750, method 2026
- Polarity: Color band denotes cathode end
- Position: Any
- Weight: 0.012 ounce, 0.33 gram
- Marking: Cathode band

**Maximum Ratings@ $T_A=25^{\circ}\text{C}$  unless otherwise specified**

Parameter	Symbol	Value	Units
Zener Current see Table Characteristics			
Power Dissipation at $T_{amb}=25^{\circ}\text{C}$ (Note1)	$P_D$	1000	mW
Operating Junction Temperature	$T_J$	175	$^{\circ}\text{C}$
Storage Temperature Range	$T_{STG}$	-65 to 175	$^{\circ}\text{C}$
Typical Thermal resistance junction to Ambient(Note 1)	$R_{\theta JA}$	0.3	K/mW
Forward Voltage @ $I_F = 200\text{mA}$	$V_F$	1.1	V

Notes: 1. Valid provided that leads at a distance of 10mm from case are kept at ambient temperature.

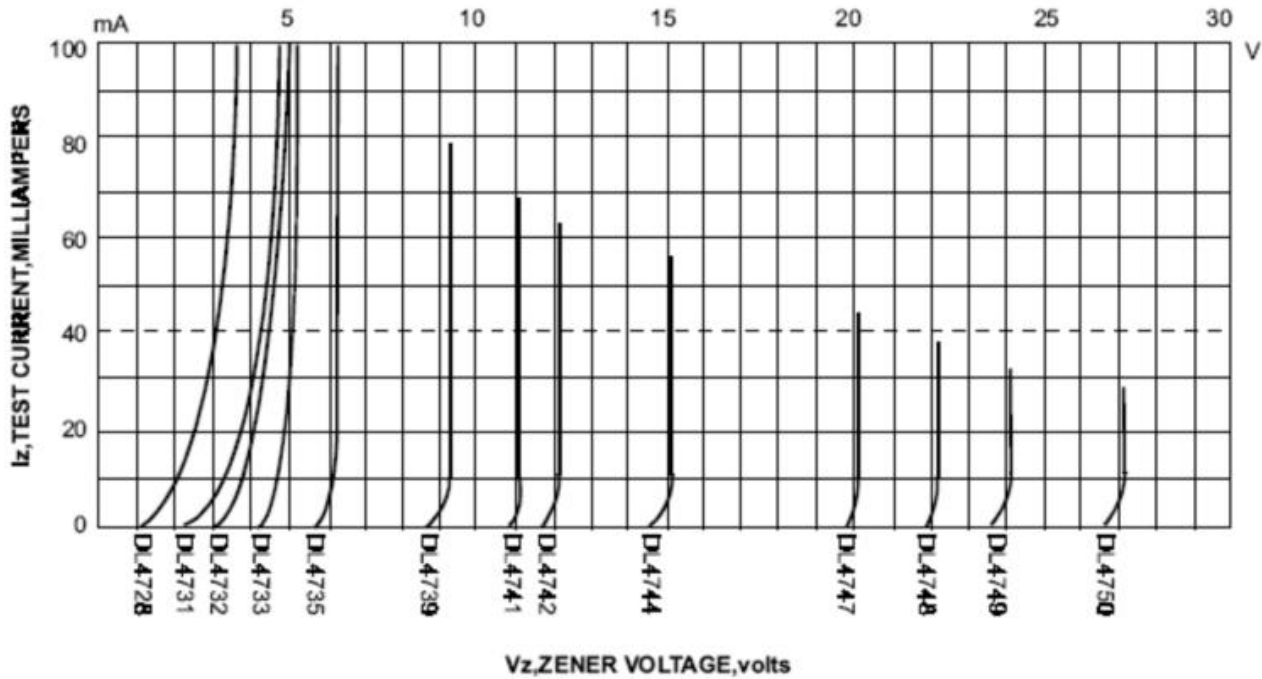
**Electrical Characteristics @ $T_A=25^\circ\text{C}$  unless otherwise specified**

Device Type	Nominal Zener Voltage $V_Z@I_{ZT}$	Test Current $I_{ZT}$	Maximum Zener Impedance		Maximum Reverse Leakage Current		$I_{ZK}$	Max.Surge Current $I_{R@25^\circ\text{C}}$	Maximum Regulator Current $I_{ZM}$
			$Z_{ZT}@I_{ZT}$	$Z_{ZT}@I_{ZK}$	$I_R$	@ $V_R$			
			Ohms	Ohms	$\mu\text{A}$	Volts			
DL4728A	3.3	76	10	400	100	1.0	1.0	1380	276
DL4729A	3.6	69	10	400	100	1.0	1.0	1260	252
DL4730A	3.9	64	9.0	400	50	1.0	1.0	1170	234
DL4731A	4.3	58	9.0	400	10	1.0	1.0	1085	217
DL4732A	4.7	53	8.0	500	10	1.0	1.0	965	193
DL4733A	5.1	49	7.0	550	10	1.0	1.0	890	178
DL4734A	5.6	45	5.0	600	10	2.0	1.0	810	162
DL4735A	6.2	41	2.0	700	10	3.0	1.0	730	146
DL4736A	6.8	37	3.5	700	10	4.0	1.0	660	133
DL4737A	7.5	34	4.0	700	10	5.0	0.5	605	121
DL4738A	8.2	31	4.5	700	10	6.0	0.5	550	110
DL4739A	9.1	28	5.0	700	10	7.0	0.5	500	100
DL4740A	10	25	7.0	700	10	7.6	0.25	454	91
DL4741A	11	23	8.0	700	5.0	8.4	0.25	414	83
DL4742A	12	21	9.0	700	5.0	9.1	0.25	380	76
DL4743A	13	19	10	700	5.0	9.9	0.25	344	69
DL4744A	15	17	14	700	5.0	11.4	0.25	304	61
DL4745A	16	15.5	16	700	5.0	12.2	0.25	285	57
DL4746A	18	14	20	750	5.0	13.7	0.25	250	50
DL4747A	20	12.5	22	750	5.0	15.2	0.25	225	45
DL4748A	22	11.5	23	750	5.0	16.7	0.25	205	41
DL4749A	24	10.5	25	750	5.0	18.2	0.25	190	38
DL4750A	27	9.5	35	750	5.0	20.6	0.25	170	34
DL4751A	30	8.5	40	1000	5.0	22.8	0.25	150	30
DL4752A	33	7.5	45	1000	5.0	25.1	0.25	135	27
DL4753A	36	7.0	50	1000	5.0	27.4	0.25	125	25
DL4754A	39	6.5	60	1000	5.0	29.7	0.25	115	23
DL4755A	43	6.0	70	1500	5.0	32.7	0.25	110	22
DL4756A	47	5.5	80	1500	5.0	35.8	0.25	95	19
DL4757A	51	5.0	95	1500	5.0	38.8	0.25	90	18
DL4758A	56	4.5	110	2000	5.0	42.6	0.25	80	16
DL4759A	62	4.0	125	2000	5.0	47.1	0.25	70	14
DL4760A	68	3.7	150	2000	5.0	51.7	0.25	65	13
DL4761A	75	3.3	175	2000	5.0	56.0	0.25	60	12
DL4762A	82	3.0	200	3000	5.0	62.2	0.25	55	11
DL4763A	91	2.8	250	3000	5.0	69.2	0.25	50	10
DL4764A	100	2.5	350	3000	5.0	76.0	0.25	45	9

Note 1: Suffix "A" indicate  $\pm 5\%$  tolerance

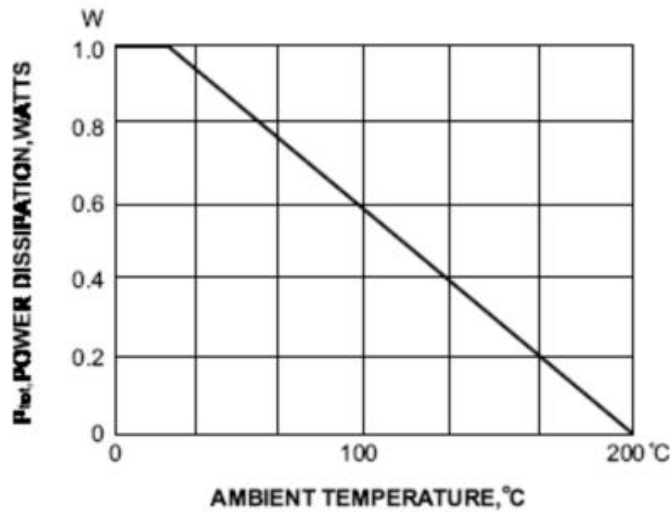
**Ratings and Characteristics Curves**

**Breakdown characteristics**

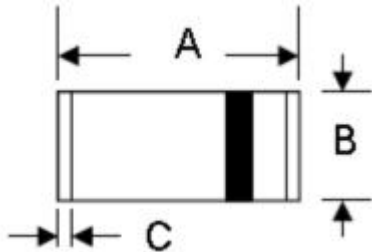


**Admissible power dissipation versus ambient temperature**

Valid provided that leads are kept at ambient temperature at a distance of 10mm from case



**Mechanical Dimensions DL-41**



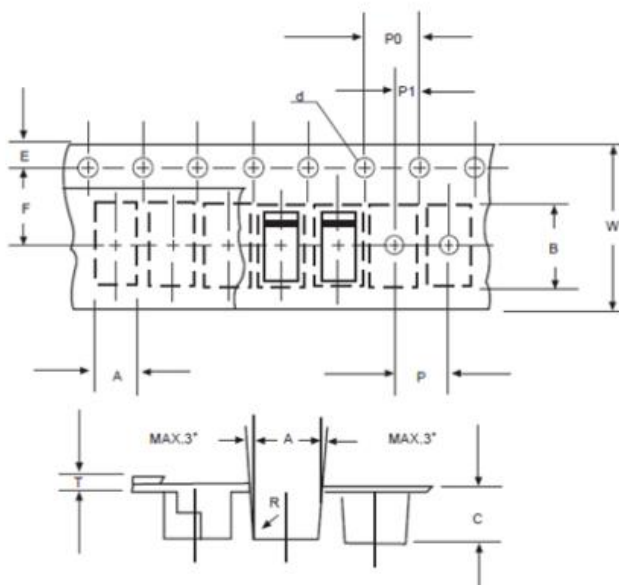
SYMBOL	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	5.1	5.5	0.201	0.216
B	2.60	2.80	0.101	0.110
C	0.30	0.50	0.012	0.020

**Ordering Information**

Device	Package	Shipping
DL47-SERIES	DL-41 (Pb-Free)	5000pcs / reel

For information on tape and reel specifications, including part orientation and tape sizes, please refer to our tape and reel packaging specification.

**Carrier Tape Specification DL-41**



SYMBOL	Millimeters	
	Min.	Max.
A	2.85	3.05
B	5.15	5.35
C	2.90	3.10
d	1.40	1.60
E	1.65	1.85
F	5.45	5.55
P	3.90	4.10
P0	3.90	4.10
P1	1.90	2.10
T	0.26	0.30
W	11.80	12.20

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