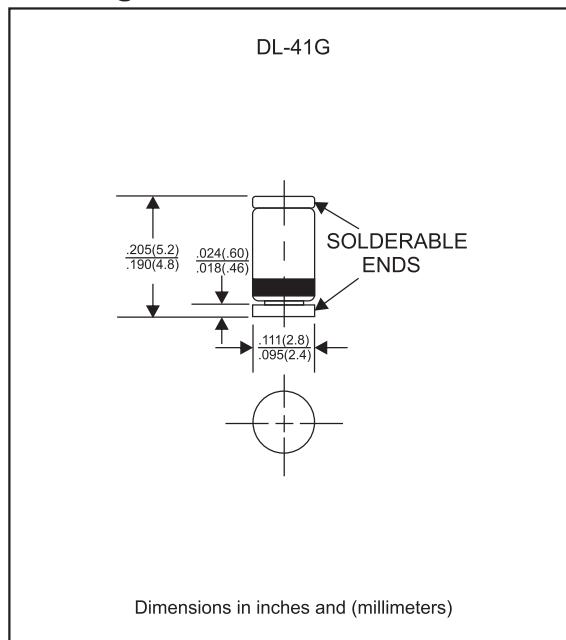


**DL4728A THRU DL4764A**

**1000mW Surface Mount  
Zener Diodes - 3.3V-95V**

**Features**

- Silicon epitaxial planar chip structure.
- Surface mount glass hermetically sealed package.
- Wide zener reverse voltage range 3.3V to 95V.
- Other tolerance are available upon request.
- Lead-free parts meet environmental standards of MIL-STD-19500 /228

**Package outline****Mechanical data**

- Epoxy : UL94-VO rated flame retardant
- Case : DL-41G
- Terminals :Plated terminals, solderable per MIL-STD-750, Method 2026
- Polarity : Indicated by cathode band
- Mounting Position : Any
- Weight : Approximated 0.01 gram

**MAXIMUM RATINGS** (at  $T_A=25^\circ\text{C}$  unless otherwise noted)

PARAMETER	CONDITIONS	Symbol	MIN.	TYP.	MAX.	UNIT
Forward voltage	$I_F = 200 \text{ mA}$	$V_F$			1.20	V
Power Dissipation	$T_{amb} \leq 50^\circ\text{C}$	$P_D$			1000	mW
Thermal resistance junction to ambient	$I=9.5\text{mm}(3/8")$ TL=constant	$R_{\theta JA}$		100		K/W
Operating junction temperature range		$T_J$	-55		+150	°C
Storage temperature range		$T_{STG}$	-65		+175	°C

**DL4728A THRU DL4764A****Electrical characteristics** (at  $T_A=25^\circ\text{C}$  unless otherwise noted)

Part No.	Zener voltage			Test current	Zener impedance		Leakage current		
	$V_z @ I_{zT}$ (Volts)				$I_{zT}$	$Z_{zT} @ I_{zT}$	$Z_{zK} @ I_{zK}$	$I_{zK}$	$I_R$
	Min.	Nom.	Max.	mA	( $\Omega$ )Max	( $\Omega$ )Max	mA	( $\mu\text{A}$ )Max	Volts
DL4728A	3.14	3.3	3.47	76	10	400	1.00	100	1.0
DL4729A	3.42	3.6	3.78	69	10	400	1.00	100	1.0
DL4730A	3.71	3.9	4.10	64	9	400	1.00	50	1.0
DL4731A	4.09	4.3	4.52	58	9	400	1.00	10	1.0
DL4732A	4.47	4.7	4.94	53	8	500	1.00	10	1.0
DL4733A	4.85	5.1	5.36	49	7	550	1.00	10	1.0
DL4734A	5.32	5.6	5.88	45	5	600	1.00	10	2.0
DL4735A	5.89	6.2	6.51	41	2	700	1.00	10	3.0
DL4736A	6.46	6.8	7.14	37	3.5	700	1.00	10	4.0
DL4737A	7.13	7.5	7.88	34	4.0	700	0.50	10	5.0
DL4738A	7.79	8.2	8.61	31	4.5	700	0.50	10	6.0
DL4739A	8.65	9.1	9.56	28	5	700	0.50	10	7.0
DL4740A	9.50	10	10.5	25	7	700	0.25	10	7.6
DL4741A	10.45	11	11.55	23	8	700	0.25	5	8.4
DL4742A	11.40	12	12.60	21	9	700	0.25	5	9.1
DL4743A	12.35	13	13.65	19	10	700	0.25	5	9.9
DL4744A	14.25	15	15.75	17	14	700	0.25	5	11.4
DL4745A	15.20	16	16.80	15.5	16	700	0.25	5	12.2
DL4746A	17.10	18	18.90	14	20	750	0.25	5	13.7
DL4747A	19.00	20	21.00	12.5	22	750	0.25	5	15.2
DL4748A	20.90	22	23.10	11.5	23	750	0.25	5	16.7
DL4749A	22.80	24	25.20	10.5	25	750	0.25	5	18.2
DL4750A	25.65	27	28.35	9.5	35	750	0.25	5	20.6
DL4751A	28.50	30	31.50	8.5	40	1000	0.25	5	22.8
DL4752A	31.35	33	34.65	7.5	45	1000	0.25	5	25.4
DL4753A	34.20	36	37.80	7.0	50	1000	0.25	5	27.4
DL4754A	37.05	39	40.95	6.5	60	1000	0.25	5	29.7
DL4755A	40.85	43	45.15	6.0	70	1500	0.25	5	32.7
DL4756A	44.65	47	49.35	5.5	80	1500	0.25	5	35.8
DL4757A	48.45	51	53.55	5.0	95	1500	0.25	5	38.8
DL4758A	53.20	56	58.80	4.5	110	2000	0.25	5	42.6
DL4759A	58.90	62	65.10	4.0	125	2000	0.25	5	47.1
DL4760A	64.60	68	71.40	3.7	150	2000	0.25	5	51.7
DL4761A	71.25	75	78.75	3.3	175	2000	0.25	5	56.0
DL4762A	77.90	82	86.10	3.0	200	3000	0.25	5	62.2
DL4763A	86.50	91	95.60	2.8	250	3000	0.25	5	69.2
DL4764A	100.0	95	105.0	2.5	105	3000	0.25	5	76.0

Note : 5% tolerance of Zener voltage



## Rating and characteristic curves (DL4728A THRU DL4764A)

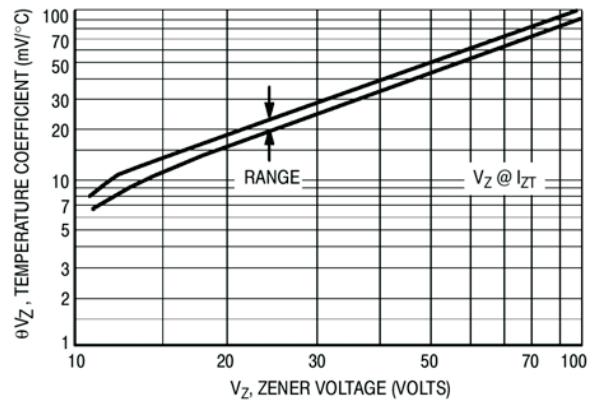
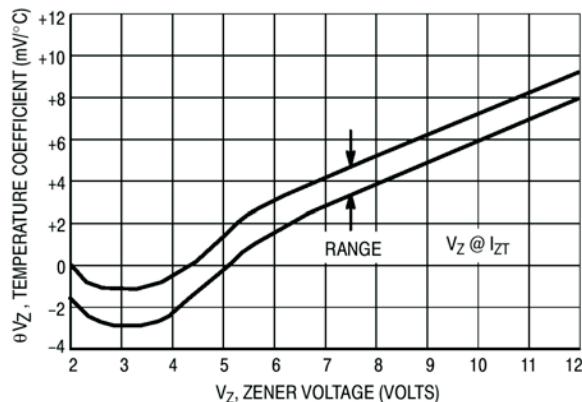


Figure 1. Temperature coefficients  
( $-55^{\circ}\text{C}$  to  $+150^{\circ}\text{C}$  temperature range; 90% of the units are in the ranges indicated)

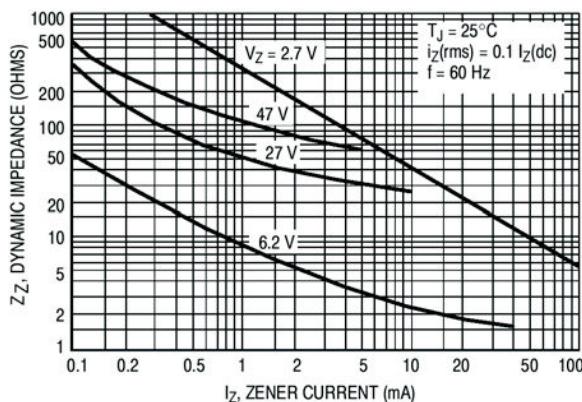


Figure 3. Effect of zener current on zener impedance

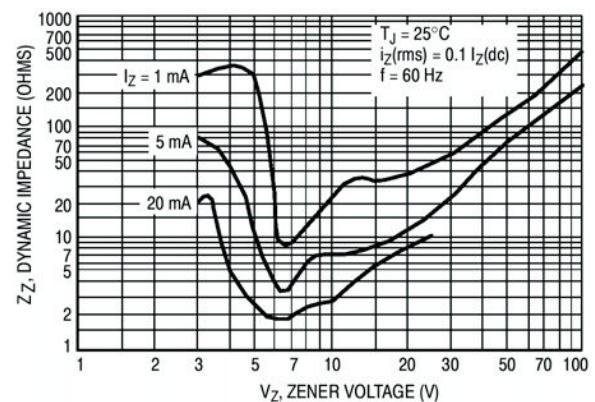
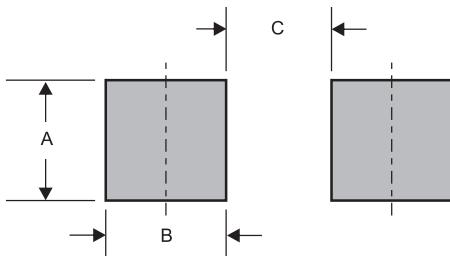


Figure 4. Effect of zener voltage on zener impedance

**DL4728A THRU DL4764A****Pinning information**

Pin	Simplified outline	Symbol
Pin1 cathode Pin2 anode		

**Suggested solder pad layout**

Dimensions in inches and (millimeters)

PACKAGE	A	B	C
DL-41G	0.118 (3.00)	0.079 (2.00)	0.130 (3.30)

**Reel packing**

PACKAGE	REEL SIZE	REEL (pcs)	COMPONENT SPACING (m/m)	BOX (pcs)	INNER BOX (m/m)	REEL DIA. (m/m)	CARTON SIZE (m/m)	CARTON (pcs)	APPROX. GROSS WEIGHT (kg)
DL-41G	13"	5000	4.0	10,000	337*337*37	330	350*330*360	80,000	19.5