

<p><b>ZENER DIODE</b></p> <p><b>FEATURES</b></p> <ul style="list-style-type: none"> <li>● High reliability</li> <li>● Very sharp reverse characteristic</li> <li>● Low reverse current level</li> <li>● Vz-tolerance±5%</li> </ul> <p><b>APPLICATIONS</b></p> <ul style="list-style-type: none"> <li>● Voltage stabilization</li> </ul>	<p>REVERSE VOLTAGE - 4.3 to 100 Volts</p> <p><b>DL - 41</b></p> <p style="text-align: center;">Dimensions in inches and (millimeters)</p>
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**ABSOLUTE MAXIMUM RATINGS**

T<sub>J</sub>=25°C

Parameter	Test Conditions	Type	Symbol	Value	Unit
Power dissipation	T <sub>amb</sub> ≤ 50°C		P <sub>v</sub>	1	W
Z-current			I <sub>z</sub>	P <sub>v</sub> /V <sub>z</sub>	mA
Junction temperature			T <sub>j</sub>	200	°C
Storage temperature range			T <sub>stg</sub>	-55 ~ +175	°C

**MAXIMUM THERMAL RESISTANCE**

T<sub>J</sub>=25°C

Parameter	Test Conditions	Symbol	Value	Unit
Junction ambient	l=9.5mm(3/8") TL=constant	R <sub>thJA</sub>	100	K/W

**ELECTRICAL CHARACTERISTICS**

T<sub>J</sub>=25°C

Parameter	Test Conditions	Type	Symbol	Min	Typ	Max	Unit
Forward voltage	I <sub>F</sub> =200mA		V <sub>F</sub>			1.2	V



Symbol	Parameter
V <sub>Z</sub>	Reverse Zener Voltage @ I <sub>ZT</sub>
I <sub>ZT</sub>	Reverse current
Z <sub>ZT</sub>	Maximum zener impedance @ I <sub>ZT</sub>
I <sub>ZK</sub>	Rever current
Z <sub>ZK</sub>	Maximum zener impedance @ I <sub>Zk</sub>
I <sub>R</sub>	Reverse leakage current @ V <sub>R</sub>
V <sub>R</sub>	Breakdown voltage
I <sub>F</sub>	Forward current
V <sub>F</sub>	Forward voltage @ I <sub>F</sub>

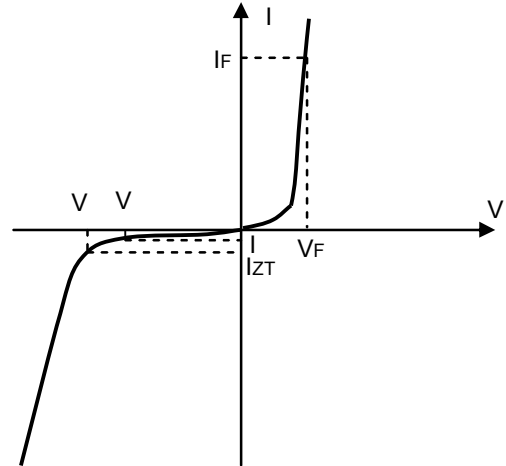


FIG. 1 - ZENER VOLTAGE REGULATOR

FIG. 2 - TEMPERATURE COEFFICIENTS  
 (-55°C to +150°C temperature; 90% of the units are in the ranges indicated.)

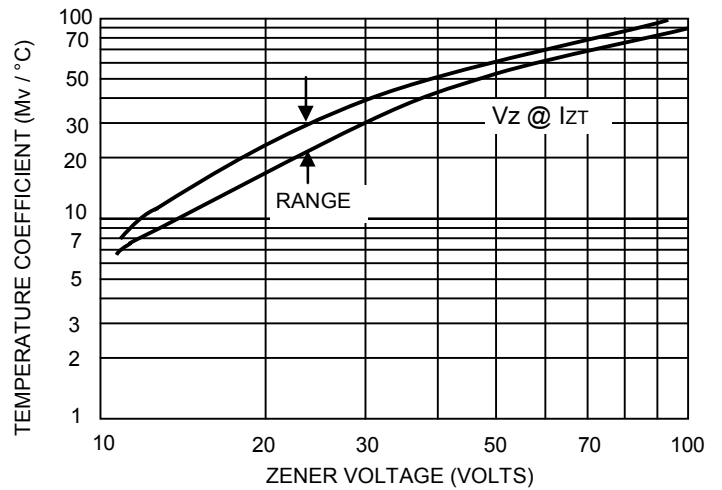
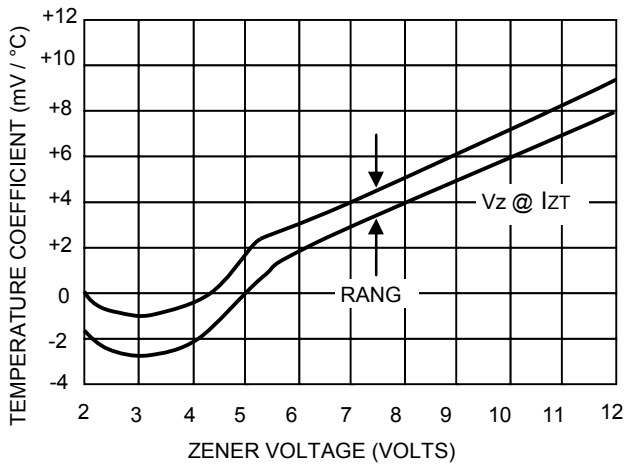
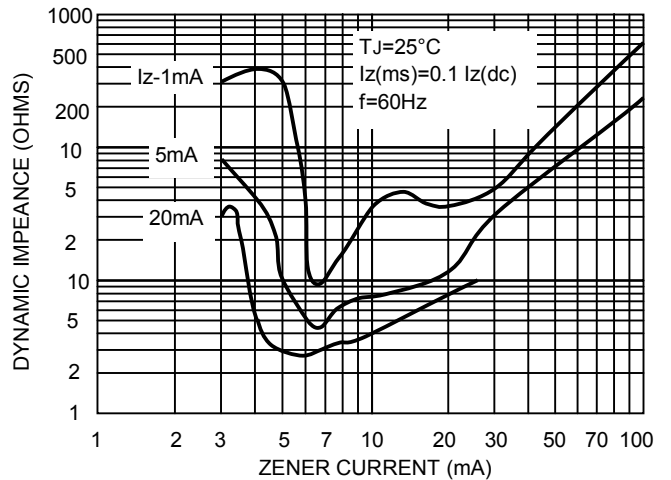
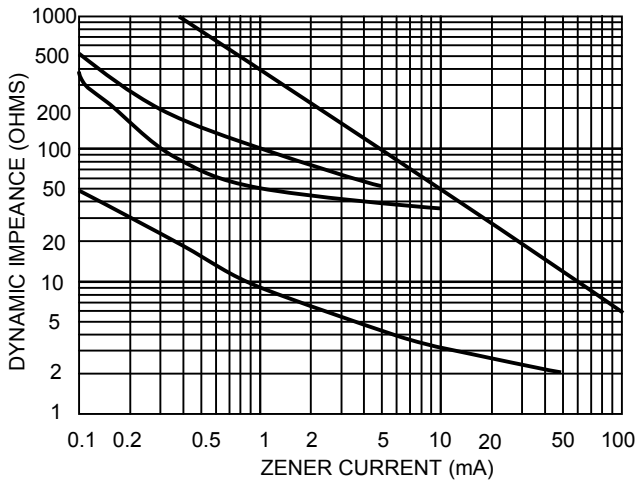


FIG. 3 - EFFECT OF ZENER CURRENT ON ZENER IMPEDANCE

FIG. 4 - EFFECT OF ZENER CURRENT ON ZENER IMPEDANCE





# DL4731A thru DL4764A

1W ZENER DIODES/DO-35/DL-41(MELF)

OPERATING AND STORAGE TEMPERATURE -55°C to +200°C

TYPE	Zener Nominal Voltage $V_Z @ I_{ZT}$	Test Current $I_{ZT}$	Maximum Zener Impedance		$I_{ZK}$	Maximum Reverse Leakage Current		Maximum Surge Current $I_R$	Maximum Regulation Current $I_{ZM}$
			$Z_{ZT} @ I_{ZT}$	$Z_{ZT} @ I_{ZK}$		$I_R$	@ $V_R$		
	Volts	mA	Ohms	Ohms	mA	$\mu A$	Volts	mA	mA
DL4731A	4.3	58.0	9.0	400	1.00	10	1.0	1085	217
DL4732A	4.7	53.0	8.0	500	1.00	10	1.0	965	193
DL4733A	5.1	49.0	7.0	550	1.00	10	1.0	890	178
DL4734A	5.6	45.0	5.0	600	1.00	10	2.0	810	162
DL4735A	6.2	41.0	2.0	700	1.00	10	3.0	730	146
DL4736A	6.8	37.0	3.5	700	1.00	10	4.0	660	133
DL4737A	7.5	34.0	4.0	700	0.50	10	5.0	605	121
DL4738A	8.2	31.0	4.5	700	0.50	10	6.0	550	110
DL4739A	9.1	28.0	5.0	700	0.50	10	7.0	500	100
DL4740A	10	25.0	7.0	700	0.25	10	7.6	454	91
DL4741A	11	23.0	8.0	700	0.25	5.0	8.4	414	83
DL4742A	12	21.0	9.0	700	0.25	5.0	9.1	380	76
DL4743A	13	19.0	10	700	0.25	5.0	9.9	344	69
DL4744A	15	17.0	14	700	0.25	5.0	11.4	304	61
DL4745A	16	15.5	16	700	0.25	5.0	12.2	285	57
DL4746A	18	14.0	20	750	0.25	5.0	13.7	250	50
DL4747A	20	12.5	22	750	0.25	5.0	15.2	225	45
DL4748A	22	11.5	23	750	0.25	5.0	16.7	205	41
DL4749A	24	10.5	25	750	0.25	5.0	18.2	190	37
DL4750A	27	9.5	35	750	0.25	5.0	20.6	170	34
DL4751A	30	8.5	40	1000	0.25	5.0	22.8	150	30
DL4752A	33	7.5	45	1000	0.25	5.0	25.1	135	27
DL4753A	36	7.0	50	1000	0.25	5.0	27.4	125	25
DL4754A	39	6.5	60	1000	0.25	5.0	29.7	115	23
DL4755A	43	6.0	70	1500	0.25	5.0	32.7	110	22
DL4756A	47	5.5	80	1500	0.25	5.0	35.8	95	16
DL4757A	51	5.0	95	1500	0.25	5.0	38.8	90	18
DL4758A	56	4.5	110	2000	0.25	5.0	42.6	80	16
DL4759A	63	4.0	125	2000	0.25	5.0	47.1	70	14
DL4760A	68	3.7	150	2000	0.25	5.0	51.7	65	13
DL4761A	75	3.3	175	2000	0.25	5.0	56.0	60	12
DL4762A	82	3.0	200	2000	0.25	5.0	62.2	55	11
DL4763A	91	2.8	250	2000	0.25	5.0	69.2	50	10
DL4764A	100	2.5	350	2000	0.25	5.0	76.0	45	9.0

NOTE:1."DL" Indicates Melf Package.

2.Suffix "A" Indicates  $\pm 5\%$  Tolerance.