

## Surface Mount Zener Diodes

**(Pb)** Lead(Pb)-Free

### Features:

- \* High Reliability
- \* Very Sharp Reverse Characteristic
- \* Low Reverse Current Level
- \*  $V_Z$ -Tolerance  $\pm 5\%$

### Applications:

- \* Voltage Stabilization

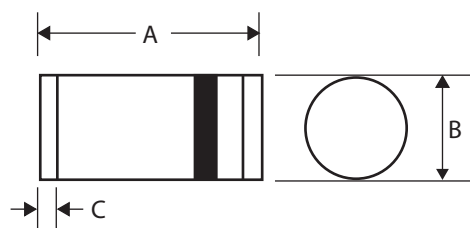
**SMALL SIGNAL  
ZENER DIODES  
1.0 WATTS**



**MELF**

## MELF Outline Dimensions

Unit: mm



MELF		
Dim	Min	Max
A	4.80	5.20
B	2.40	2.67
C	0.46	0.60

**Absolute Maximum Ratings** ( $T_j=25^\circ\text{C}$ )

Parameter	Symbol	Value	Unit
Power dissipation $T_{\text{amb}} \leq 50^\circ\text{C}$	$P_V$	1	W
Z-current	$I_Z$	$P_V/V_Z$	mA
Junction temperature	$T_j$	200	$^\circ\text{C}$
Storage temperature range	$T_{\text{stg}}$	-65~+175	$^\circ\text{C}$

**Maximum Thermal Resistance** ( $T_j=25^\circ\text{C}$ )

Parameter	Symbol	Value	Unit
Junction ambient $l=9.5\text{mm (3/8") } T_L=\text{constant}$	$R_{\theta JA}$	100	K/W

**Electrical Characteristics** ( $T_j=25^\circ\text{C}$ )

Parameter	Symbol	Min	Typ	Max	Unit
Forward voltage $I_F=200\text{mA}$	$V_F$	-	-	1.2	V

Type	$V_{Znom}^{1)}$	$I_{ZT}$ mA	for	$r_{zT}$ $\Omega$	$r_{zK}$ $\Omega$	at	$I_{ZK}$ mA	$I_R$ $\mu A$	at	$V_R$ V
	V									
DL4728A	3.3	76		<10	<400		1	<100		1
DL4729A	3.6	69		<10	<400		1	<100		1
DL4730A	3.9	64		<9	<400		1	<50		1
DL4731A	4.3	58		<9	<400		1	<10		1
DL4732A	4.7	53		<8	<500		1	<10		1
DL4733A	5.1	49		<7	<550		1	<10		1
DL4734A	5.6	45		<5	<600		1	<10		2
DL4735A	6.2	41		<2	<700		1	<10		3
DL4736A	6.8	37		<3.5	<700		1	<10		4
DL4737A	7.5	34		<4.0	<700		0.5	<10		5
DL4738A	8.2	31		<4.5	<700		0.5	<10		6
DL4739A	9.1	28		<5.0	<700		0.5	<10		7
DL4740A	10	25		<7	<700		0.25	<10		7.6
DL4741A	11	23		<8	<700		0.25	<5		8.4
DL4742A	12	21		<9	<700		0.25	<5		9.1
DL4743A	13	19		<10	<700		0.25	<5		9.9
DL4744A	15	17		<14	<700		0.25	<5		11.4
DL4745A	16	15.5		<16	<700		0.25	<5		12.2
DL4746A	18	14		<20	<750		0.25	<5		13.7
DL4747A	20	12.5		<22	<750		0.25	<5		15.2
DL4748A	22	11.5		<23	<750		0.25	<5		16.7
DL4749A	24	10.5		<25	<750		0.25	<5		18.2
DL4750A	27	9.5		<35	<750		0.25	<5		20.6
DL4751A	30	8.5		<40	<1000		0.25	<5		22.8
DL4752A	33	7.5		<45	<1000		0.25	<5		25.1
DL4753A	36	7.0		<50	<1000		0.25	<5		27.4
DL4754A	39	6.5		<60	<1000		0.25	<5		29.7
DL4755A	43	6.0		<70	<1500		0.25	<5		32.7
DL4756A	47	5.5		<80	<1500		0.25	<5		35.8
DL4757A	51	5.0		<95	<1500		0.25	<5		38.8
DL4758A	56	4.5		<110	<2000		0.25	<5		42.6
DL4759A	62	4.0		<125	<2000		0.25	<5		47.1
DL4760A	68	3.7		<150	<2000		0.25	<5		51.7
DL4761A	75	3.3		<175	<2000		0.25	<5		56

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

2) Suffix "A" For  $\pm 5\%$ .