

**SURFACE MOUNT M.E.L.F  
ZENER DIODE**

**FEATURES**

- \* Through-Hole Device Type Mounting
- \* Hermetically Sealed Glass
- \* Compression Bonded Construction
- \* All external surfaces are corrosion resistant and leads are readily solderable

**MECHANICAL DATA**

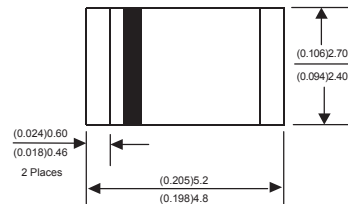
- \* Package : LL-41 (MELF)
- \* Case : Hermetically Sealed Glass
- \* Lead : Tin

**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

Ratings at 25 °C ambient temperature unless otherwise specified.  
Single phase, half wave, 60Hz, resistive or inductive load.  
For capacitive load, derate current by 20%.



**LL-41**



Dimensions in inches and (millimeters)

**MAXIMUM RATINGS ( @ TA = 25°C unless otherwise noted )**

CHARACTERISTICS	SYMBOL	Ratings	UNITS
Power Dissipation	PTOT	1	W
Thermal Resis	R <sub>th</sub> JA	170	K / W
Tolerance	-	5	%
Forward Voltage@I <sub>f</sub> = 100mA	V <sub>f</sub>	1.0	V
Junction Temp	T <sub>J</sub>	200	°C
Storage Temp	T <sub>stg</sub>	-65 to 200	°C

**ELECTRICAL CHARACTERISTICS ( @ TA = 25°C unless otherwise noted )**

TYPE	ZENER VOLTAGE		MAX ZENER IMPEDANCE @I <sub>ZT</sub>		MAX ZENER IMPEDANCE @I <sub>ZK</sub>		MAXIMUM REVERSE CURRENT		MAXIMUM REGULATOR CURRENT
	V <sub>Z</sub> (V)	I <sub>ZT</sub> (mA)	Z <sub>ZT</sub> (Ω)	I <sub>ZT</sub> (mA)	Z <sub>ZK</sub> (Ω)	I <sub>ZK</sub> (mA)	V <sub>R</sub> (V)	I <sub>R</sub> (μA)	I <sub>ZM</sub> (mA)
DL4728A	3.3	76	10	76	400	1.0	1.0	100	276
DL4729A	3.6	69	10	69	400	1.0	1.0	100	252
DL4730A	3.9	64	9	64	400	1.0	1.0	50	234
DL4731A	4.3	58	9	58	400	1.0	1.0	10	217
DL4732A	4.7	53	8	53	500	1.0	1.0	10	193
DL4733A	5.1	49	7	49	550	1.0	1.0	10	178
DL4734A	5.6	45	5	45	600	1.0	2.0	10	162
DL4735A	6.2	41	2	41	700	1.0	3.0	10	146
DL4736A	6.8	37	3.5	37	700	1.0	4.0	10	133
DL4737A	7.5	34	4	34	700	0.5	5.0	10	121
DL4738A	8.2	31	4.5	31	700	0.5	6.0	10	110
DL4739A	9.1	28	5	28	700	0.5	7.0	10	100

ELECTRICAL CHARACTERISTICS ( @ TA = 25°C unless otherwise noted )

TYPE	ZENER VOLTAGE		MAX ZENER IMPEDANCE @IzT		MAX ZENER IMPEDANCE @Izk		MAX IMUM REVERSE CURRENT		MAX IMUM REGULATOR CURRENT
	Vz(V)	Izt(mA)	ZzT( $\Omega$ )	IzT(mA)	Zzk( $\Omega$ )	Izk(mA)	VR(V)	IR( $\mu$ A)	IzM(mA)
DL4740A	10	25	7	25	700	0.25	7.6	10	91
DL4741A	11	23	8	23	700	0.25	8.4	5	83
DL4742A	12	21	9	21	700	1.0	9.1	5	76
DL4743A	13	19	10	19	700	1.0	9.9	5	69
DL4744A	15	17	14	17	700	1.0	11.4	5	61
DL4745A	16	15.5	16	15.5	700	1.0	12.2	5	57
DL4746A	18	14	20	14	750	1.0	13.7	5	50
DL4747A	20	12.5	22	12.5	750	1.0	15.2	5	45
DL4748A	22	11.5	23	11.5	750	1.0	16.7	5	41
DL4749A	24	10.5	25	10.5	750	1.0	18.2	5	38
DL4750A	27	9.5	35	9.5	750	1.0	20.6	5	34
DL4751A	30	8.5	40	8.5	1000	0.5	22.8	5	30
DL4752A	33	7.5	45	7.5	1000	0.5	25.1	5	27
DL4753A	36	7.0	50	7.0	1000	0.5	27.4	5	25
DL4754A	39	6.5	60	6.5	1000	0.25	29.7	5	23
DL4755A	43	6.0	70	6.0	1500	0.25	32.7	5	22
DL4756A	47	5.5	80	5.5	1500	0.25	35.8	5	19
DL4757A	51	5.0	95	5.0	1500	0.25	38.8	5	18
DL4758A	56	4.5	110	4.5	2000	0.25	42.6	5	16
DL4759A	62	4.0	125	4.0	2000	0.25	47.1	5	14
DL4760A	68	3.7	150	3.7	2000	0.25	51.7	5	13
DL4761A	75	3.3	175	3.3	2000	0.25	56.0	5	12
DL4762A	82	3.0	200	3.0	3000	0.25	62.2	5	11
DL4763A	91	2.8	250	2.8	3000	0.25	69.2	5	10
DL4764A	100	2.5	350	2.5	3000	0.25	76.0	5	9

Note : "Fully ROHS compliant", "100% Sn plating (Pb-free)".

2008-02



## RATING AND CHARACTERISTICS CURVES ( DL4728A THRU DL4764A )

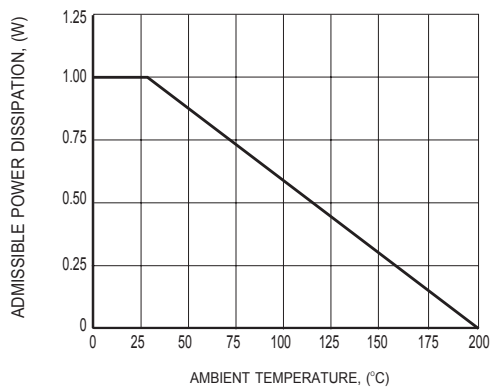


FIG.1 ADMISSIBLE POWER DISSIPATION vs. AMBIENT TEMPERATURE

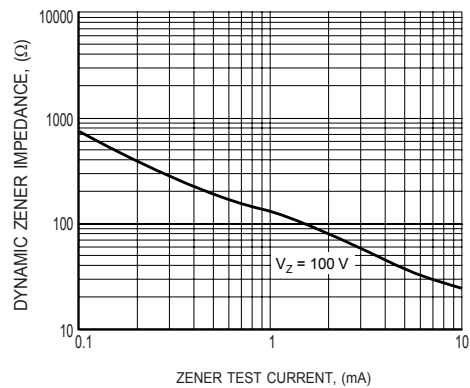


FIG.2 TYPICAL ZENER IMPEDANCE

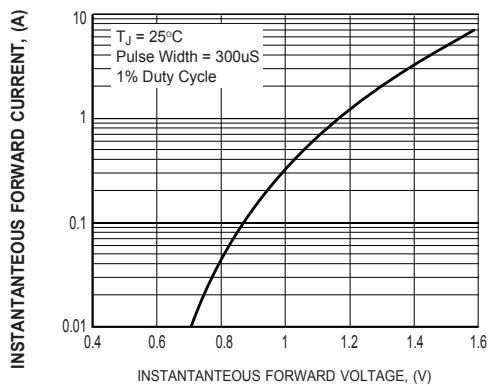


FIG.3 TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

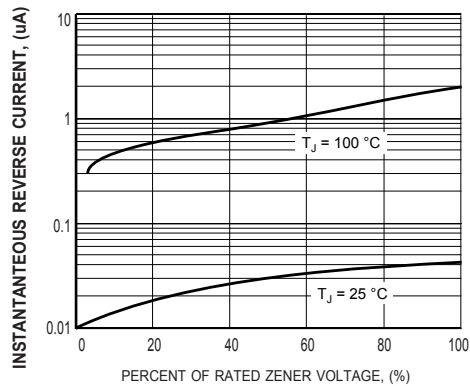


FIG.4 TYPICAL REVERSE CHARACTERISTICS

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