RECTRON SEMICONDUCTOR
TECHNICAL SPECIFICATION

DL4728A THRU DL4764A

SURFACE MOUNT M.E.L.F ZENER DIODE

FEATURES

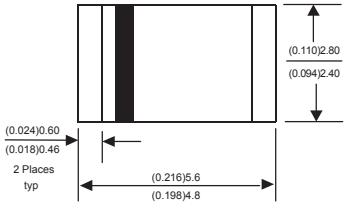
* Through-Hole Device Type Mounting
* Hermetically Sealed Glass
* Compression Bonded Construction
* All external surfaces are corrosion resistant and leads are readily solderable

MECHANICAL DATA

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



LL-41



Dimensions in inches and (millimeters)

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%.

MAXIMUN RATINGS (@ T_A = 25°C unless otherwise noted)

CHARACTERISTICS	SYMBOL	Ratings	UNITS
Power Dissipation	P_{TOT}	1	W
Thermal Resis	$R_{th}JA$	170	K / W
Tolarance	-	5	%
Forward Voltage@If = 100mA	Vf	1.0	V
Junction Temp	T_J	200	°C
Storage Temp	T_{stg}	-65 to 200	°C

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

TYPE	ZENER VOLTAGE		MAX ZENER IMPEDANCE @I_{ZT}		MAX ZENER IMPEDANCE @Izk		MAX IMUM REVERSE CURRENT		MAX IMUM REGULATOR CURRENT
	Vz(V)	Izt(mA)	$Z_{ZT}(\Omega)$	I_{ZT}(mA)	$Z_{ZK}(\Omega)$	I_{ZK}(mA)	V_R(V)	I_R(uA)	I_{ZM}(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 (@ T_A = 25°C unless otherwise noted)

TYPE	ZENER VOLTAGE		MAX ZENER IMPEDANCE @I_{ZT}		MAX ZENER IMPEDANCE @I_{ZK}		MAX IMUM REVERSE CURRENT		MAX IMUM REGULATOR CURRENT
	V_Z(V)	I_{ZT}(mA)	Z_{ZT}(Ω)	I_{ZT}(mA)	Z_{ZK}(Ω)	I_{ZK}(mA)	V_R(V)	I_R(uA)	I_{ZM}(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)".

2009-02

RATING AND CHARACTERISTICS CURVES (DL4728A THRU DL4764A)

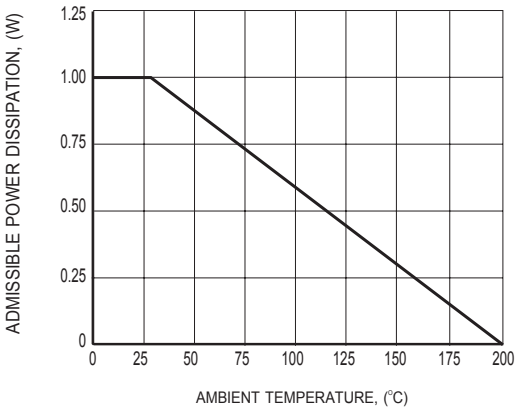


FIG.1 ADMISSIBLE POWER DISSIPATION vs. AMBIENT TEMPERATURE

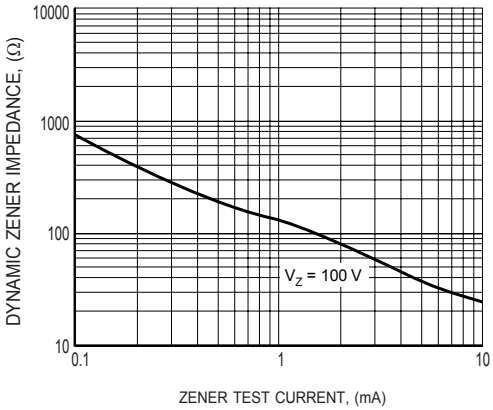


FIG.2 TYPICAL ZENER IMPEDANCE

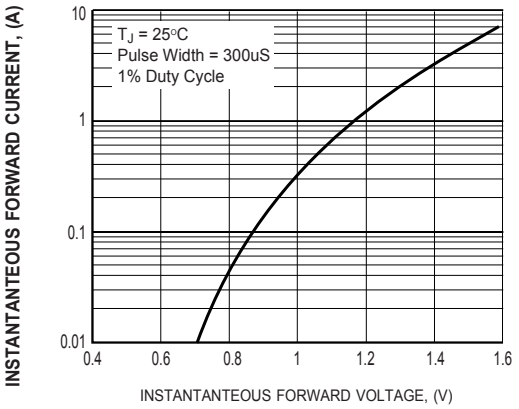


FIG.3 TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

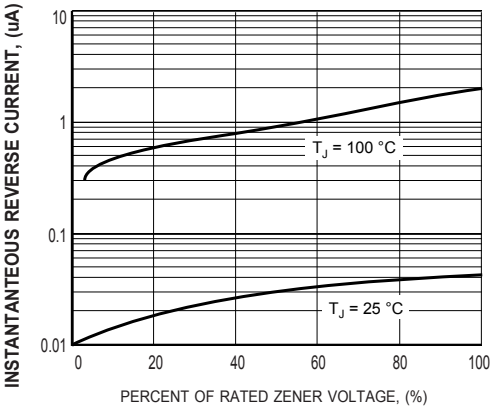


FIG.4 TYPICAL REVERSE CHARACTERISTICS

DISCLAIMER NOTICE

Rectron Inc reserves the right to make changes without notice to any product specification herein, to make corrections, modifications, enhancements or other changes. Rectron Inc or anyone on its behalf assumes no responsibility or liability for any errors or inaccuracies. Data sheet specifications and its information contained are intended to provide a product description only. "Typical" parameters which may be included on RECTRON data sheets and/ or specifications can and do vary in different applications and actual performance may vary over time. Rectron Inc does not assume any liability arising out of the application or use of any product or circuit.

Rectron products are not designed, intended or authorized for use in medical, life-saving implant or other applications intended for life-sustaining or other related applications where a failure or malfunction of component or circuitry may directly or indirectly cause injury or threaten a life without expressed written approval of Rectron Inc. Customers using or selling Rectron components for use in such applications do so at their own risk and shall agree to fully indemnify Rectron Inc and its subsidiaries harmless against all claims, damages and expenditures.