

LSH2 Series THRU LSH36 Series

Features

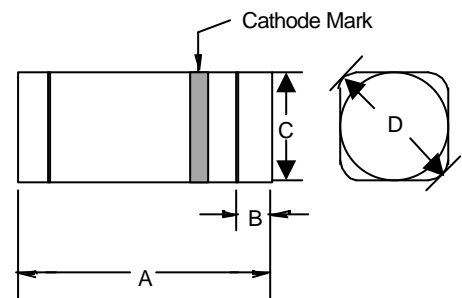
- Low Leakage
- Low Zener Impedance
- High Reliability

**500 mW
Zener Diode
1.9 to 37.2 Volts**

Maximum Ratings

Symbol	Rating	Rating	Unit
P_b	Power dissipation	500	W
T_j	Junction Temperature	-55 to +175	°C
T_{STG}	Storage Temperature Range	-55 to +175	°C

Quadro MELF



DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.130	.146	3.30	3.70	
B	.008	.016	.20	.40	
C	.055	.063	1.40	1.60	∅
D	.067		1.70		

SUGGESTED SOLDER PAD LAYOUT

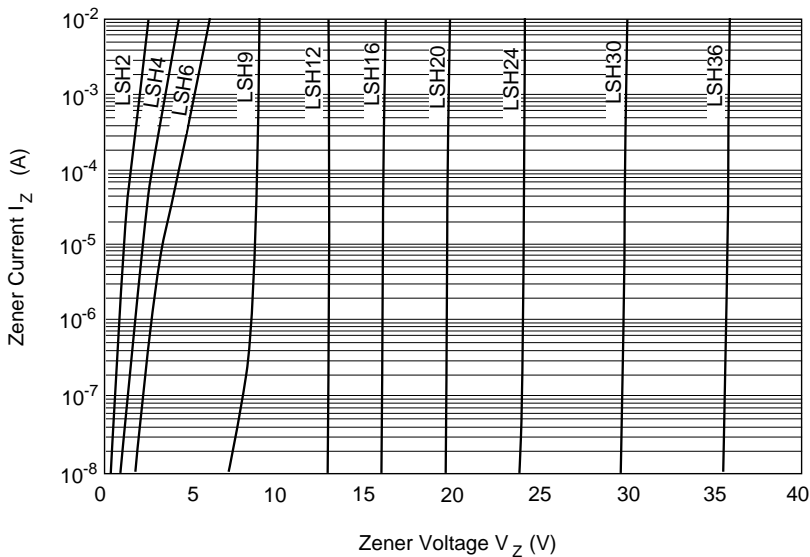
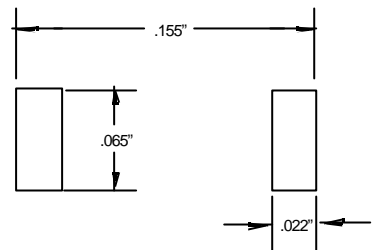


Fig.1 Zener current Vs. Zener voltage

LSH2 Series thru LSH36 Series

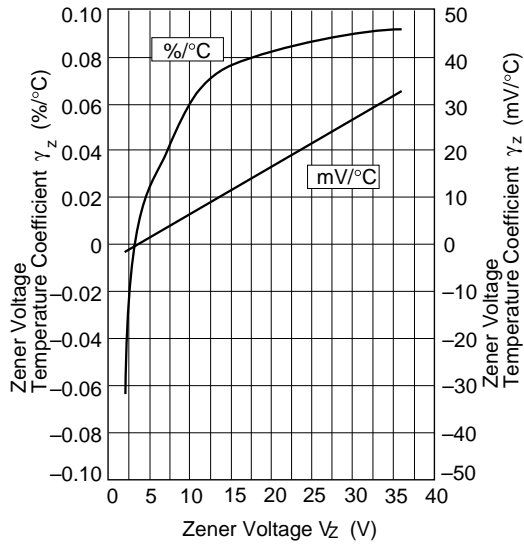


Fig.2 Temperature Coefficient Vs. Zener voltage

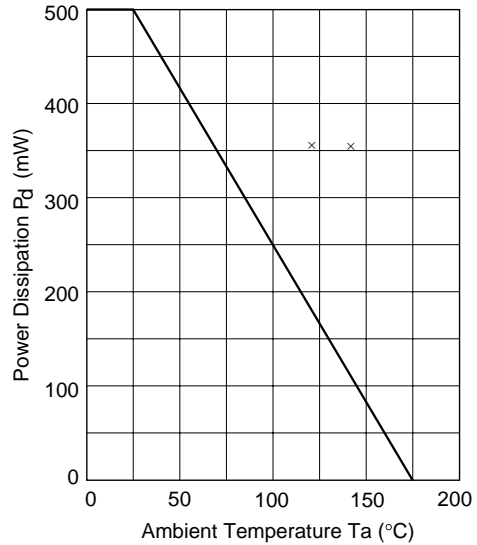


Fig.3 Power Dissipation Vs. Ambient Temperature

ELECTRICAL CHARACTERISTICS @25°C

MCC PART NUMBER		ZENER VOLTAGE V_z @ I_{zT} VOLTS		TEST CURRENT I_{zT}	Dynamic Resistance r_d (Max) I_z		REVERSE CURRENT I_R (Max) @ V_R	
Type	Grade	Min	Max	mA	OHMS	mA	μ A	VOLTS
LSH2	A3	1.8	2.0	5.0	100	5.0	25	0.5
	B1	1.9	2.1	5.0	100	5.0	5.0	0.5
	B2	2.0	2.2	5.0	100	5.0	5.0	0.5
	B3	2.1	2.3	5.0	100	5.0	5.0	0.5
	C1	2.2	2.4	5.0	100	5.0	5.0	0.5
	C2	2.3	2.5	5.0	100	5.0	5.0	0.5
LSH3	A1	2.5	2.7	5.0	100	5.0	5.0	0.5
	A2	2.6	2.8	5.0	100	5.0	5.0	0.5
	A3	2.7	2.9	5.0	100	5.0	5.0	0.5
	B1	2.8	3.0	5.0	100	5.0	5.0	0.5
	B2	2.9	3.1	5.0	100	5.0	5.0	0.5
	B3	3.0	3.2	5.0	100	5.0	5.0	0.5
LSH4	C1	3.1	3.3	5.0	100	5.0	5.0	0.5
	C2	3.2	3.4	5.0	100	5.0	5.0	0.5
	C3	3.3	3.5	5.0	100	5.0	5.0	0.5
	A1	3.4	3.6	5.0	100	5.0	5.0	1.0
	A2	3.5	3.7	5.0	100	5.0	5.0	1.0
	A3	3.6	3.8	5.0	100	5.0	5.0	1.0
LSH4	B1	3.7	3.9	5.0	100	5.0	5.0	1.0
	B2	3.8	4.0	5.0	100	5.0	5.0	1.0
	B3	3.9	4.1	5.0	100	5.0	5.0	1.0
	C1	4.0	4.2	5.0	100	5.0	5.0	1.0
	C2	4.1	4.3	5.0	100	5.0	5.0	1.0

ELECTRICAL CHARACTERISTICS @25°C

MCC PART NUMBER		ZENER VOLTAGE $V_Z @ I_{ZT}$ VOLTS		TEST CURRENT I_{ZT}	Dynamic Resistance r_d (Max) I_Z		REVERSE CURRENT I_R (Max) @ V_R	
Type	Grade	Min	Max	mA	OHMS	mA	μ A	VOLTS
LSH5	A1	4.3	4.5	5.0	100	5.0	5.0	1.5
	A2	4.4	4.6	5.0	100	5.0	5.0	1.5
	A3	4.5	4.7	5.0	100	5.0	5.0	1.5
	B1	4.6	4.8	5.0	100	5.0	5.0	1.5
	B2	4.7	4.9	5.0	100	5.0	5.0	1.5
	B3	4.8	5.0	5.0	100	5.0	5.0	1.5
	C1	4.9	5.1	5.0	100	5.0	5.0	1.5
	C2	5.0	5.2	5.0	100	5.0	5.0	1.5
	C3	5.1	5.3	5.0	100	5.0	5.0	1.5
LSH6	A1	5.2	5.5	5.0	40	5.0	5.0	2.0
	A2	5.3	5.6	5.0	40	5.0	5.0	2.0
	A3	5.4	5.7	5.0	40	5.0	5.0	2.0
	B1	5.5	5.8	5.0	40	5.0	5.0	2.0
	B2	5.6	5.9	5.0	40	5.0	5.0	2.0
	B3	5.7	6.0	5.0	40	5.0	5.0	2.0
	C1	5.8	6.1	5.0	40	5.0	5.0	2.0
	C2	6.0	6.3	5.0	40	5.0	5.0	2.0
	C3	6.1	6.4	5.0	40	5.0	5.0	2.0
LSH7	A1	6.3	6.6	5.0	15	5.0	1.0	3.5
	A2	6.4	6.7	5.0	15	5.0	1.0	3.5
	A3	6.6	6.9	5.0	15	5.0	1.0	3.5
	B1	6.7	7.0	5.0	15	5.0	1.0	3.5
	B2	6.9	7.2	5.0	15	5.0	1.0	3.5
	B3	7.0	7.3	5.0	15	5.0	1.0	3.5
	C1	7.2	7.6	5.0	15	5.0	1.0	3.5
	C2	7.3	7.7	5.0	15	5.0	1.0	3.5
	C3	7.5	7.9	5.0	15	5.0	1.0	3.5
LSH9	A1	7.7	8.1	5.0	20	5.0	1.0	5.0
	A2	7.9	8.3	5.0	20	5.0	1.0	5.0
	A3	8.1	8.5	5.0	20	5.0	1.0	5.0
	B1	8.3	8.7	5.0	20	5.0	1.0	5.0
	B2	8.5	8.9	5.0	20	5.0	1.0	5.0
	B3	8.7	9.1	5.0	20	5.0	1.0	5.0
	C1	8.9	9.3	5.0	20	5.0	1.0	5.0
	C2	9.1	9.5	5.0	20	5.0	1.0	5.0
	C3	9.3	9.7	5.0	20	5.0	1.0	5.0
LSH11	A1	9.5	9.9	5.0	25	5.0	1.0	7.5
	A2	9.7	10.1	5.0	25	5.0	1.0	7.5
	A3	9.9	10.3	5.0	25	5.0	1.0	7.5
	B1	10.2	10.6	5.0	25	5.0	1.0	7.5
	B2	10.4	10.8	5.0	25	5.0	1.0	7.5
	B3	10.7	11.1	5.0	25	5.0	1.0	7.5
	C1	10.9	11.3	5.0	25	5.0	1.0	7.5
	C2	11.1	11.6	5.0	25	5.0	1.0	7.5
	C3	11.4	11.9	5.0	25	5.0	1.0	7.5
LSH12	A1	11.6	12.1	5.0	35	5.0	1.0	9.5
	A2	11.9	12.4	5.0	35	5.0	1.0	9.5
	A3	12.2	12.7	5.0	35	5.0	1.0	9.5
	B1	12.4	12.9	5.0	35	5.0	1.0	9.5
	B2	12.6	13.1	5.0	35	5.0	1.0	9.5
	B3	12.9	13.4	5.0	35	5.0	1.0	9.5
	C1	13.2	13.7	5.0	35	5.0	1.0	9.5
	C2	13.5	14.0	5.0	35	5.0	1.0	9.5
	C3	13.8	14.3	5.0	35	5.0	1.0	9.5
LSH15	1	14.1	14.7	5.0	40	5.0	1.0	11
	2	14.5	15.1	5.0	40	5.0	1.0	11
	3	14.9	15.5	5.0	40	5.0	1.0	11
LSH16	1	15.3	15.9	5.0	45	5.0	1.0	12
	2	15.7	16.5	5.0	45	5.0	1.0	12
	3	16.3	17.1	5.0	45	5.0	1.0	12
LSH18	1	16.9	17.7	5.0	55	5.0	1.0	13
	2	17.5	18.3	5.0	55	5.0	1.0	13
	3	18.1	19.0	5.0	55	5.0	1.0	13
LSH20	1	18.8	19.7	2.0	60	2.0	1.0	15
	2	19.5	20.4	2.0	60	2.0	1.0	15
	3	20.2	21.1	2.0	60	2.0	1.0	15

LSH2 Series thru LSH36 Series

ELECTRICAL CHARACTERISTICS @25°C

MCC PART NUMBER		ZENER VOLTAGE $V_Z @ I_{ZT}$ VOLTS		TEST CURRENT I_{ZT}	Dynamic Resistance $r_d(\text{Max})$ I_Z		REVERSE CURRENT $I_R(\text{Max}) @ V_R$	
Type	Grade	Min	Max	mA	OHMS	mA	μA	VOLTS
LSH22	1	20.9	21.9	2.0	65	2.0	1.0	17
	2	21.6	22.6	2.0	65	2.0	1.0	17
	3	22.3	23.3	2.0	65	2.0	1.0	17
LSH24	1	22.9	24.0	2.0	70	2.0	1.0	19
	2	23.6	24.7	2.0	70	2.0	1.0	19
	3	24.3	25.5	2.0	70	2.0	1.0	19
LSH27	1	25.2	26.6	2.0	80	2.0	1.0	21.0
	2	26.2	27.6	2.0	80	2.0	1.0	21.0
	3	27.2	28.6	2.0	80	2.0	1.0	21.0
LSH30	1	28.2	29.6	2.0	100	2.0	1.0	23.0
	2	29.2	30.6	2.0	100	2.0	1.0	23.0
	3	30.2	31.6	2.0	100	2.0	1.0	23.0
LSH33	1	31.2	32.6	2.0	120	2.0	1.0	25.0
	2	32.2	33.6	2.0	120	2.0	1.0	25.0
	3	33.2	34.6	2.0	120	2.0	1.0	25.0
LSH36	1	34.2	35.7	2.0	140	2.0	1.0	27.0
	2	35.3	36.8	2.0	140	2.0	1.0	27.0
	3	36.4	38.0	2.0	140	2.0	1.0	27.0

