Formosa MS

LLZ Series

Features

1. Low leakage
2. High reliability

Applications

Voltage stabilization

Construction

Silicon epitaxial planar

Absolute Maximum Ratings

T_j=25℃

Parameter	Test Conditions	Type	Symbol	Value	Unit
Power dissipation	R_{thJA}≦300K/W		P_V	500	mW
Junction temperature			T_j	175	℃
Storage temperature range			T_{stg}	-65~+175	℃

Maximum Thermal Resistance

T_j=25℃

Parameter	Test Conditions	Symbol	Value	Unit
Junction ambient	on PC board 50mm×50mm×1.6mm	R_{thJA}	500	K/W

Stresses exceeding maximum ratings may damage the device. Maximum ratings are stress ratings only. Functional operation above the recommended operating conditions is not implied. Extended exposure to stresses above the recommended operating conditions may affect device reliability.

LLZ Series

Electrical Characteristics

T_j=25℃

Type	Zener voltage				Operating resistance		Rising operating resistance		Reverse current	
		Vz (V)			Zzt (Ω)		Zzk (Ω)		I_R (μA)	
	Rank	Min.	Max.	Iz (mA)	Max.	Iz (mA)	Max.	Iz (mA)	Max.	V_R (V)
LLZ 2.0	A	1.88	2.10	20	140	20	2000	1	120	0.5
	B	2.02	2.20							
LLZ 2.2	A	2.12	2.30	20	120	20	2000	1	120	0.7
	B	2.22	2.41							
LLZ 2.4	A	2.33	2.52	20	100	20	2000	1	120	1.0
	B	2.43	2.63							
LLZ 2.7	A	2.54	2.75	20	100	20	1000	1	120	1.0
	B	2.69	2.91							
LLZ 3.0	A	2.85	3.07	20	80	20	1000	1	50	1.0
	B	3.01	3.22							
LLZ 3.3	A	3.16	3.38	20	70	20	1000	1	20	1.0
	B	3.32	3.53							
LLZ 3.6	A	3.46	3.69	20	60	20	1000	1	10	1.0
	B	3.60	3.84							
LLZ 3.9	A	3.74	4.01	20	50	20	1000	1	5	1.0
	B	3.89	4.16							
LLZ 4.3	A	4.04	4.29	20	40	20	1000	1	5	1.0
	B	4.17	4.43							
	C	4.30	4.57							
LLZ 4.7	A	4.44	4.68	20	25	20	900	1	5	1.0
	B	4.55	4.80							
	C	4.68	4.93							
LLZ 5.1	A	4.81	5.07	20	20	20	800	1	5	1.5
	B	4.94	5.20							
	C	5.09	5.37							
LLZ 5.6	A	5.28	5.55	20	13	20	500	1	5	2.5
	B	5.45	5.73							
	C	5.61	5.91							
LLZ 6.2	A	5.78	6.09	20	10	20	300	1	5	3.0
	B	5.96	6.27							
	C	6.12	6.44							
LLZ 6.8	A	6.29	6.63	20	8	20	150	0.5	2	3.5
	B	6.49	6.83							
	C	6.66	7.01							
LLZ 7.5	A	6.85	7.22	20	8	20	120	0.5	0.5	4.0
	B	7.07	7.45							
	C	7.29	7.67							
LLZ 8.2	A	7.53	7.92	20	8	20	120	0.5	0.5	5.0
	B	7.78	8.19							
	C	8.03	8.45							
LLZ 9.1	A	8.29	8.73	20	8	20	120	0.5	0.5	6.0
	B	8.57	9.01							
	C	8.83	9.30							

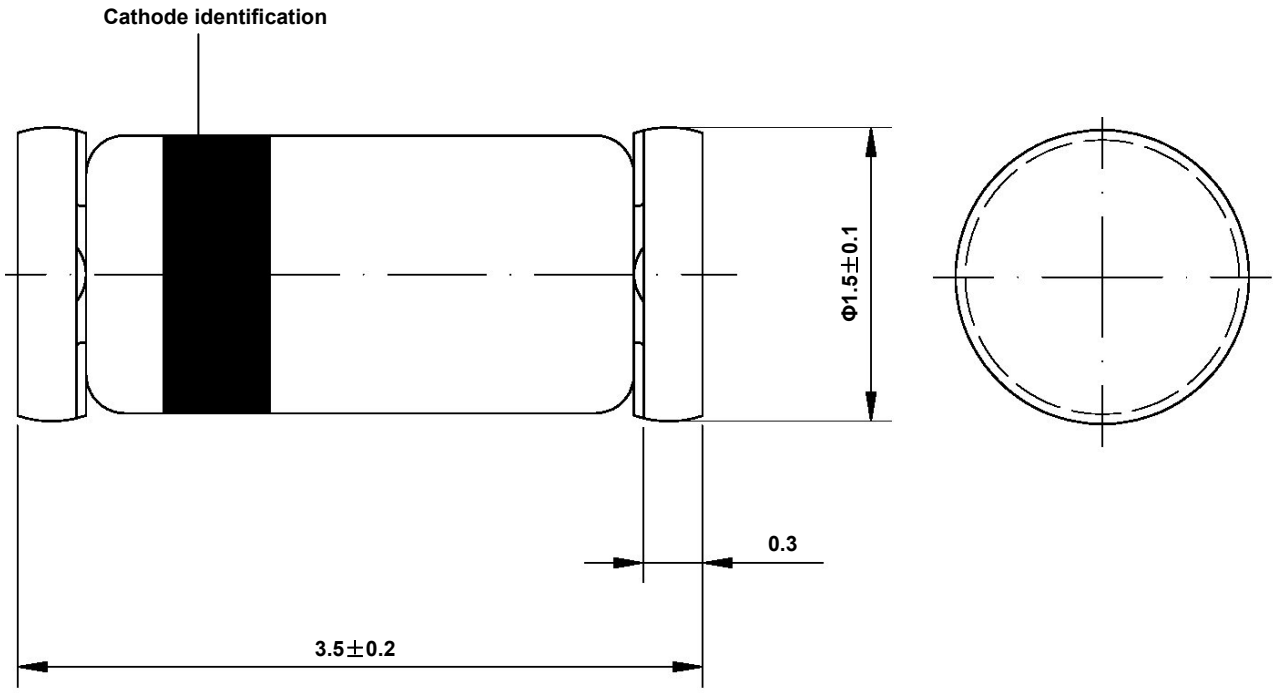
LLZ Series

Type	Zener voltage				Operating resistance		Rising operating resistance		Reverse current	
		Vz (V)			Zzt (Ω)		Zzk (Ω)		I_R (μA)	
	Rank	Min.	Max.	Iz (mA)	Max.	Iz (mA)	Max.	Iz (mA)	Max.	V_R (V)
LLZ 10	A	9.12	9.59	20	8	20	120	0.5	0.2	7.0
	B	9.41	9.90							
	C	9.70	10.20							
	D	9.94	10.44							
LLZ 11	A	10.18	10.71	10	10	10	120	0.5	0.2	8.0
	B	10.50	11.05							
	C	10.82	11.38							
LLZ 12	A	11.13	11.71	10	12	10	110	0.5	0.2	9.0
	B	11.44	12.03							
	C	11.74	12.35							
LLZ 13	A	12.11	12.75	10	14	10	110	0.5	0.2	10
	B	12.55	13.21							
	C	12.99	13.66							
LLZ 15	A	13.44	14.13	10	16	10	110	0.5	0.2	11
	B	13.89	14.62							
	C	14.35	15.09							
LLZ 16	A	14.80	15.57	10	18	10	150	0.5	0.2	12
	B	15.25	16.04							
	C	15.69	16.51							
LLZ 18	A	16.22	17.06	10	23	10	150	0.5	0.2	13
	B	16.82	17.70							
	C	17.42	18.33							
LLZ 20	A	18.20	18.96	10	28	10	200	0.5	0.2	15
	B	18.63	19.59							
	C	19.23	20.22							
	D	19.72	20.72							
LLZ 22	A	20.15	21.20	5	30	5	200	0.5	0.2	17
	B	20.64	21.71							
	C	21.08	22.17							
	D	21.52	22.63							
LLZ 24	A	22.05	23.18	5	35	5	200	0.5	0.2	19
	B	22.61	23.77							
	C	23.12	24.13							
	D	23.63	24.85							
LLZ 27	A	24.26	25.52	5	45	5	250	0.5	0.2	21
	B	24.97	26.26							
	C	25.63	26.95							
	D	26.29	27.64							
LLZ 30	A	26.99	28.39	5	55	5	250	0.5	0.2	23
	B	27.70	29.13							
	C	28.36	29.82							
	D	29.02	30.51							

LLZ Series

Type	LLZener voltage				Operating resistance		Rising operating resistance		Reverse current	
		Vz (V)			Zzt (Ω)		Zzk (Ω)		I_R (μA)	
	Rank	Min.	Max.	Iz (mA)	Max.	Iz (mA)	Max.	Iz (mA)	Max.	V_R (V)
LLZ 33	A	29.68	31.22	5	65	5	250	0.5	0.2	25
	B	30.32	31.88							
	C	30.90	32.50							
	D	31.49	33.11							
LLZ 36	A	32.14	33.79	5	75	5	250	0.5	0.2	27
	B	32.79	34.49							
	C	33.40	35.13							
	D	34.01	35.77							
LLZ 39	A	34.68	36.47	5	85	5	250	0.5	0.2	30
	B	35.36	37.19							
	C	36.00	37.85							
	D	36.63	38.52							

Dimensions in mm



Glass Case
Mini Melf / SOD-80
JEDEC DO-213 AA