RLZ Series

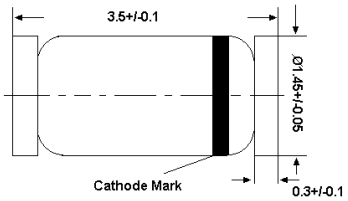
Silicon Epitaxial Planar Zener Diodes

Constant voltage control applications

Features

- Small surface mounting type
- High reliability

LL-34



Glass case MiniMELF
Dimensions in mm

Absolute Maximum Ratings (T_a = 25 °C)

Parameter	Symbol	Value	Unit
Power Dissipation	P_{tot}	500	mW
Junction Temperature	T_j	175	°C
Storage Temperature Range	T_{stg}	- 65 to + 175	°C

Characteristics at T_a = 25 °C (V_F = 1 V Max. at I_F = 100 mA)

Type	Zener Voltage [1]			Operating Resistance		Rising Operating Resistance		Reverse Current	
	V_Z		at I_{ZT}	Z_{ZT}	at I_{ZT}	Z_{ZK}	at I_{ZK}	I_R	at V_R
	Min. (V)	Max. (V)	(mA)	Max. (Ω)	(mA)	Max. (Ω)	(mA)	Max. (µA)	(V)
RLZ2V2A	2.12	2.3	20	120	20	2000	1	120	0.7
RLZ2V2B	2.22	2.41	20	120	20	2000	1	120	0.7
RLZ2V4A	2.33	2.52	20	100	20	2000	1	120	1
RLZ2V4B	2.43	2.63	20	100	20	2000	1	120	1
RLZ2V7A	2.54	2.75	20	100	20	1000	1	100	1
RLZ2V7B	2.69	2.91	20	100	20	1000	1	100	1
RLZ3V0A	2.85	3.07	20	80	20	1000	1	50	1
RLZ3V0B	3.01	3.22	20	80	20	1000	1	50	1
RLZ3V3A	3.16	3.38	20	70	20	1000	1	20	1
RLZ3V3B	3.32	3.53	20	70	20	1000	1	20	1
RLZ3V6	3.4	3.8	20	60	20	1000	1	10	1
RLZ3V6A	3.455	3.695	20	60	20	1000	1	10	1
RLZ3V6B	3.6	3.845	20	60	20	1000	1	10	1
RLZ3V9	3.7	4.1	20	50	20	1000	1	5	1
RLZ3V9A	3.74	4.01	20	50	20	1000	1	5	1
RLZ3V9B	3.89	4.16	20	50	20	1000	1	5	1
RLZ4V3	4	4.5	20	40	20	1000	1	5	1
RLZ4V3A	4.04	4.29	20	40	20	1000	1	5	1
RLZ4V3B	4.17	4.43	20	40	20	1000	1	5	1
RLZ4V3C	4.3	4.57	20	40	20	1000	1	5	1
RLZ4V7	4.4	4.9	20	25	20	900	1	5	1
RLZ4V7A	4.44	4.68	20	25	20	900	1	5	1
RLZ4V7B	4.55	4.8	20	25	20	900	1	5	1

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Characteristics at T_a = 25 °C (V_F = 1 V Max. at I_F = 100 mA)

Type	Zener Voltage [1]			Operating Resistance		Rising Operating Resistance		Reverse Current	
	V_Z		at I_{ZT}	Z_{ZT}	at I_{ZT}	Z_{ZK}	at I_{ZK}	I_R	at V_R
	Min. (V)	Max. (V)	(mA)	Max. (Ω)	(mA)	Max. (Ω)	(mA)	Max. (μA)	(V)
RLZ4V7C	4.68	4.93	20	25	20	900	1	5	1
RLZ5V1	4.8	5.4	20	20	20	800	1	5	1.5
RLZ5V1A	4.81	5.07	20	20	20	800	1	5	1.5
RLZ5V1B	4.94	5.2	20	20	20	800	1	5	1.5
RLZ5V1C	5.09	5.37	20	20	20	800	1	5	1.5
RLZ5V6	5.3	6	20	13	20	500	1	5	2.5
RLZ5V6A	5.28	5.55	20	13	20	500	1	5	2.5
RLZ5V6B	5.45	5.73	20	13	20	500	1	5	2.5
RLZ5V6C	5.61	5.91	20	13	20	500	1	5	2.5
RLZ6V2	5.8	6.6	20	10	20	300	1	5	3
RLZ6V2A	5.78	6.09	20	10	20	300	1	5	3
RLZ6V2B	5.96	6.27	20	10	20	300	1	5	3
RLZ6V2C	6.12	6.44	20	10	20	300	1	5	3
RLZ6V8	6.4	7.2	20	8	20	150	0.5	2	3.5
RLZ6V8A	6.29	6.63	20	8	20	150	0.5	2	3.5
RLZ6V8B	6.49	6.83	20	8	20	150	0.5	2	3.5
RLZ6V8C	6.66	7.01	20	8	20	150	0.5	2	3.5
RLZ7V5	7	7.9	20	8	20	120	0.5	0.5	4
RLZ7V5A	6.85	7.22	20	8	20	120	0.5	0.5	4
RLZ7V5B	7.07	7.45	20	8	20	120	0.5	0.5	4
RLZ7V5C	7.29	7.67	20	8	20	120	0.5	0.5	4
RLZ8V2	7.7	8.7	20	8	20	120	0.5	0.5	5
RLZ8V2A	7.53	7.92	20	8	20	120	0.5	0.5	5
RLZ8V2B	7.78	8.19	20	8	20	120	0.5	0.5	5
RLZ8V2C	8.03	8.45	20	8	20	120	0.5	0.5	5
RLZ9V1	8.5	9.6	20	8	20	120	0.5	0.5	6
RLZ9V1A	8.29	8.73	20	8	20	120	0.5	0.5	6
RLZ9V1B	8.57	9.01	20	8	20	120	0.5	0.5	6
RLZ9V1C	8.83	9.3	20	8	20	120	0.5	0.5	6
RLZ10	9.4	10.6	20	8	20	120	0.5	0.2	7
RLZ10A	9.12	9.59	20	8	20	120	0.5	0.2	7
RLZ10B	9.41	9.9	20	8	20	120	0.5	0.2	7
RLZ10C	9.7	10.2	20	8	20	120	0.5	0.2	7
RLZ10D	9.94	10.44	20	8	20	120	0.5	0.2	7
RLZ11	10.4	11.6	10	10	10	120	0.5	0.2	8
RLZ11A	10.18	10.71	10	10	10	120	0.5	0.2	8
RLZ11B	10.5	11.05	10	10	10	120	0.5	0.2	8
RLZ11C	10.82	11.38	10	10	10	120	0.5	0.2	8
RLZ12	11.4	12.6	10	12	10	110	0.5	0.2	9
RLZ12A	11.13	11.71	10	12	10	110	0.5	0.2	9
RLZ12B	11.44	12.03	10	12	10	110	0.5	0.2	9
RLZ12C	11.74	12.35	10	12	10	110	0.5	0.2	9
RLZ13	12.4	14.1	10	14	10	110	0.5	0.2	10

Characteristics at T_a = 25 °C (V_F = 1 V Max. at I_F = 100 mA)

Type	Zener Voltage [1]			Operating Resistance		Rising Operating Resistance		Reverse Current	
	V_Z		at I_{ZT}	Z_{ZT}	at I_{ZT}	Z_{ZK}	at I_{ZK}	I_R	at V_R
	Min. (V)	Max. (V)	(mA)	Max. (Ω)	(mA)	Max. (Ω)	(mA)	Max. (μA)	(V)
RLZ13A	12.11	12.75	10	14	10	110	0.5	0.2	10
RLZ13B	12.55	13.21	10	14	10	110	0.5	0.2	10
RLZ13C	12.99	13.66	10	14	10	110	0.5	0.2	10
RLZ15	13.8	15.6	10	16	10	110	0.5	0.2	11
RLZ15A	13.44	14.13	10	16	10	110	0.5	0.2	11
RLZ15B	13.89	14.62	10	16	10	110	0.5	0.2	11
RLZ15C	14.35	15.09	10	16	10	110	0.5	0.2	11
RLZ16	15.3	17.1	10	18	10	150	0.5	0.2	12
RLZ16A	14.8	15.57	10	18	10	150	0.5	0.2	12
RLZ16B	15.25	16.04	10	18	10	150	0.5	0.2	12
RLZ16C	15.69	16.51	10	18	10	150	0.5	0.2	12
RLZ18	16.8	19.1	10	23	10	150	0.5	0.2	13
RLZ18A	16.22	17.06	10	23	10	150	0.5	0.2	13
RLZ18B	16.82	17.7	10	23	10	150	0.5	0.2	13
RLZ18C	17.42	18.33	10	23	10	150	0.5	0.2	13
RLZ20	18.8	21.2	10	28	10	200	0.5	0.2	15
RLZ20A	18.02	18.96	10	28	10	200	0.5	0.2	15
RLZ20B	18.63	19.59	10	28	10	200	0.5	0.2	15
RLZ20C	19.23	20.22	10	28	10	200	0.5	0.2	15
RLZ20D	19.72	20.72	10	28	10	200	0.5	0.2	15
RLZ22	20.8	23.3	5	30	5	200	0.5	0.2	17
RLZ22A	20.15	21.2	5	30	5	200	0.5	0.2	17
RLZ22B	20.64	21.71	5	30	5	200	0.5	0.2	17
RLZ22C	21.08	22.17	5	30	5	200	0.5	0.2	17
RLZ22D	21.52	22.63	5	30	5	200	0.5	0.2	17
RLZ24	22.8	25.6	5	35	5	200	0.5	0.2	19
RLZ24A	22.05	23.18	5	35	5	200	0.5	0.2	19
RLZ24B	22.61	23.77	5	35	5	200	0.5	0.2	19
RLZ24C	23.12	24.31	5	35	5	200	0.5	0.2	19
RLZ24D	23.63	24.85	5	35	5	200	0.5	0.2	19
RLZ27	25.1	28.9	5	45	5	250	0.5	0.2	21
RLZ27A	24.26	25.52	5	45	5	250	0.5	0.2	21
RLZ27B	24.97	26.26	5	45	5	250	0.5	0.2	21
RLZ27C	25.63	26.95	5	45	5	250	0.5	0.2	21
RLZ27D	26.29	27.64	5	45	5	250	0.5	0.2	21
RLZ30	28	32	5	55	5	250	0.5	0.2	23
RLZ30A	26.99	28.39	5	55	5	250	0.5	0.2	23
RLZ30B	27.70	29.13	5	55	5	250	0.5	0.2	23
RLZ30C	28.36	29.82	5	55	5	250	0.5	0.2	23
RLZ30D	29.02	30.51	5	55	5	250	0.5	0.2	23
RLZ33	31	35	5	65	5	250	0.5	0.2	25
RLZ33A	29.68	31.22	5	65	5	250	0.5	0.2	25
RLZ33B	30.32	31.88	5	65	5	250	0.5	0.2	25

Characteristics at T_a = 25 °C (V_F = 1 V Max. at I_F = 100 mA)

Type	Zener Voltage [1]			Operating Resistance		Rising Operating Resistance		Reverse Current	
	V_Z		at I_{ZT}	Z_{ZT}	at I_{ZT}	Z_{ZK}	at I_{ZK}	I_R	at V_R
	Min. (V)	Max. (V)	(mA)	Max. (Ω)	(mA)	Max. (Ω)	(mA)	Max. (μA)	(V)
RLZ33C	30.9	32.5	5	65	5	250	0.5	0.2	25
RLZ33D	31.49	33.11	5	65	5	250	0.5	0.2	25
RLZ36	34	38	5	75	5	250	0.5	0.2	27
RLZ36A	32.14	33.79	5	75	5	250	0.5	0.2	27
RLZ36B	32.79	34.49	5	75	5	250	0.5	0.2	27
RLZ36C	33.4	35.13	5	75	5	250	0.5	0.2	27
RLZ36D	34.01	35.77	5	75	5	250	0.5	0.2	27
RLZ39	37	41	5	85	5	250	0.5	0.2	30
RLZ39A	34.68	36.47	5	85	5	250	0.5	0.2	30
RLZ39B	35.36	37.19	5	85	5	250	0.5	0.2	30
RLZ39C	36	37.85	5	85	5	250	0.5	0.2	30
RLZ39D	36.63	38.52	5	85	5	250	0.5	0.2	30

[1] Tested with pulses tp = 20 ms.

