

# Zener diode

## RLZ Series

●Applications

Constant voltage control.

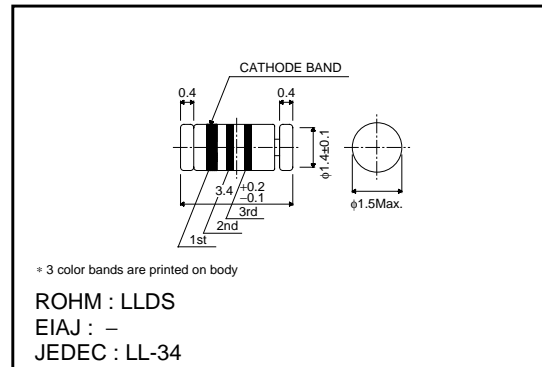
●Features

- 1) Small surface mounting type. (LLDS)
- 2) High reliability.

●Construction

Silicon epitaxial planar

●External dimensions (Units : mm)



●Cathode band colors

Type	1st color band	2nd color band	3rd color band	Type	1st color band	2nd color band	3rd color band
RLZ 3.6B	Black	Purple	Green	RLZ 12B	Red	Black	Green
RLZ 3.9B	Black	Gray		RLZ 13B	Red	Brown	
RLZ 4.3B	Black	White		RLZ 15B	Red	Red	
RLZ 4.7B	Brown	Black		RLZ 16B	Red	Orange	
RLZ 5.1B	Brown	Brown		RLZ 18B	Red	Yellow	
RLZ 5.6B	Brown	Red		RLZ 20B	Red	Green	
RLZ 6.2B	Brown	Orange		RLZ 22B	Red	Blue	
RLZ 6.8B	Brown	Yellow		RLZ 24B	Red	Purple	
RLZ 7.5B	Brown	Green		RLZ 27B	Red	Gray	
RLZ 8.2B	Brown	Blue		RLZ 30B	Red	White	
RLZ 9.1B	Brown	Purple		RLZ 33B	Orange	Black	
RLZ 10B	Brown	Gray		RLZ 36B	Orange	Brown	
RLZ 11B	Brown	White		RLZ 39B	Orange	Red	

●Absolute maximum ratings (Ta=25°C)

Parameter	Symbol	Limite	Unit
Power dissipation	P	500	mW
Junction temperature	T <sub>j</sub>	175	°C
Storage temperature	T <sub>stg</sub>	-65~+175	°C

## Diodes

## ●Electrical characteristics (Ta=25°C)

Type	Zener voltage			Operating resistance		Rising operating resistance		Reverse current	
	V <sub>Z</sub> (V)			Z <sub>Z</sub> (Ω)		Z <sub>ZK</sub> (Ω)		I <sub>R</sub> (μA)	
	Min.	Max.	I <sub>Z</sub> (mA)	Max.	I <sub>Z</sub> (mA)	Max.	I <sub>Z</sub> (mA)	Max.	V <sub>R</sub> (V)
RLZ 3.6B	3.600	3.845	20	60	20	1000	1	10	1.0
RLZ 3.9B	3.89	4.16	20	50	20	1000	1	5	1.0
RLZ 4.3B	4.17	4.43	20	40	20	1000	1	5	1.0
RLZ 4.7B	4.55	4.80	20	25	20	900	1	5	1.0
RLZ 5.1B	4.94	5.20	20	20	20	800	1	5	1.5
RLZ 5.6B	5.45	5.73	20	13	20	500	1	5	2.5
RLZ 6.2B	5.96	6.27	20	10	20	300	1	5	3.0
RLZ 6.8B	6.49	6.83	20	8	20	150	0.5	2	3.5
RLZ 7.5B	7.07	7.45	20	8	20	120	0.5	0.5	4.0
RLZ 8.2B	7.78	8.19	20	8	20	120	0.5	0.5	5.0
RLZ 9.1B	8.57	9.01	20	8	20	120	0.5	0.5	6.0
RLZ 10B	9.41	9.90	20	8	20	120	0.5	0.2	7.0
RLZ 11B	10.50	11.05	10	10	10	120	0.5	0.2	8.0
RLZ 12B	11.44	12.03	10	12	10	110	0.5	0.2	9.0
RLZ 13B	12.55	13.21	10	14	10	110	0.5	0.2	10
RLZ 15B	13.89	14.62	10	16	10	110	0.5	0.2	11
RLZ 16B	15.25	16.04	10	18	10	150	0.5	0.2	12
RLZ 18B	16.82	17.70	10	23	10	150	0.5	0.2	13
RLZ 20B	18.63	19.59	10	28	10	200	0.5	0.2	15
RLZ 22B	20.64	21.71	5	30	5	200	0.5	0.2	17
RLZ 24B	22.61	23.77	5	35	5	200	0.5	0.2	19
RLZ 27B	24.97	26.26	5	45	5	250	0.5	0.2	21
RLZ 30B	27.70	29.13	5	55	5	250	0.5	0.2	23
RLZ 33B	30.32	31.88	5	65	5	250	0.5	0.2	25
RLZ 36B	32.79	34.49	5	75	5	250	0.5	0.2	27
RLZ 39B	35.36	37.19	5	85	5	250	0.5	0.2	30

\* The Zener voltage is measured 40ms after power is supplied.

Diodes

●Electrical characteristic curves (Ta=25°C)

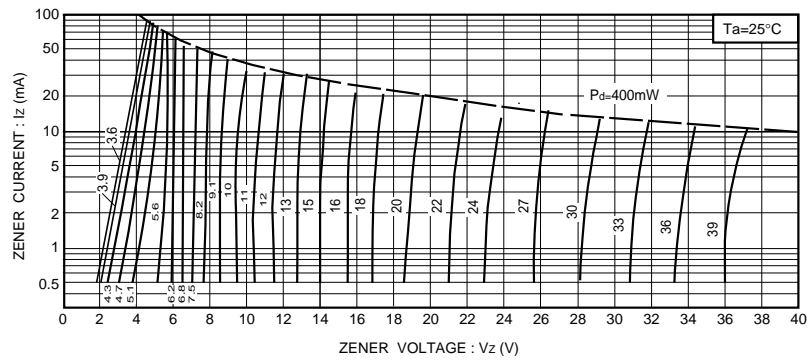


Fig.1 Zener characteristics

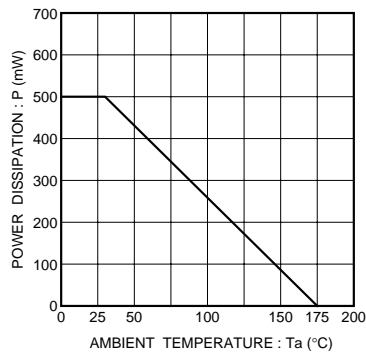


Fig.2 Derating curve

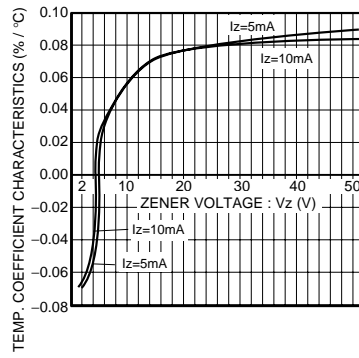


Fig.3 Zener voltage - temp.coefficient characteristics