# Zener diode

# **RLZ5.1B**

### Applications

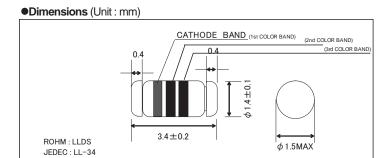
Voltage regulation

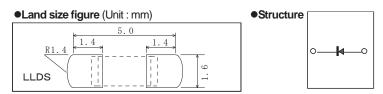
#### Features

- 1) Grass seald envelope. (LLDS)
- 2) High reliability.

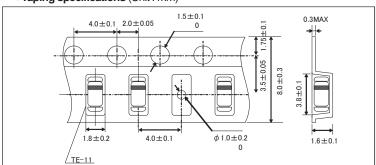
#### Construction

Silicon planar





# ● Taping specifications (Unit: mm)



### ● Absolute maximum ratings (Ta=25°C)

Parameter	Symbol	Limits	Unit
Power dissipation	Р	500	mW
Junction temperature	Tj	175	°C
Storage temperature	Tstg	-65 to +175	°C

# ●Electrical voltage (Ta=25°C)

	Symbol								
TYP.	Zener voltage :Vz(V)		Operating		Rising operating		Reverse current		
		Zonor voitage . vZ(V)		resistance : $Zz(\Omega)$		resistance: $Zz(\Omega)$		:IR(uA)	
	MIN.	MAX.	Iz(mA)	MAX.	Iz(mA)	MAX.	Iz(mA)	MAX.	VR(V)
RLZ 3.6B	3.600	3.845	20.0	60	20.0	1000	1.0	10.0	1.0
RLZ 3.9B	3.890	4.160	20.0	50	20.0	1000	1.0	5.0	1.0
RLZ 4.3B	4.170	4.430	20.0	40	20.0	1000	1.0	5.0	1.0
RLZ 4.7B	4.550	4.800	20.0	25	20.0	900	1.0	5.0	1.0
RLZ 5.1B	4.940	5.200	20.0	20	20.0	800	1.0	5.0	1.5
RLZ 5.6B	5.450	5.730	20.0	13	20.0	500	1.0	5.0	2.5
RLZ 6.2B	5.960	6.270	20.0	10	20.0	300	1.0	5.0	3.0
RLZ 6.8B	6.490	6.830	20.0	8	20.0	150	0.5	2.0	3.5
RLZ 7.5B	7.070	7.450	20.0	8	20.0	120	0.5	0.5	4.0
RLZ 8.2B	7.780	8.190	20.0	8	20.0	120	0.5	0.5	5.0
RLZ 9.1B	8.570	9.010	20.0	8	20.0	120	0.5	0.5	6.0
RLZ 10B	9.410	9.900	20.0	8	20.0	120	0.5	0.2	7.0
RLZ 11B	10.500	11.050	10.0	10	10.0	120	0.5	0.2	8.0
RLZ 12B	11.440	12.030	10.0	12	10.0	110	0.5	0.2	9.0
RLZ 13B	12.550	13.210	10.0	14	10.0	110	0.5	0.2	10.0
RLZ 15B	13.890	14.620	10.0	16	10.0	110	0.5	0.2	11.0
RLZ 16B	15.250	16.040	10.0	18	10.0	150	0.5	0.2	12.0
RLZ 18B	16.820	17.700	10.0	23	10.0	150	0.5	0.2	13.0
RLZ 20B	18.630	19.590	10.0	28	10.0	200	0.5	0.2	15.0
RLZ 22B	20.640	21.710	5.0	30	5.0	200	0.5	0.2	17.0
RLZ 24B	22.610	23.770	5.0	35	5.0	200	0.5	0.2	19.0
RLZ 27B	24.970	26.260	5.0	45	5.0	250	0.5	0.2	21.0
RLZ 30B	27.700	29.130	5.0	55	5.0	250	0.5	0.2	23.0
RLZ 33B	30.320	31.880	5.0	65	5.0	250	0.5	0.2	25.0
RLZ 36B	32.790	34.490	5.0	75	5.0	250	0.5	0.2	27.0
RLZ 39B	35.360	37.190	5.0	85	5.0	250	0.5	0.2	30.0

<sup>(1)</sup>The zener voltage(Vz) is measured 40ms after power is supplied.

# ●Type No.

	TYPE NO.			TYPE NO.		
TYPE	1st COLOR BAND	2nd COLOR BAND	TYPE	1st COLOR BAND	2nd COLOR BAND	
RLZ 3.6B	0	7	RLZ 12B	2	0	
RLZ 3.9B	0	8	RLZ 13B	2	1	
RLZ 4.3B	0	9	RLZ 15B	2	2	
RLZ 4.7B	1	0	RLZ 16B	2	3	
RLZ 5.1B	1	1	RLZ 18B	2	4	
RLZ 5.6B	1	2	RLZ 20B	2	5	
RLZ 6.2B	1	3	RLZ 22B	2	6	
RLZ 6.8B	1	4	RLZ 24B	2	7	
RLZ 7.5B	1	5	RLZ 27B	2	8	
RLZ 8.2B	1	6	RLZ 30B	2	9	
RLZ 9.1B	1	7	RLZ 33B	3	0	
RLZ 10B	1	8	RLZ 36B	3	1	
RLZ 11B	1	9	RLZ 39B	3	2	

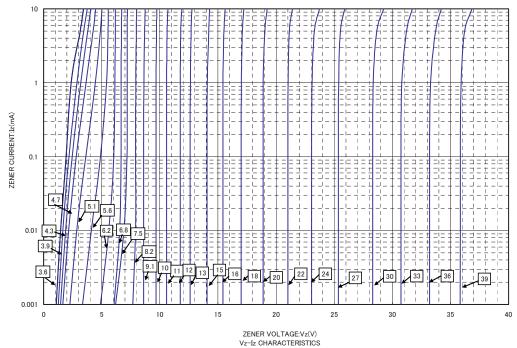
1st COLOR BAND	Color
0	Black
1	Brown
2	Red
3	Orange

2nd COLOR BAND	Color
0	Black
1	Brown
2	Red
3	Orange
4	Yellow
5	Green
6	Blue
7	Purple
8	Gray
9	White

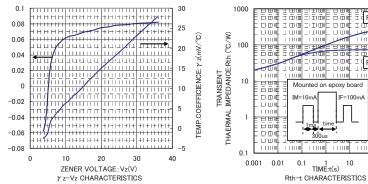
3rd COLOR BAND	Color	
A 、E	Yellow	
B 、F	Green	
C 、 G	Blue	
D	White	

<sup>(2)</sup> The operating resistances(Zz,Zzk) are measured by superimposing a minute alternating current on the regulated current(lz)

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



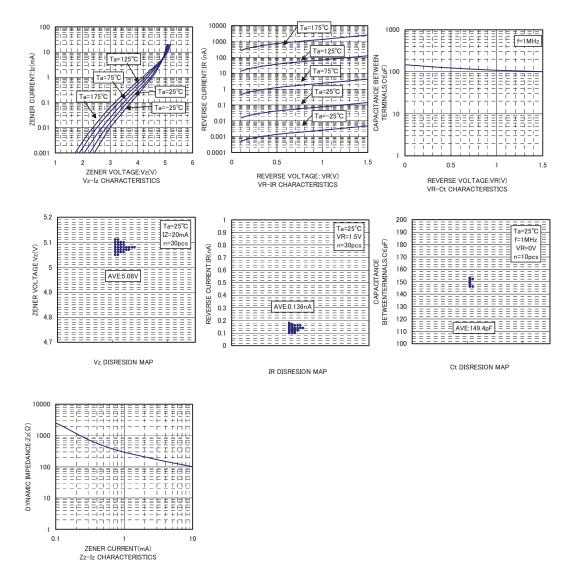
600 500 POWER DISSIPATION:Pd(W) REVERSE SURGE MAXIMUM POWER:PRSM(W) 1000 300 100 200 100 0 0.001 0.01 0 AMBIENT TEMPERATURE:Ta(°C)
Pd-Ta CHARACTERISTICS TIME:t(ms) PRSM-TIME CHARACTERISTICS



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Rev.C

TEMP.COEFFICIENCE:  $\gamma$  z(%/°C)



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