

225mW Zener Diode for Voltage Control

RSZ5200B Series

*This product is marketed only in countries other than Japan.

●Applications

Constant voltage control

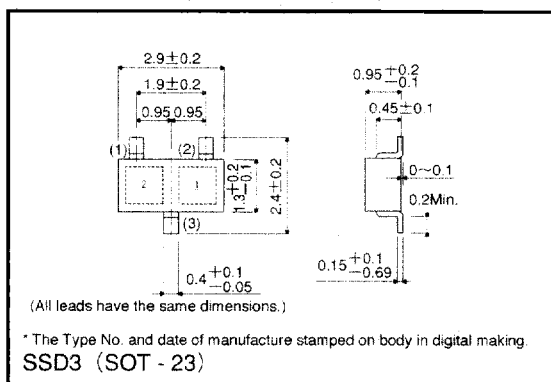
●Features

- 1) Designed for mounting on small surface areas (SSD3 (SOT-23))
- 2) High reliability

●Construction

Silicon epitaxial planar

●External dimensions (Units: mm)



●Absolute maximum ratings (Ta=25°C)

Parameter	Symbol	Limits	Unit
Power dissipation	P	225	mW
Junction temperature	T _j	1	°C
Storage temperature	T _{stg}	-55	°C

●Electrical characteristics (Ta=25°C)

Type	Zener voltage			Operating resistance		Rising operating resistance		Reverse current		Temperature coefficient
	V _Z (V)		I _Z (mA)	Z _Z (Ω)	I _Z (mA)	Z _{ZK} (Ω)	I _Z (mA)	I _R (μA)	V _R (V)	θ V _Z (% / °C)
	Min.	Max.		Max.		Max.		Max.		
RSZ5221B	2.28	2.52	20	30	20	1200	0.25	100	0.1	-0.085
RSZ5222B	2.38	2.63	20	30	20	1250	0.25	100	1.0	-0.085
RSZ5223B	2.57	2.84	20	30	20	1300	0.25	75	1.0	-0.080
RSZ5224B	2.66	2.94	20	30	20	1400	0.25	75	1.0	-0.080
RSZ5225B	2.85	3.15	20	29	20	1600	0.25	50	1.0	-0.075
RSZ5226B	3.14	3.47	20	28	20	1600	0.25	25	1.0	-0.070
RSZ5227B	3.42	3.78	20	24	20	1700	0.25	15	1.0	-0.065
RSZ5228B	3.71	4.10	20	23	20	1900	0.25	10	1.0	-0.060
RSZ5229B	4.09	4.52	20	22	20	2000	0.25	5.0	1.0	±0.055
RSZ5230B	4.47	4.94	20	19	20	1900	0.25	5.0	2.0	±0.030
RSZ5231B	4.85	5.36	20	17	20	1600	0.25	5.0	2.0	±0.030
RSZ5232B	5.32	5.88	20	11	20	1600	0.25	5.0	3.0	+0.038
RSZ5233B	5.70	6.30	20	7.0	20	1600	0.25	5.0	3.5	+0.038
RSZ5234B	5.89	6.51	20	7.0	20	1000	0.25	5.0	4.0	+0.045
RSZ5235B	6.46	7.14	20	5.0	20	750	0.25	3.0	5.0	+0.050
RSZ5236B	7.13	7.88	20	6.0	20	500	0.25	3.0	6.0	+0.058
RSZ5237B	7.79	8.61	20	8.0	20	500	0.25	3.0	6.5	+0.062
RSZ5238B	8.27	9.14	20	8.0	20	600	0.25	3.0	6.5	+0.065
RSZ5239B	8.65	9.56	20	10	20	600	0.25	3.0	7.0	+0.068
RSZ5240B	9.50	10.50	20	17	20	600	0.25	3.0	8.0	+0.075
RSZ5241B	10.45	11.55	20	22	20	600	0.25	2.0	8.4	+0.076
RSZ5242B	11.40	12.60	20	30	20	600	0.25	1.0	9.1	+0.077
RSZ5243B	12.35	13.65	9.5	13	9.5	600	0.25	0.5	9.9	+0.079
RSZ5244B	13.30	14.70	9.0	15	9.0	600	0.25	0.1	10.0	+0.082
RSZ5245B	14.25	15.75	8.5	16	8.5	600	0.25	0.1	11.0	+0.082
RSZ5246B	15.20	16.80	7.8	17	7.8	600	0.25	0.1	12.0	+0.083
RSZ5247B	16.15	17.85	7.4	19	7.4	600	0.25	0.1	13.0	+0.084
RSZ5248B	17.10	18.90	7.0	21	7.0	600	0.25	0.1	14.0	+0.085
RSZ5249B	18.05	19.95	6.6	23	6.6	600	0.25	0.1	14.0	+0.086
RSZ5250B	19.00	21.00	6.2	25	6.2	600	0.25	0.1	15.0	+0.086
RSZ5251B	20.90	23.10	5.6	29	5.6	600	0.25	0.1	17.0	+0.087
RSZ5252B	22.80	25.20	5.2	33	5.2	600	0.25	0.1	18.0	+0.088

(1) The Zener voltage (V_Z) is measured under normal conditions.(2) The operating resistances (Z_Z, Z_{ZK}) are measured by superimposing a minute alternating current in the regulated current (I_Z).

Zener diodes

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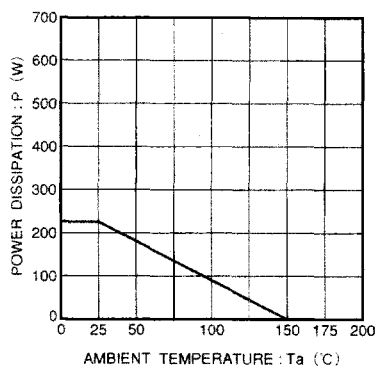
● Electrical characteristic curve ($T_a=25^{\circ}\text{C}$)

Fig. 1 Derating curve