

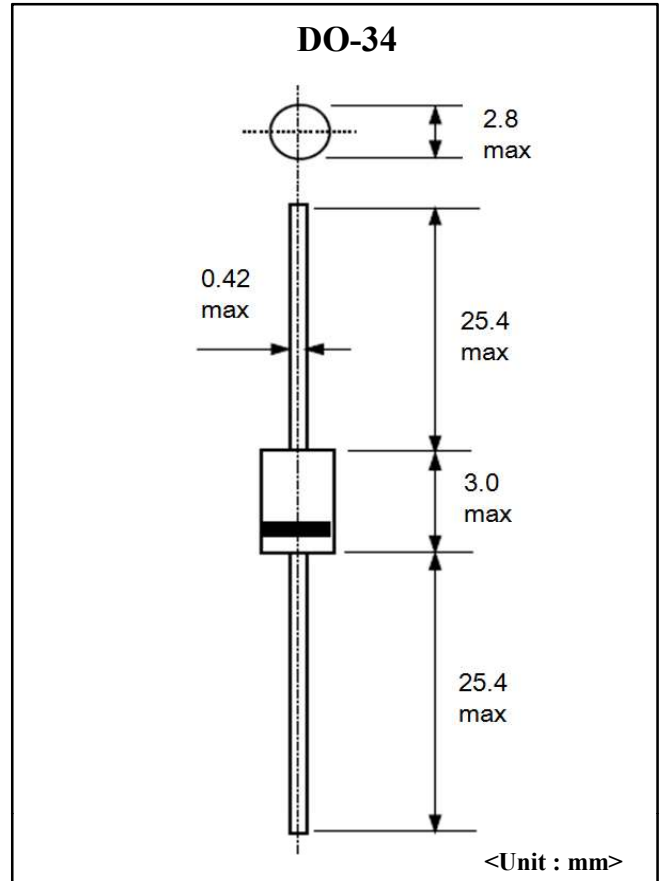
0.5W Glass Seal Zener Diode

Features

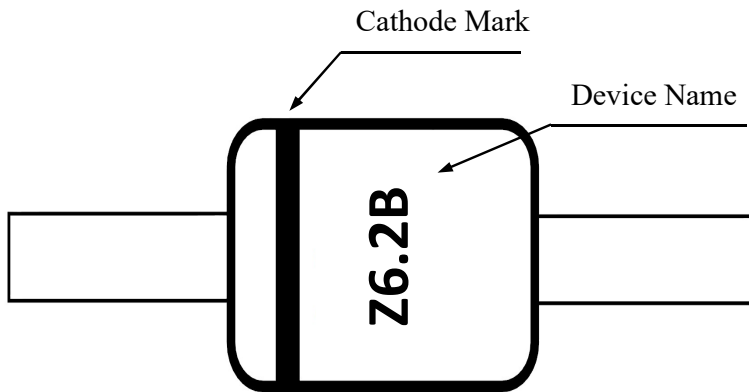
- Small, light and high-quality diode with glass-sealed structure
- Silicon planer zener diode

Applications

- Constant-voltage circuit
- Surge absorbing circuit
- Voltage shift circuit



Marking



Maximum Ratings (Ta=25°C unless otherwise noted)

Parameter	Symbol	Rated Value	Unit	Remark
Power Dissipation	Pd	0.5	W	
Maximum Junction Temperature	T _J	175	°C	
Storage Temperature Range	T _{STG}	-65 to +175	°C	



Electrical Characteristics (Ta=25°C unless otherwise noted)

Type No.		Zener Voltage		Measurement Condition I _Z (mA)	Dynamic Resistance		Standing Dynamic Resistance		Reverse Direction Characteristic	
		Min	Max		Max R _Z (Ω)	Measurement Condition I _Z (mA)	Max R _Z (Ω)	Measurement Condition I _Z (mA)	Max I _R (μA)	Measurement Condition V _R (V)
DZ2.0BS		1.88	2.2	5	100	5	1000	0.5	120	0.5
	A	1.88	2.1							
	B	2.02	2.2							
DZ2.2BS		2.12	2.41	5	100	5	1000	0.5	120	0.7
	A	2.12	2.3							
	B	2.22	2.41							
DZ2.4BS		2.33	2.63	5	100	5	1000	0.5	120	1.0
	A	2.33	2.52							
	B	2.43	2.63							
DZ2.7BS		2.54	2.91	5	110	5	1000	0.5	100	1.0
	A	2.54	2.75							
	B	2.69	2.91							
DZ3.0BS		2.85	3.22	5	120	5	1000	0.5	50	1.0
	A	2.85	3.07							
	B	3.01	3.22							
DZ3.3BS		3.16	3.53	5	120	5	1000	0.5	20	1.0
	A	3.16	3.38							
	B	3.32	3.53							
DZ3.6BS		3.47	3.83	5	120	5	1100	0.5	10	1.0
	A	3.47	3.68							
	B	3.62	3.83							
DZ3.9BS		3.77	4.14	5	120	5	1200	0.5	5	1.0
	A	3.77	3.98							
	B	3.92	4.14							
DZ4.3BS		4.05	4.53	5	120	5	1200	0.5	5	1.0
	A	4.05	4.26							
	B	4.2	4.4							
	C	4.34	4.53							
DZ4.7BS		4.47	4.91	5	100	5	1200	0.5	5	1.0
	A	4.47	4.65							
	B	4.59	4.77							
	C	4.71	4.91							
DZ5.1BS		4.85	5.35	5	70	5	1200	0.5	5	1.5
	A	4.85	5.03							
	B	4.97	5.18							
	C	5.12	5.35							



Electrical Characteristics (Ta=25°C unless otherwise noted)

Type No.		Zener Voltage		Measurement Condition I _Z (mA)	Dynamic Resistance		Standing Dynamic Resistance		Reverse Direction Characteristic	
		Min	Max		Max R _Z (Ω)	Measurement Condition I _Z (mA)	Max R _Z (Ω)	Measurement Condition I _Z (mA)	Max I _R (μA)	Measurement Condition V _R (V)
DZ5.6BS		5.29	5.88	5	40	5	900	0.5	5	2.5
	A	5.29	5.52							
	B	5.46	5.7							
	C	5.64	5.88							
DZ6.2BS		5.81	6.4	5	30	5	500	0.5	5	3.0
	A	5.81	6.06							
	B	5.99	6.24							
	C	6.16	6.4							
DZ6.8BS		6.32	6.97	5	25	5	150	0.5	2	3.5
	A	6.32	6.59							
	B	6.52	6.79							
	C	6.7	6.97							
DZ7.5BS		6.88	7.64	5	25	5	150	0.5	0.5	4.0
	A	6.88	7.19							
	B	7.11	7.44							
	C	7.33	7.64							
DZ8.2BS		7.56	8.41	5	20	5	120	0.5	0.5	5.0
	A	7.56	7.9							
	B	7.82	8.15							
	C	8.07	8.41							
DZ9.1BS		8.33	9.29	5	20	5	120	0.5	0.5	6.0
	A	8.33	8.7							
	B	8.61	8.99							
	C	8.89	9.29							
DZ10BS		9.19	10.3	5	20	5	120	0.5	0.2	7.0
	A	9.19	9.59							
	B	9.48	9.9							
	C	9.82	10.3							
DZ11BS		10.18	11.26	5	20	5	120	0.5	0.2	8.0
	A	10.18	10.63							
	B	10.5	10.95							
	C	10.82	11.26							
DZ12BS		11.13	12.3	5	25	5	110	0.5	0.2	9.0
	A	11.13	11.63							
	B	11.5	11.92							
	C	11.8	12.3							



Electrical Characteristics (Ta=25°C unless otherwise noted)

Type No.		Zener Voltage		Measurment Condition Iz(mA)	Dynamic Resistance		Standing Dynmic Resistance		Reverse Direction Charateristic	
		Min	Max		Max Rz(Ω)	Measurment Condition Iz(mA)	Max Rz(Ω)	Measurment Condition Iz(mA)	Max IR(uA)	Measurment Condition VR(V)
DZ13BS		12.18	13.62	5	25	5	110	0.5	0.2	10.0
	A	12.18	12.71							
	B	12.59	13.16							
	C	13.03	13.62							
DZ15BS		13.48	15.02	5	25	5	110	0.5	0.2	11.0
	A	13.48	14.09							
	B	13.95	14.56							
	C	14.42	15.02							
DZ16BS		14.87	16.5	5	25	5	150	0.5	0.2	12.0
	A	14.87	15.5							
	B	15.33	15.96							
	C	15.79	16.5							
DZ18BS		16.34	18.3	5	30	5	150	0.5	0.2	13.0
	A	16.34	17.06							
	B	16.9	17.67							
	C	17.51	18.3							
DZ20BS		18.14	20.45	5	30	5	200	0.5	0.2	15.0
	A	18.14	18.96							
	B	18.8	19.68							
	C	19.52	20.45							
DZ22BS		20.23	22.61	5	30	5	200	0.5	0.2	17.0
	A	20.23	21.08							
	B	20.76	21.65							
	C	21.22	22.09							
	D	21.68	22.61							
DZ24BS		22.26	24.81	5	35	5	200	0.5	0.2	19.0
	A	22.26	23.12							
	B	22.75	23.73							
	C	23.29	24.27							
	D	23.81	24.81							
DZ27BS		24.26	27.64	5	45	5	250	0.5	0.2	21.0
	A	24.26	25.52							
	B	24.97	26.26							
	C	25.63	26.95							
	D	26.29	27.64							



Electrical Characteristics (Ta=25°C unless otherwise noted)

Type No.		Zener Voltage		Measurement Condition Iz(mA)	Dynamic Resistance		Standing Dynamic Resistance		Reverse Direction Characteristic	
		Min	Max		Max Rz(Ω)	Measurement Condition Iz(mA)	Max Rz(Ω)	Measurement Condition Iz(mA)	Max IR(uA)	Measurement Condition VR(V)
DZ30BS		26.99	30.51	5	55	5	250	0.5	0.2	23.0
	A	26.99	28.39							
	B	27.7	29.13							
	C	28.36	29.82							
	D	29.02	30.51							
DZ33BS		29.68	33.11	5	65	5	250	0.5	0.2	25.0
	A	29.68	31.22							
	B	30.32	31.88							
	C	30.9	32.5							
	D	31.49	33.11							
DZ36BS		32.14	35.77	5	75	5	250	0.5	0.2	27.0
	A	32.14	33.79							
	B	32.79	34.49							
	C	33.4	35.13							
	D	34.01	35.77							
DZ39BS		34.68	38.52	5	85	5	250	0.5	0.2	30.0
	A	34.68	36.47							
	B	35.36	37.19							
	C	36	37.85							
	D	36.63	38.52							



Rating and Characteristic Curves

Admissible power dissipation versus ambient temperature

Valid provided that leads at a distance of 10mm from case are kept at ambient temperature

