Zener diode

Features

1. Small surface mounting type
2. High reliability

Applications

Voltage stabilization

Construction

Silicon epitaxial planar

Absolute Maximum Ratings

T_j=25?

Parameter	Test Conditions	Type	Symbol	Value	Unit
Power dissipation	R_{thJA}? 300K/W		P_V	500	mW
Junction temperature			T_j	175	?
Storage temperature range			T_{stg}	-65~+175	?

Maximum Thermal Resistance

T_j=25?

Parameter	Test Conditions	Symbol	Value	Unit
Junction ambient	on PC board 50mm× 50mm× 1.6mm	R_{thJA}	500	K/W

Electrical Characteristics

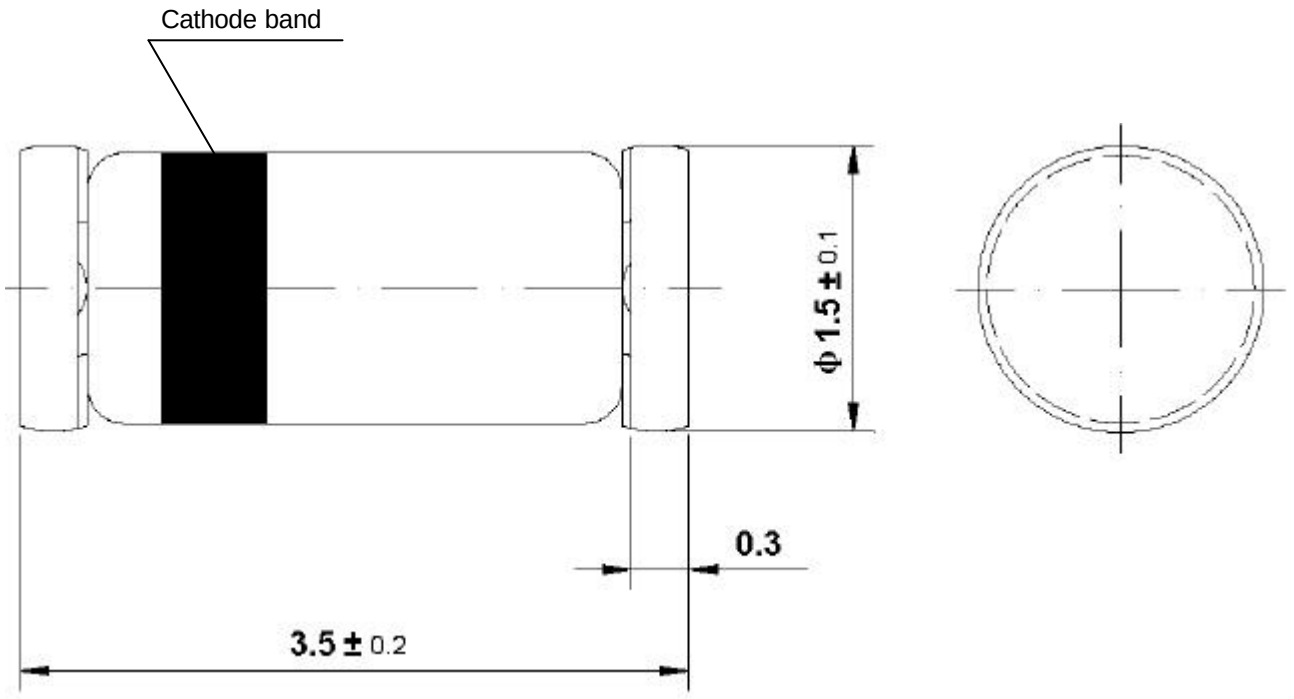
Tj=25?

Type	Zener voltage				Operating resistance		Rising operating resistance		Reverse current	
		Vz (V)			Zzt (0)		Zzk (0)		I_R (μ A)	
	Rank	Min.	Max.	Iz (mA)	Max.	Iz (mA)	Max.	Iz (mA)	Max.	V_R (V)
LLZJ 2.0	A	1.88	2.10	5	100	5	1000	0.5	120	0.5
	B	2.02	2.20							
LLZJ 2.2	A	2.12	2.30	5	100	5	1000	0.5	100	0.7
	B	2.22	2.41							
LLZJ 2.4	A	2.33	2.52	5	100	5	1000	0.5	120	1.0
	B	2.43	2.63							
LLZJ 2.7	A	2.54	2.75	5	110	5	1000	0.5	100	1.0
	B	2.69	2.91							
LLZJ 3.0	A	2.85	3.07	5	120	5	1000	0.5	50	1.0
	B	3.01	3.22							
LLZJ 3.3	A	3.16	3.38	5	120	5	1000	0.5	20	1.0
	B	3.32	3.53							
LLZJ 3.6	A	3.46	3.69	5	100	5	1000	1	10	1.0
	B	3.60	3.84							
LLZJ 3.9	A	3.74	4.01	5	100	5	1000	1	5	1.0
	B	3.89	4.16							
LLZJ 4.3	A	4.04	4.29	5	100	5	1000	1	5	1.0
	B	4.17	4.43							
	C	4.30	4.57							
LLZJ 4.7	A	4.44	4.68	5	90	5	900	1	5	1.0
	B	4.55	4.80							
	C	4.68	4.93							
LLZJ 5.1	A	4.81	5.07	5	80	5	800	1	5	1.5
	B	4.94	5.20							
	C	5.09	5.37							
LLZJ 5.6	A	5.28	5.55	5	60	5	500	1	5	2.5
	B	5.45	5.73							
	C	5.61	5.91							
LLZJ 6.2	A	5.78	6.09	5	60	5	300	1	5	3.0
	B	5.96	6.27							
	C	6.12	6.44							
LLZJ 6.8	A	6.29	6.63	5	20	5	150	0.5	2	3.5
	B	6.49	6.83							
	C	6.66	7.01							
LLZJ 7.5	A	6.85	7.22	5	20	5	120	0.5	0.5	4.0
	B	7.07	7.45							
	C	7.29	7.67							
LLZJ 8.2	A	7.53	7.92	5	20	5	120	0.5	0.5	5.0
	B	7.78	8.19							
	C	8.03	8.45							
LLZJ 9.1	A	8.29	8.73	5	25	5	120	0.5	0.5	6.0
	B	8.57	9.01							
	C	8.83	9.30							

Type	Zener voltage				Operating resistance		Rising operating resistance		Reverse current	
		Vz (V)			Zzt (Ω)		Zzk (Ω)		I_R (μA)	
	Rank	Min.	Max.	Iz (mA)	Max.	Iz (mA)	Max.	Iz (mA)	Max.	V_R (V)
LLZJ 10	A	9.12	9.59	5	30	5	120	0.5	0.2	7.0
	B	9.41	9.90							
	C	9.70	10.20							
	D	9.94	10.44							
LLZJ 11	A	10.18	10.71	5	30	5	120	0.5	0.2	8.0
	B	10.50	11.05							
	C	10.82	11.38							
LLZJ 12	A	11.13	11.71	5	30	5	110	0.5	0.2	9.0
	B	11.44	12.03							
	C	11.74	12.35							
LLZJ 13	A	12.11	12.75	5	35	5	110	0.5	0.2	10
	B	12.55	13.21							
	C	12.99	13.66							
LLZJ 15	A	13.44	14.13	5	40	5	110	0.5	0.2	11
	B	13.89	14.62							
	C	14.35	15.09							
LLZJ 16	A	14.80	15.57	5	40	5	150	0.5	0.2	12
	B	15.25	16.04							
	C	15.69	16.51							
LLZJ 18	A	16.22	17.06	5	45	5	150	0.5	0.2	13
	B	16.82	17.70							
	C	17.42	18.33							
LLZJ 20	A	18.20	18.96	5	55	5	200	0.5	0.2	15
	B	18.63	19.59							
	C	19.23	20.22							
	D	19.72	20.72							
LLZJ 22	A	20.15	21.20	5	30	5	200	0.5	0.2	17
	B	20.64	21.71							
	C	21.08	22.17							
	D	21.52	22.63							
LLZJ 24	A	22.05	23.18	5	35	5	200	0.5	0.2	19
	B	22.61	23.77							
	C	23.12	24.13							
	D	23.63	24.85							
LLZJ 27	A	24.26	25.52	5	45	5	250	0.5	0.2	21
	B	24.97	26.26							
	C	25.63	26.95							
	D	26.29	27.64							
LLZJ 30	A	26.99	28.39	5	55	5	250	0.5	0.2	23
	B	27.70	29.13							
	C	28.36	29.82							
	D	29.02	30.51							

Type	Zener voltage				Operating resistance		Rising operating resistance		Reverse current	
		Vz (V)			Zzt (Ω)		Zzk (Ω)		I_R (μA)	
	Rank	Min.	Max.	Iz (mA)	Max.	Iz (mA)	Max.	Iz (mA)	Max.	V_R (V)
LLZJ 33	A	29.68	31.22	5	65	5	250	0.5	0.2	25
	B	30.32	31.88							
	C	30.90	32.50							
	D	31.49	33.11							
LLZJ 36	A	32.14	33.79	5	75	5	250	0.5	0.2	27
	B	32.79	34.49							
	C	33.40	35.13							
	D	34.01	35.77							
LLZJ 39	A	34.68	36.47	5	85	5	250	0.5	0.2	30
	B	35.36	37.19							
	C	36.00	37.85							
	D	36.63	38.52							

Dimensions in mm



Glass Case
Mini Melf / SOD 80
JEDEC DO 213 AA