



Zener diode

Features

1. Small surface mounting type
2. High reliability



Applications

Voltage stabilization

Construction

Silicon epitaxial planar

Absolute Maximum Ratings

$T_j=25\text{ }^{\circ}\text{C}$

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

Stresses exceeding maximum ratings may damage the device. Maximum ratings are stress ratings only. Functional operation above the recommended operating conditions is not implied. Extended exposure to stresses above the recommended operating conditions may affect device reliability.



Electrical Characteristics

T_j=25°C

Type	Zener voltage			Operating resistance		Rising operating resistance		Reverse current		
	Rank	V _z (V)		I _z (mA)	Z _{zt} (Ω)		Z _{zk} (Ω)		I _R (μA)	
		Min.	Max.		Max.	I _z (mA)	Max.	I _z (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							

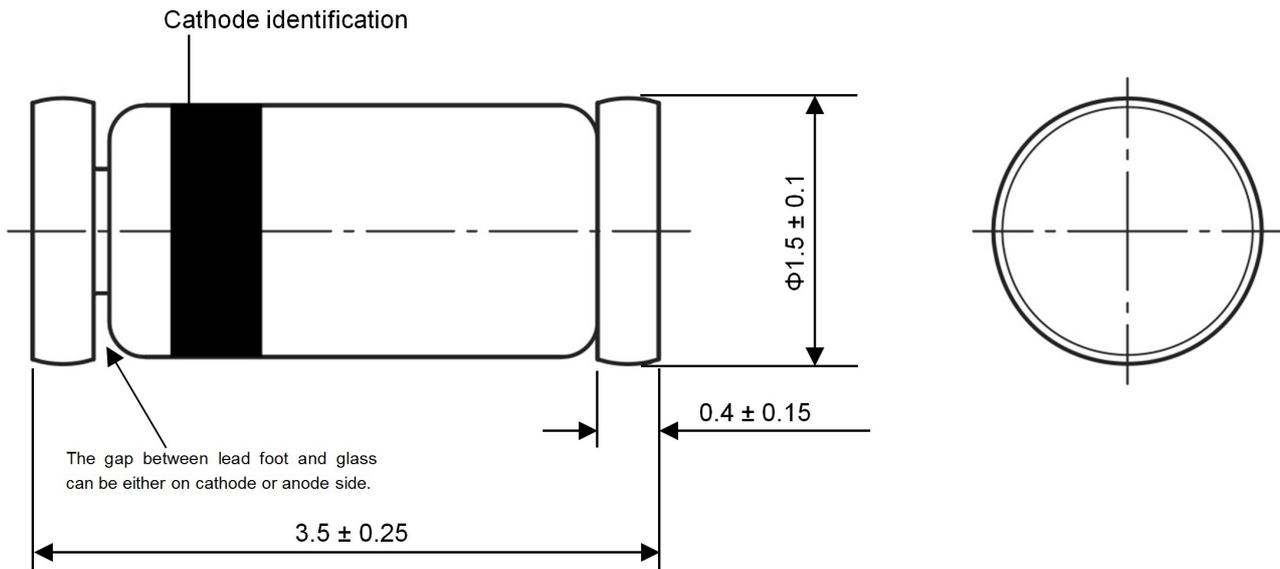


Type	Zener voltage				Operating resistance		Rising operating resistance		Reverse current	
	Rank	Vz (V)		Iz (mA)	Zzt (Ω)		Zzk (Ω)		I _R (μ A)	
		Min.	Max.		Max.	Iz (mA)	Max.	Iz (mA)	Max.	V _R (V)
LLZJ 10	A	9.12	9.59	5	30	5	120	0.5	0.2	7.0
	B	9.41	9.90							
	C	9.70	10.20							
	D	9.94	10.44							
LLZJ 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	
	Rank	Vz (V)		Iz (mA)	Zzt (Ω)		Zzk (Ω)		IR (μA)	
		Min.	Max.		Max.	Iz (mA)	Max.	Iz (mA)	Max.	VR (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