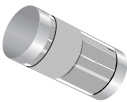


Surface Mount Zener Diodes

CZRL4728 Thru CZRL4764

Voltage: 3.3 - 100 Volts
Power: 1 Watt

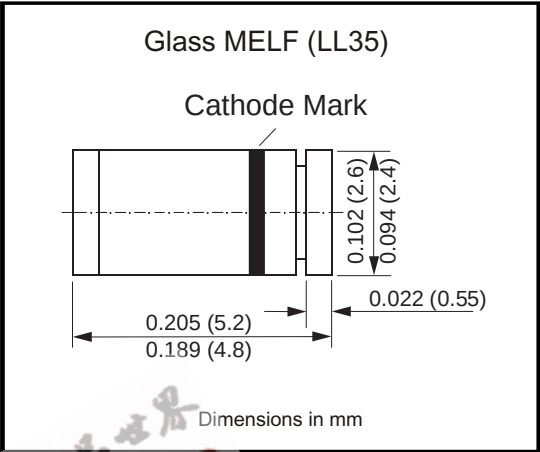


Features

Silicon Planar Power Zener Diodes
For use in stabilizing and clipping circuits with higher power rating.
Standard Zener voltage tolerance is $\pm 10\%$. Add suffix "A" for $\pm 5\%$ tolerance.
Other Zener voltages and tolerances are available upon request.

Mechanical data

Case: MELF Glass Case
Weight: approx. 0.25g



Maximum Ratings and Electrical Characteristics

Parameter	Symbol	Value	Unit
Zener Current (see Table "Characteristics")			
Power Dissipation at $T_{amb} = 25^{\circ}C$	P_{tot}	1.0 ⁽¹⁾	W
Thermal Resistance Junction to Ambient Air	R_{JA}	170 ⁽¹⁾	$^{\circ}C/W$
Junction Temperature	T_j	200	$^{\circ}C$
Storage Temperature Range	T_s	-65 to +200	$^{\circ}C$

Note: (1) Valid provided that electrodes are kept at ambient temperature

Surface Mount Zener Diodes

Type No.	Nominal Zener Voltage at I_{ZT} VZ (V) (Note 3.)	Test current I_{ZT} (mA)	Maximum Zener Impedance (Note 1.)			Max reverse Leakage Current		Surge Current at $T_A = 25^\circ\text{C}$ I_r (mA)	Maximum Regulator Current I_{ZM} (mA) (Note 2.)
			Z_{ZT} at I_{ZT} (Ohm)	Z_{ZK} (Ohm)	I_{ZK} (mA)	I_R (uA)	V_R (V)		
CZRL4728	3.3	76	10	400	1	100	1	1380	276
CZRL4729	3.6	69	10	400	1	100	1	1260	252
CZRL4730	3.9	64	9	400	1	50	1	1190	234
CZRL4731	4.3	58	9	400	1	10	1	1070	217
CZRL4732	4.7	53	8	500	1	10	1	970	193
CZRL4733	5.1	49	7	550	1	10	1	890	178
CZRL4734	5.6	45	5	600	1	10	2	810	162
CZRL4735	6.2	41	2	700	1	10	3	730	146
CZRL4736	6.8	37	3.5	700	1	10	4	660	133
CZRL4737	7.5	34	4	700	0.5	10	5	605	121
CZRL4738	8.2	31	4.5	700	0.5	10	6	550	110
CZRL4739	9.1	28	5	700	0.5	10	7	500	100
CZRL4740	10	25	7	700	0.25	10	7.6	454	91
CZRL4741	11	23	8	700	0.25	5	8.4	414	83
CZRL4742	12	21	9	700	0.25	5	9.1	380	76
CZRL4743	13	19	10	700	0.25	5	9.9	344	69
CZRL4744	15	17	14	700	0.25	5	11.4	304	61
CZRL4745	16	15.5	16	700	0.25	5	12.2	285	57
CZRL4746	18	14	20	750	0.25	5	13.7	250	50
CZRL4747	20	12.5	22	750	0.25	5	15.2	225	45
CZRL4748	22	11.5	23	750	0.25	5	16.7	205	41
CZRL4749	24	10.5	25	750	0.25	5	18.2	190	38
CZRL4750	27	9.5	35	750	0.25	5	20.6	170	34
CZRL4751	30	8.5	40	1000	0.25	5	22.8	150	30
CZRL4752	33	7.5	45	1000	0.25	5	25.1	135	27
CZRL4753	36	7	50	1000	0.25	5	27.4	125	25
CZRL4754	39	6.5	60	1000	0.25	5	29.7	115	23
CZRL4755	43	6	70	1500	0.25	5	32.7	110	22
CZRL4756	47	5.5	80	1500	0.25	5	35.8	95	19
CZRL4757	51	5	95	1500	0.25	5	38.8	90	18
CZRL4758	56	4.5	110	2000	0.25	5	42.6	80	16
CZRL4759	62	4	125	2000	0.25	5	47.1	70	14
CZRL4760	68	3.7	150	2000	0.25	5	51.7	65	13
CZRL4761	75	3.3	175	2000	0.25	5	56	60	12
CZRL4762	82	3	200	3000	0.25	5	62.2	55	11
CZRL4763	91	2.8	250	3000	0.25	5	69.2	50	10
CZRL4764	100	2.5	350	3000	0.25	5	76	45	9

Notes: (1) The Zener impedance is derived from the 1KHZ AC voltage which results when an AC current having an RMS value equal to 10% of the Zener current (I_{ZT} or I_{ZK}) is superimposed on I_{ZT} or I_{ZK} . Zener impedance is measured at two points to insure a sharp knee on the breakdown curve and to eliminate unstable units

(2) Valid provided that electrodes at a distance of 10mm from case are kept at ambient temperature

(3) Measured under thermal equilibrium and DC test conditions.

Rating and Characteristic Curves (CZRL4728 Thru CZRL4764)

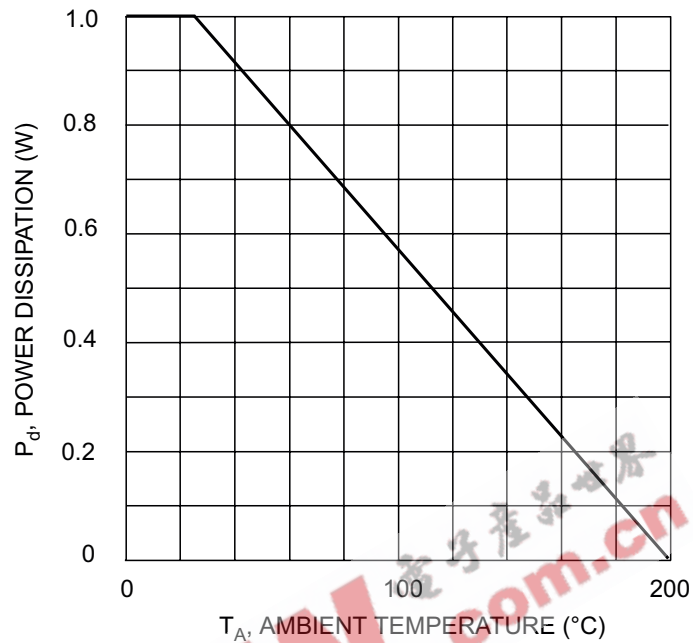


Fig. 1, Power Derating Curve

Admissible power dissipation versus ambient temperature

Valid provided that electrodes are kept at ambient temperature

