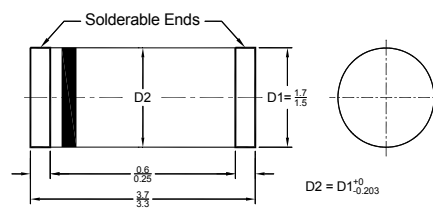


Surface Mount Glass Passivated Power Zener Diodes

LM4728A...LM4761A

for use in stabilizing and clipping circuits with high power rating.



MiniMELF (DO-213AA) Plastic Package
Dimensions in millimeters

Absolute Maximum Ratings ($T_a = 25\text{ }^\circ\text{C}$)

Parameter	Symbol	Value	Unit
Power Dissipation	P_{tot}	1	W
Junction Temperature	T_j	150	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	- 55 to + 150	$^\circ\text{C}$

Characteristics at $T_a = 25\text{ }^\circ\text{C}$

Parameter	Symbol	Max.	Unit
Forward Voltage at $I_F = 200\text{ mA}$	V_F	1.2	V



Surface Mount Glass Passivated Power Zener Diodes

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Characteristics at $T_a = 25\text{ }^\circ\text{C}$

Type	Zener Voltage ³⁾				Dynamic Resistance ¹⁾			Reverse Current		Maximum Surge Current ⁴⁾	Maximum Regulator Current ²⁾
	V_{Znom}	V_{ZT}		at I_{ZT}	Z_{ZT}	Z_{ZK}	at I_{ZK}	I_R	at V_R	at $T_a = 25\text{ }^\circ\text{C}$	
	(V)	Min. (V)	Max. (V)	(mA)	Max. (Ω)	Max. (Ω)	(mA)	Max. (μA)	(V)	I_{ZSM} (mA)	I_{ZM} (mA)
LM4728A	3.3	3.13	3.47	76	10	400	1	150	1	1375	275
LM4729A	3.6	3.42	3.78	69	10	400	1	100	1	1260	252
LM4730A	3.9	3.7	4.1	64	9	400	1	100	1	1190	234
LM4731A	4.3	4.08	4.52	58	9	400	1	50	1	1070	217
LM4732A	4.7	4.46	4.94	53	8	500	1	10	1	970	193
LM4733A	5.1	4.84	5.36	49	7	550	1	10	1	890	178
LM4734A	5.6	5.32	5.88	45	5	600	1	10	2	810	162
LM4735A	6.2	5.89	6.51	41	2	700	1	10	3	730	146
LM4736A	6.8	6.46	7.14	37	3.5	700	1	10	4	660	133
LM4737A	7.5	7.12	7.88	34	4	700	0.5	10	5	605	121
LM4738A	8.2	7.79	8.61	31	4.5	700	0.5	10	6	550	110
LM4739A	9.1	8.64	9.56	28	5	700	0.5	10	7	500	100
LM4740A	10	9.5	10.5	25	7	700	0.25	10	7.6	454	91
LM4741A	11	10.45	11.55	23	8	700	0.25	5	8.4	414	83
LM4742A	12	11.4	12.6	21	9	700	0.25	5	9.1	380	76
LM4743A	13	12.35	13.65	19	10	700	0.25	5	9.9	344	69
LM4744A	15	14.25	15.75	17	14	700	0.25	5	11.4	304	61
LM4745A	16	15.2	16.8	15.5	16	700	0.25	5	12.2	285	57
LM4746A	18	17.1	18.9	14	20	750	0.25	5	13.7	250	50
LM4747A	20	19	21	12.5	22	750	0.25	5	15.2	225	45
LM4748A	22	20.9	23.1	11.5	23	750	0.25	5	16.7	205	41
LM4749A	24	22.8	25.2	10.5	25	750	0.25	5	18.2	190	38
LM4750A	27	25.65	28.35	9.5	35	750	0.25	5	20.6	170	34
LM4751A	30	28.5	31.5	8.5	40	1000	0.25	5	22.8	150	30
LM4752A	33	31.35	34.65	7.5	45	1000	0.25	5	25.1	135	27
LM 4753A	36	34.2	37.8	7	50	1000	0.25	5	27.4	125	25
LM4754A	39	37.05	40.95	6.5	60	1000	0.25	5	29.7	115	23
LM4755A	43	40.85	45.15	6	70	1500	0.25	5	32.7	110	22
LM4756A	47	44.65	49.35	5.5	80	1500	0.25	5	35.8	95	19
LM4757A	51	48.45	53.55	5	95	1500	0.25	5	38.8	90	18
LM4758A	56	53.2	58.8	4.5	110	2000	0.25	5	42.6	80	16
LM4759A	62	58.9	65.1	4	125	2000	0.25	5	47.1	70	14
LM4760A	68	64.6	71.4	3.7	150	2000	0.25	5	51.7	65	13
LM4761A	75	71.25	78.75	3.3	175	2000	0.25	5	56	60	12

¹⁾ The dynamic resistance is derived from the 60 Hz 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} . Dynamic resistance is measured at two points to insure a sharp knee on the breakdown curve and to eliminate unstable units.

²⁾ Valid provided that electrodes are kept at ambient temperature.

³⁾ Tested with pulses $t_p = 20\text{ ms}$.

⁴⁾ The rating listed in the electrical characteristics table is maximum peak, non-repetitive, reverse surge current of 1/2 square wave or equivalent sine wave pulse of 1/120 second duration superimposed on the test current I_{ZT} .

Admissible power dissipation
versus ambient temperature
Valid provided that electrodes are kept
at ambient temperature

