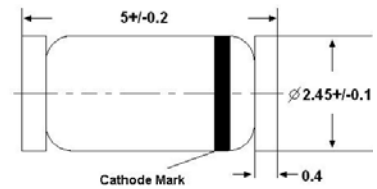


for use in stabilizing and clipping circuits with high power rating. Standard Zener voltage tolerance is $\pm 10\%$. Add suffix "A" for $\pm 5\%$ tolerance and suffix "B" for $\pm 2\%$ tolerance. Other tolerances available are upon request.

These diodes are also available in DO-41 case with the type designation 1N4727...1N4761

LL-41



Glass case MELF
 Dimensions in mm

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

Parameter	Symbol	Value	Unit
Power Dissipation	P_{tot}	1 ¹⁾	W
Junction Temperature	T_j	175	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	- 65 to + 175	$^\circ\text{C}$
¹⁾ Valid provided that electrodes are kept at ambient temperature.			

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

Parameter	Symbol	Max.	Unit
Thermal Resistance Junction to Ambient Air	$R_{\theta\text{JA}}$	170 ¹⁾	K/W
Forward Voltage at $I_F = 200 \text{ mA}$	V_F	1.2	V
¹⁾ Valid provided that electrodes are kept at ambient temperature.			

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

Type	Zener Voltage ³⁾		Dynamic Resistance ¹⁾			Reverse Current		Maximum Surge Current ⁴⁾	Maximum Regulator Current ²⁾
	V_{Znom}	at I_{ZT}	Z_{ZT}	Z_{ZK}	at I_{ZK}	I_R	at V_R	at $T_a = 25^\circ\text{C}$	
	(V)	(mA)	Max. (Ω)	Max. (Ω)	(mA)	Max. (μA)	(V)	I_{ZSM} (mA)	I_{ZM} (mA)
DL4727A	3	83	10	400	1	150	1	1375	275
DL4728A	3.3	76	10	400	1	150	1	1375	275
DL4729A	3.6	69	10	400	1	100	1	1260	252
DL4730A	3.9	64	9	400	1	100	1	1190	234
DL4731A	4.3	58	9	400	1	50	1	1070	217
DL4732A	4.7	53	8	500	1	10	1	970	193
DL4733A	5.1	49	7	550	1	10	1	890	178
DL4734A	5.6	45	5	600	1	10	2	810	162
DL4735A	6.2	41	2	700	1	10	3	730	146
DL4736A	6.8	37	3.5	700	1	10	4	660	133
DL4737A	7.5	34	4	700	0.5	10	5	605	121
DL4738A	8.2	31	4.5	700	0.5	10	6	550	110
DL4739A	9.1	28	5	700	0.5	10	7	500	100
DL4740A	10	25	7	700	0.25	10	7.6	454	91
DL4741A	11	23	8	700	0.25	5	8.4	414	83
DL4742A	12	21	9	700	0.25	5	9.1	380	76
DL4743A	13	19	10	700	0.25	5	9.9	344	69
DL4744A	15	17	14	700	0.25	5	11.4	304	61
DL4745A	16	15.5	16	700	0.25	5	12.2	285	57
DL4746A	18	14	20	750	0.25	5	13.7	250	50
DL4747A	20	12.5	22	750	0.25	5	15.2	225	45
DL4748A	22	11.5	23	750	0.25	5	16.7	205	41
DL4749A	24	10.5	25	750	0.25	5	18.2	190	38
DL4750A	27	9.5	35	750	0.25	5	20.6	170	34
DL4751A	30	8.5	40	1000	0.25	5	22.8	150	30
DL4752A	33	7.5	45	1000	0.25	5	25.1	135	27
DL4753A	36	7	50	1000	0.25	5	27.4	125	25
DL4754A	39	6.5	60	1000	0.25	5	29.7	115	23
DL4755A	43	6	70	1500	0.25	5	32.7	110	22
DL4756A	47	5.5	80	1500	0.25	5	35.8	95	19
DL4757A	51	5	95	1500	0.25	5	38.8	90	18
DL4758A	56	4.5	110	2000	0.25	5	42.6	80	16
DL4759A	62	4	125	2000	0.25	5	47.1	70	14
DL4760A	68	3.7	150	2000	0.25	5	51.7	65	13
DL4761A	75	3.3	175	2000	0.25	5	56	60	12

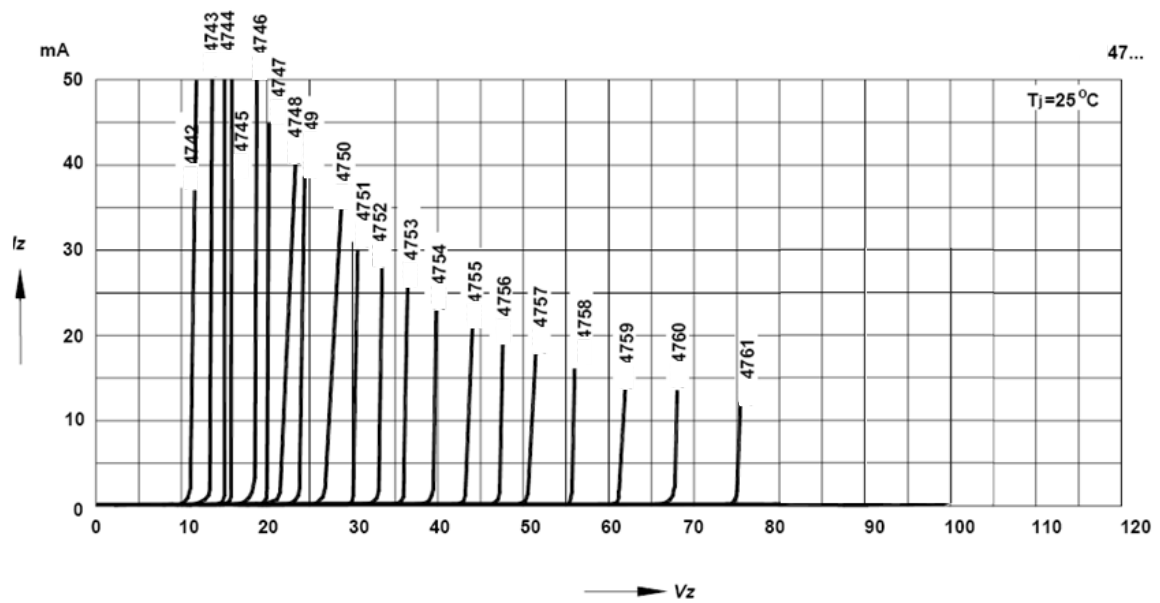
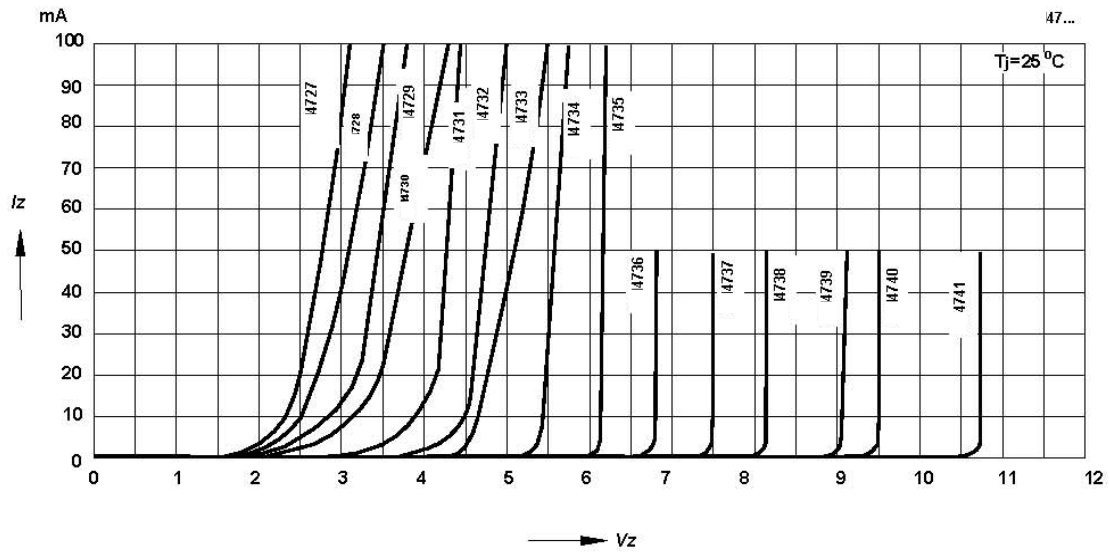
¹⁾ The dynamic resistance is derived from the 60 Hz AC voltage which results when an AC current having an RMS value equal to 10% of the Zener Current (I_{ZT} or I_{ZK}) is superimposed on I_{ZT} or I_{ZK} . Dynamic resistance is measured at two points to insure a sharp knee on the breakdown curve and to eliminate unstable units.

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

³⁾ Tested with pulses $t_p = 20$ 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} .

Breakdown characteristics

 T_J=constant(pulsed)


Power Dissipation vs Ambient Temperature

