

# MELF-SMD 1 Watt



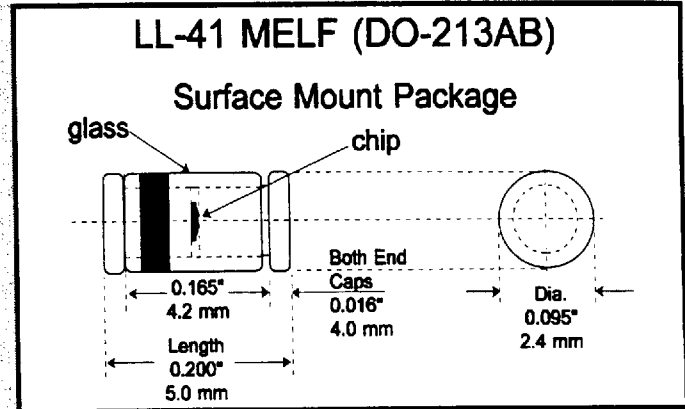
# Zener Diodes

## Use Advantages

- Used where low cost and space are important.
- Cost effective replacement for plastic SMB zener diodes.
- Occupies the same footprint as SMB, no PC board rework.
- LL-41 MELF vs. SMB - savings of up to 50% are possible.
- Compatible with all major automatic pick and place SM mounting equipment.
- May be used on ceramic boards along with high temperature IR solder reflow.

## Features

- Humidity proof glass
- Thermally matched system
- No thermal fatigue
- No applications restrictions
- Sigma Bond™ plated contacts
- 100% guaranteed solderability
- Problem free assembly
- Six Sigma quality
- DO-41 leaded 1N glass types available
- Can be screened up to "S" level via Source Control Drawings



Absolute Maximum Ratings	Symbol	Value	Unit
Power Dissipation at end cap temperature, T = 50 °C	$P_{tot}$	1.0	Watts
Junction Temperature	$T_j$	200	°C
Storage Temperature Range	$T_s$	-65 to +200	°C

Characteristics at $T_{amb} = 25 °C$	Symbol	Limit	Unit
Power Derating at end cap temperature, T = 50 °C	$P_{DR}$	6.67 (Max)	mW/°C
Forward Voltage at $I_F = 200 \text{ mA}$	$V_F$	1.2 (Max)	Volts

BKC is capable of providing extended zener voltages up to and beyond 200 volts in high quantities. DO-41 leaded glass package available, substitute a 1N prefix instead of the MELF LL prefix.

DETAILED SPECIFICATIONS ON REVERSE

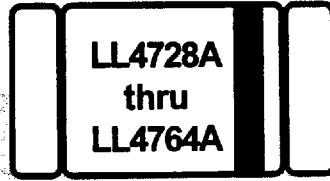


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# MELF-SMD 1 Watt

LL4728A  
thru  
LL4764A



# Zener Diodes

LL-41 DO-213AB  
Detail  
Specifications

Type	Nominal Zener Voltage (V <sub>Z</sub> ) @ I <sub>Zt</sub> Volts	Test Current I <sub>Zt</sub> mA	Maximum Zener Impedance			Maximum Reverse Leakage Current		Maximum Surge Current 8.5 ms (I <sub>ZSM</sub> ) mA	Maximum Regulator Current (I <sub>ZM</sub> ) mA
			(Z <sub>Zt</sub> ) @ I <sub>Zt</sub> Ohms	(Z <sub>ZK</sub> ) @ I <sub>ZK</sub> Ohms	I <sub>ZK</sub> mA	(I <sub>R</sub> ) μA	@ V <sub>R</sub> Volts		
LL4728A	3.3	76	10	400	1.0	100	1	1380	276
LL4729A	3.6	69	10	400	1.0	100	1	1260	252
LL4730A	3.9	64	9	400	1.0	100	1	1190	234
LL4731A	4.3	58	9	400	1.0	50	1	1070	217
LL4732A	4.7	53	8	500	1.0	10	1	970	193
LL4733A	5.1	49	7	550	1.0	10	1	890	178
LL4734A	5.6	45	5	600	1.0	10	2	810	162
LL4735A	6.2	41	2	700	1.0	10	3	730	146
LL4736A	6.8	37	3.5	700	1.0	10	4	660	133
LL4737A	7.5	34	4	700	0.5	10	5	605	121
LL4738A	8.2	31	4.5	700	0.5	10	6	550	110
LL4739A	9.1	28	5	700	0.5	10	7	500	100
LL4740A	10	25	7	700	0.25	10	7.6	454	91
LL4741A	11	23	8	700	0.25	5	8.4	414	83
LL4742A	12	21	9	700	0.25	5	9.1	380	76
LL4743A	13	19	10	700	0.25	5	9.9	344	69
LL4744A	15	17	14	700	0.25	5	11.4	304	61
LL4745A	16	15.5	16	700	0.25	5	12.2	285	57
LL4746A	18	14	20	750	0.25	5	13.7	250	50
LL4747A	20	12.5	22	750	0.25	5	15.2	225	45
LL4748A	22	11.5	23	750	0.25	5	16.7	205	41
LL4749A	24	10.5	25	750	0.25	5	18.2	190	38
LL4750A	27	9.5	35	750	0.25	5	20.6	170	34
LL4751A	30	8.5	40	1000	0.25	5	22.8	150	30
LL4752A	33	7.5	45	1000	0.25	5	25.1	135	27
LL4753A	36	7.0	50	1000	0.25	5	27.4	125	25
LL4754A	39	6.5	60	1000	0.25	5	29.7	115	23
LL4755A	43	6.0	70	1500	0.25	5	32.7	110	21
LL4756A	47	5.5	80	1500	0.25	5	35.8	95	20
LL4757A	51	5.0	95	1500	0.25	5	38.8	90	18
LL4758A	56	4.5	110	2000	0.25	5	42.6	80	16
LL4759A	62	4.0	125	2000	0.25	5	47.1	70	15
LL4760A	68	3.7	150	2000	0.25	5	51.7	65	13.5
LL4761A	75	3.3	175	2000	0.25	5	56.0	60	12
LL4762A	82	3.0	200	3000	0.25	5	62.2	55	11
LL4763A	91	2.8	250	3000	0.25	5	69.2	50	10
LL4764A	100	2.5	350	3000	0.25	5	76	45	9.0

Voltage tolerance is ± 5%. Use non-suffix part numbers for ± 10% tolerance.  
Other tolerances and higher zener voltages available upon request. Please consult factory.  
For DO-41 leaded glass package, replace "LL" prefix with "1N".

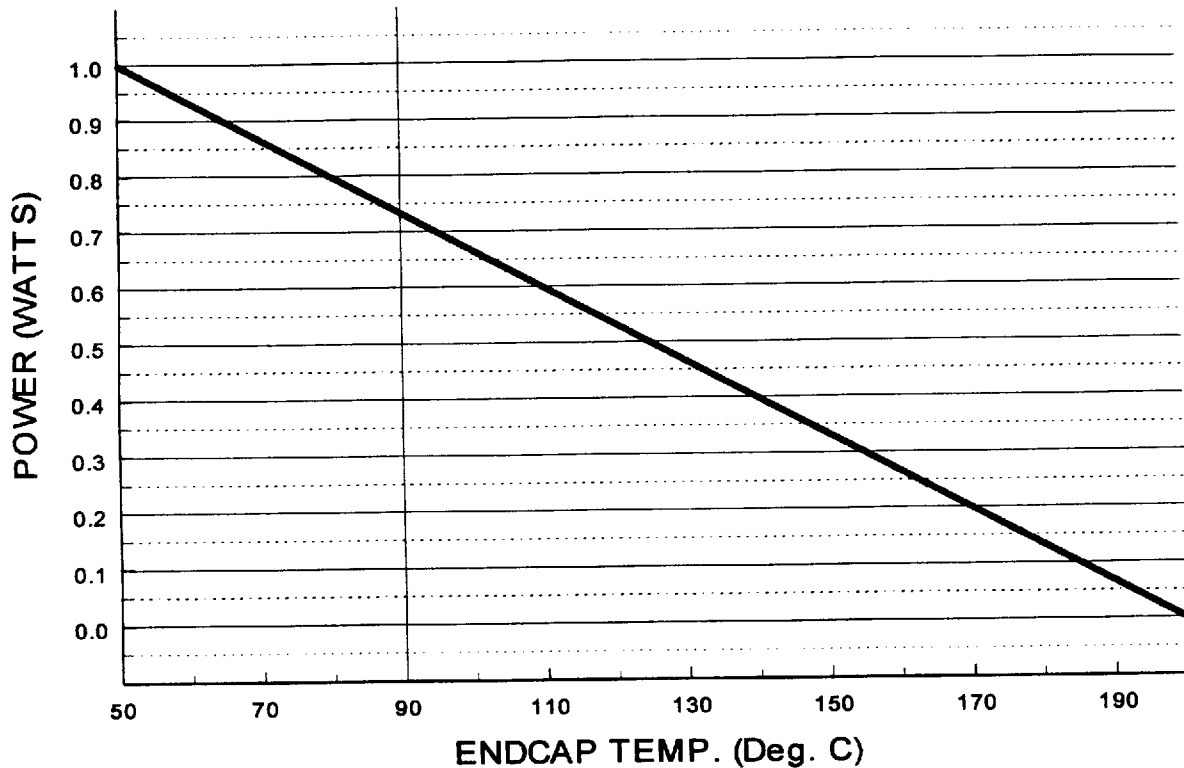


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# LL4729A thru LL4764A LL-41 MELF 1 WATT Zeners DERATING CURVE

LL-41 POWER DERATING



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