



1 Watt LL-41 Hermetically Sealed Glass Zener Voltage Regulators

LL-41

Absolute Maximum Ratings $T_A = 25^\circ\text{C}$ unless otherwise noted

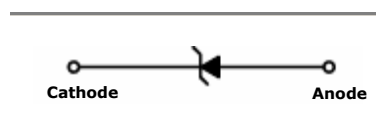
Parameter	Value	Units
Storage Temperature Range	-65 to +200	$^\circ\text{C}$
Maximum Junction Operating Temperature	+175	$^\circ\text{C}$
Total Device Dissipation	1.0	Watt
Thermal Resistance Junction to Ambient	170	$^\circ\text{C} / \text{W}$

These ratings are limiting values above which the serviceability of the diode may be impaired.

Specification Features:

- Zener Voltage Range 3.3 to 56 Volts
- LL-41 MELF Package (JEDEC DO-213AB)
- Surface Mount Devices (SMD)
- Hermetically Sealed Glass
- Compression Bonded Construction
- All External Surfaces Are Corrosion Resistant And Terminals Are Readily Solderable
- RoHS Compliant
- Matte Tin (Sn) Lead Finish
- Color band Indicates Negative Polarity

DEVICE MARKING DIAGRAM



ELECTRICAL SYMBOL

Electrical Characteristics $T_A = 25^\circ\text{C}$ unless otherwise noted

Device Type	$V_Z @ I_{ZT}$ (Volts) Nominal	I_{ZT} (mA)	$Z_{ZT} @ I_{ZT}$ (Ω) Max	I_{ZK} (mA)	$Z_{ZK} @ I_{ZK}$ (Ω) Max	$I_R @ V_R$ (μA) Max	V_R (Volts)
PÖZM4728A	3.3	76 1	0	1 400		100	1
PÖZM4729A	3.6	69 1	0	1 400		100	1
PÖZM4730A 39		64	9		100	50	
PÖZM4731A 43		58	10		100	50	
PÖZM4732A 47		53	8	1	500	10	1
PÖZM4733A 51		49	7	1	550	10	1
PÖZM4734A 56		45	5	1	600	10	2
PÖZM4735A 62		41	2	1	700	10	3
PÖZM4736A 68		37	3.5	1	700	10	4
PÖZM4737A 75		34	4	0.5	700	10	5
PÖZM4738A 82		31	4.5	0.5	700	10	6
PÖZM4739A 91		28	5	0.5	700	10	7
PÖZM4740A 10		25	7	0.25	700	10	7.6
PÖZM4741A 11		23	8	0.25	700	5	8.4
PÖZM4742A 12		21	9	0.25	700	5	9.1
PÖZM4743A 13		19	10	0.25	700	5	9.9
PÖZM4744A 15		17	14	0.25	700	5	11.4
PÖZM4745A	16 1	5.5 1	6 0.25		700	5	12.2
PÖZM4746A 18		14	20	0.25	700	5	13.7

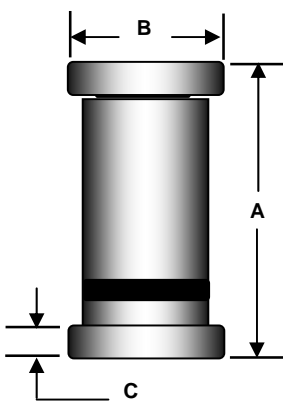
Electrical CharacteristicsT_A = 25°C unless otherwise noted

Device Type	VZ @ IZT (Volts) Nominal	IZT (mA)	ZZT @ IZT (Ω) Max	IZK (mA)	ZZK @ IZK (Ω) Max	IR @ VR (μA) Max	VR (Volts) P
PÖZM4747A	20 1	2.5 2	2 0.25		750	5	15.2
PÖZM4748A	22 1	1.5 2	3 0.25		750	5	16.7
PÖZM4749A	24 1	0.5 2	5 0.25		750	5	18.2
PÖZM4750A 27		0.5	35	0.25	750	5	20.6
PÖZM4751A 30		0.5	40	0.25	1000	5	22.8
PÖZM4752A 33		0.5	45	0.25	1000	5	25.1
PÖZM4753A 36		0.5	50	0.25	1000	5	27.4
PÖZM4754A 39		0.5	60	0.25	1000	5	29.7
PÖZM4755A 43		0.5	70	0.25	1500	5	32.7
PÖZM4756A 47		0.5	80	0.25	1500	5	35.8
PÖZM4757A 51		0.5	95	0.25	1500	5	38.8
PÖZM4758A 56		0.5	110	0.25	2000	5	42.6

V_F Forward Voltage = 1.2 V Maximum @ I_F = 200 mA for all types**Notes:**

1. The device numbers listed have a standard tolerance on the nominal zener voltage of ±5%.
2. For detailed information on price, availability and delivery of nominal zener voltages between the voltages shown and tighter voltage tolerances, contact your nearest Tak Cheong's representative.
3. The zener impedance is derived from the 60-cycle ac voltage, which results when an ac current having an rms value equal to 10% of the dc zener current (I_{ZT} or I_{ZK}) is superimposed to I_{ZT} or I_{ZK}.

Package Outline

Package	Case Outline					
LL- 41 MELF		LL- 41 MELF				
		Millimeters		Inches		
		Min	Ma	x	Min	Max
		A	4.80	5.20	0.189	0.205
		B	2.39	2.66	0.094	0.105
C	0.41	0.55	0.016	0.022		

- Notes:
- 1. All dimensions are within DO-213AB JEDEC standard.
 - 2. LL-41 MELF polarity denoted by cathode band.