

500 mW LL-34 Hermetically Sealed Glass Zener Voltage Regulators



Absolute Maximum Ratings T_A = 25°C unless otherwise noted

Parameter	Value	Units
Power Dissipation	500	mW
Storage Temperature Range	-65 to +150	°C
Operating Junction Temperature	+150	°C

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

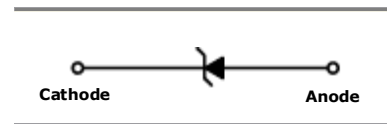
DEVICE MARKING DIAGRAM



Cathode Band Color : Blue

Specification Features:

- Zener Voltage Range 3.0 to 27 Volts
- LL-34 (Mini-MELF) Package
- Surface Device Type Mounting
- Hermetically Sealed Glass
- Compression Bonded Construction
- All External Surfaces Are Corrosion Resistant And Terminals Are Readily Solderable
- RoHS Compliant
- Matte Tin (Sn) Terminal Finish
- Color band Indicates Negative Polarity



ELECTRICAL SYMBOL

Electrical Characteristics T_A = 25°C unless otherwise noted

Device Type	V _Z @ I _{ZT} (Volts)		I _{ZT} (mA)	Z _{VT} @ I _{ZT} (Ω) Max	I _R @ V _R (μA) Max	V _R (Volts)
	Min	Max				
ZMM3V0	2.8	3.2	5	95	50	1
ZMM3V3	3.1	3.5	5	95	25	1
ZMM3V6	3.4	3.8	5	90	15	1
ZMM3V9	3.7	4.1	5	90	10	1
ZMM4V3	4.0	4.6	5	90	5	1
ZMM4V7	4.4	5	5	80	3	2
ZMM5V1	4.8	5.4	5	60	2	2
ZMM5V6	5.2	6	5	40	1	2
ZMM6V2	5.8	6.6	5	10	3	4
ZMM6V8	6.4	7.2	5	15	2	4
ZMM7V5	7.0	7.9	5	15	1	5
ZMM8V2	7.7	8.7	5	15	0.7	5
ZMM9V1	8.5	9.6	5	15	0.5	6
ZMM10V	9.4	10.6	5	20	0.2	7
ZMM11V	10.4	11.6	5	20	0.1	8
ZMM12V	11.4	12.7	5	25	0.1	8
ZMM13V	12.4	14.1	5	30	0.1	8
ZMM15V	13.8	15.6	5	30	0.05	10.5
ZMM16V	15.3	17.1	5	40	0.05	11.2
ZMM18V	16.8	19.1	5	45	0.05	12.6
ZMM20V	18.8	21.2	5	55	0.05	14

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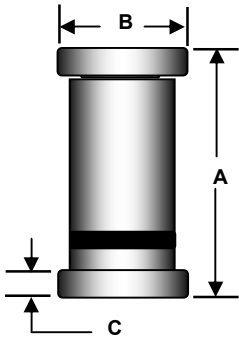
Device Type	V _Z @ I _{ZT} (Volts)		I _{ZT} (mA)	Z _{ZT} @ I _{ZT} (Ω) Max	I _R @ V _R (μA) Max	V _R (Volts)
	Min	Max				
ZMM22V	20.8	23.3	5	55	0.05	15.4
ZMM24V	22.8	25.6	5	70	0.05	16.8
ZMM27V	25.1	28.9	2	80	0.05	18.9

V_F Forward Voltage = 1.5 V Maximum @ I_F = 100 mA for all types

Notes:

1. The type numbers listed have zener voltage min/max limits as shown and 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 Electronics 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

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LL34																																
	<table border="1"> <thead> <tr> <th rowspan="3">DIM</th> <th colspan="4">LL-34</th> </tr> <tr> <th colspan="2">Millimeters</th> <th colspan="2">Inches</th> </tr> <tr> <th>Min</th> <th>Max</th> <th>Min</th> <th>Max</th> </tr> </thead> <tbody> <tr> <td>A</td> <td>3.30</td> <td>3.60</td> <td>0.130</td> <td>0.142</td> </tr> <tr> <td>B</td> <td>1.40</td> <td>1.50</td> <td>0.055</td> <td>0.059</td> </tr> <tr> <td>C</td> <td>0.35</td> <td>0.50</td> <td>0.014</td> <td>0.020</td> </tr> </tbody> </table>					DIM	LL-34				Millimeters		Inches		Min	Max	Min	Max	A	3.30	3.60	0.130	0.142	B	1.40	1.50	0.055	0.059	C	0.35	0.50	0.014
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Notes:

1. All dimensions are within DO213AC JEDEC standard.
2. LL-34 polarity denoted by cathode band.



NOTICE

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