

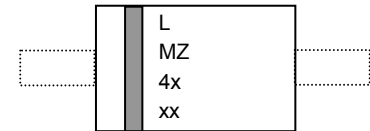
500 mW DO-35 Hermetically Sealed Glass Zener Voltage Regulators



Maximum Ratings (Note 1)

Rating	Symbol	Value	Units
Maximum Steady State Power Dissipation @TL≤75°C, Lead Length = 3/8"	P _D	500	mW
Derate Above 75°C		4.0	mW/°C
Operating and Storage Temperature Range	T _J , T _{stg}	-65 to +200	°C

Note 1: Some part number series have lower JEDEC registered ratings.



L = Logo
 MZ4xxx = MZ4xxx Device Code

Specification Features:

- Zener Voltage Range = 1.8V to 10V
- ESD Rating of Class 3 (>6 KV) per Human Body Model
- DO-35 Package (DO-204AH)
- Double Slug Type Construction
- Metallurgical Bonded Construction
- RoHS Compliant
- Solder Hot Dip Tin (Sn) Lead Finish

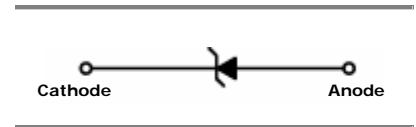
Specification Features:

Case : Double slug type, hermetically sealed glass

Finish : All external surfaces are corrosion resistant and leads are readily solderable

Polarity : Cathode indicated by polarity band

Mounting: Any



ELECTRICAL CHARACTERIZATION ($T_A = 25^\circ\text{C}$ unless otherwise noted)

Device (Note 2.)	Device Marking	Zener Voltage (Note 3 & 4.)			Zener Impedance	Leakage Current (note 5.)		
		V_Z (Volts)			@ I_{ZM}	Z_{ZT} @ I_{ZT}	IR @VR = 1V	
		Min	Nom	Max	(mA)	(Ω)	(μA)	(Volts)
MZ4614	MZ4614	1.71	1.8	1.89	120	1200	7.5	1
MZ4615	MZ4615	1.90	2.0	2.10	110	1250	5	1
MZ4616	MZ4616	2.09	2.2	2.31	100	1300	4	1
MZ4617	MZ4617	2.28	2.4	2.52	95	1400	2	1
MZ4618	MZ4618	2.565	2.7	2.835	90	1500	1	1
MZ4619	MZ4619	2.850	3.0	3.150	85	1600	0.8	1
MZ4620	MZ4620	3.135	3.3	3.465	80	1650	7.5	1.5
MZ4621	MZ4621	3.420	3.6	3.780	75	1700	7.5	2
MZ4622	MZ4622	3.705	3.9	4.095	70	1650	5	2
MZ4623	MZ4623	4.085	4.3	4.515	65	1600	4	2
MZ4624	MZ4624	4.465	4.7	4.935	60	1550	10	3
MZ4625	MZ4625	4.845	5.1	5.355	55	1500	10	3
MZ4626	MZ4626	5.320	5.6	5.880	50	1400	10	4
MZ4627	MZ4627	5.890	6.2	6.510	45	1200	10	5
MZ4099	MZ4099	6.460	6.8	7.140	35	200	10	5.2
MZ4100	MZ4100	7.125	7.5	7.875	31.8	200	10	5.7
MZ4101	MZ4101	7.790	8.2	8.610	29.0	200	1	6.3
MZ4102	MZ4102	8.265	8.7	9.135	27.4	200	1	6.7
MZ4103	MZ4103	8.645	9.1	9.555	26.2	200	1	7.0
MZ4104	MZ4104	9.500	10	10.500	24.8	200	1	7.6

VF Forward Voltage = 1.1V max @ $I_F = 2100\text{mA}$ for all types

2. TOLERANCE AND VOLTAGE DESIGNATION

The type numbers listed have a standard tolerance on the nominal zener voltage of $\pm 5\%$.

3. ZENER VOLTAGE (V_Z) MEASUREMENT

The zener voltage (V_Z) is tested under pulse condition. The measured V_Z is guaranteed to be within specification with device junction in thermal equilibrium.

4. MAXIMUM ZENER CURRENT RATING (I_{ZM})

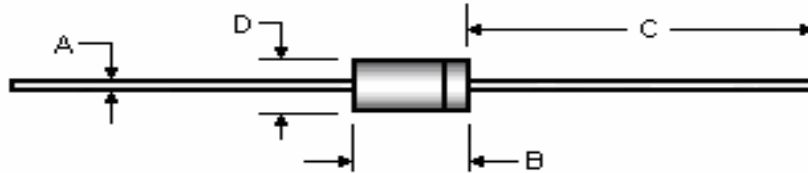
This data was calculated using nominal voltages. The maximum current handling capability on a worst case basis is limited by the actual zener voltage at the operation point and the power derating curve.

5. ZENER IMPEDANCE (Z_{ZT}) DERIVATION

Z_{ZT} is measured by dividing the AC voltage drop across the device by the AC current applied. The specified limits are for $I_{Z(AC)} = 0.1 I_{Z(DC)}$ with AC frequency = 60Hz.

Package Outline

Case Outline




DIM	DO-35			
	Millimeters		Inches	
	Min	Max	Min	Max
A	0.46	0.56	0.018	0.022
B	3.05	5.08	0.120	0.200
C	25.40	38.10	1.000	1.500
D	1.52	2.29	0.060	0.090

Note: all dimensions are within JEDEC standard.

This datasheet presents technical data of Tak Cheong's Zener Diodes. Complete specifications for the individual devices are provided in the form of datasheets. A comprehensive Selector Guide is included to simplify the task of choosing the best set of components required for a specific application. For additional information, please visit our website <http://www.takcheong.com>.

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