

# Zener diode

## MTZ J Series

### ●Applications

Constant voltage control

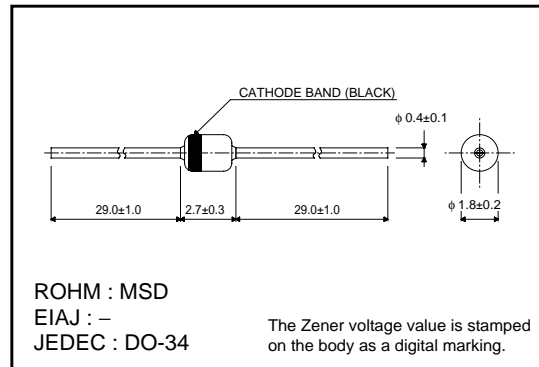
### ●Features

- 1) Glass sealed envelope. (MSD)
- 2) High reliability.

### ●Construction

Silicon epitaxial planer

### ●External dimensions (Units : mm)



### ●Absolute maximum ratings (Ta=25°C)

Parameter	Symbol	Limits	Unit
Power dissipation	P	500	mW
Junction temperature	T <sub>j</sub>	175	°C
Storage temperature	T <sub>stg</sub>	-65~+175	°C

## Diodes

## ●Electrical characteristics (Ta=25°C)

Type	Zener voltage			Operating resistance		Rising operating resistance		Reverse current	
	V <sub>Z</sub> (V)			Z <sub>Z</sub> (Ω)		Z <sub>ZK</sub> (Ω)		I <sub>R</sub> (μA)	
	Min.	Max.	I <sub>Z</sub> (mA)	Max.	I <sub>Z</sub> (mA)	Max.	I <sub>Z</sub> (mA)	Max.	V <sub>R</sub> (V)
MTZ J 3.6B	3.600	3.845	5	100	5	1000	1	10	1.0
MTZ J 3.9B	3.890	4.160	5	100	5	1000	1	5	1.0
MTZ J 4.3B	4.170	4.430	5	100	5	1000	1	5	1.0
MTZ J 4.7B	4.550	4.800	5	80	5	900	0.5	5	1.0
MTZ J 5.1B	4.940	5.200	5	70	5	1200	1	5	1.5
MTZ J 5.6B	5.450	5.730	5	40	5	900	1	5	2.5
MTZ J 6.2B	5.960	6.270	5	30	5	500	1	5	3.0
MTZ J 6.8B	6.490	6.830	5	20	5	150	0.5	2	3.5
MTZ J 7.5B	7.070	7.450	5	20	5	120	0.5	0.5	4.0
MTZ J 8.2B	7.780	8.190	5	20	5	120	0.5	0.5	5.0
MTZ J 9.1B	8.570	9.010	5	20	5	120	0.5	0.5	6.0
MTZ J 10B	9.410	9.900	5	20	5	120	0.5	0.2	7.0
MTZ J 11B	10.500	11.050	5	20	5	120	0.5	0.2	8.0
MTZ J 12B	11.440	12.030	5	25	5	110	0.5	0.2	9.0
MTZ J 13B	12.550	13.210	5	25	5	110	0.5	0.2	10
MTZ J 15B	13.890	14.620	5	25	5	110	0.5	0.2	11
MTZ J 16B	15.250	16.040	5	25	5	150	0.5	0.2	12
MTZ J 18B	16.820	17.700	5	30	5	150	0.5	0.2	13
MTZ J 20B	18.630	19.590	5	30	5	200	0.5	0.2	15
MTZ J 22B	20.640	21.710	5	30	5	200	0.5	0.2	17
MTZ J 24B	22.610	23.770	5	35	5	200	0.5	0.2	19
MTZ J 27B	24.970	26.260	5	45	5	250	0.5	0.2	21
MTZ J 30B	27.700	29.130	5	55	5	250	0.5	0.2	23
MTZ J 33B	30.320	31.880	5	65	5	250	0.5	0.2	25
MTZ J 36B	32.790	34.490	5	75	5	250	0.5	0.2	27
MTZ J 39B	35.360	37.190	5	85	5	250	0.5	0.2	30

Notes) 1. The Zener voltage is measured 40ms after power is supplied.

Diodes

●Electrical characteristics curves (Ta=25°C)

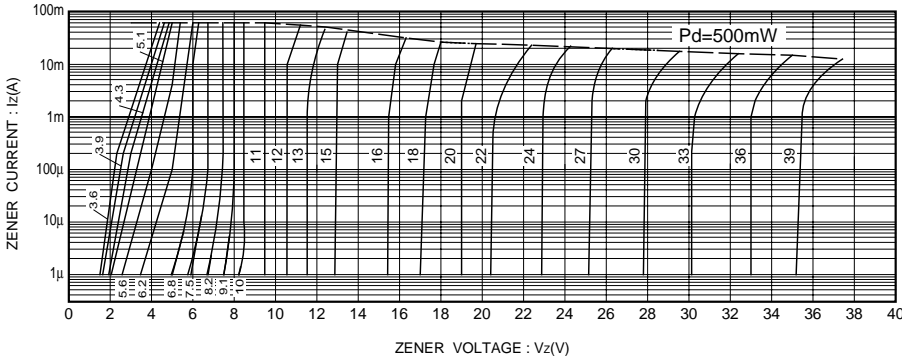


Fig.1 Zener characteristics

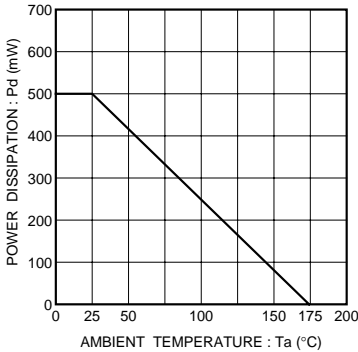


Fig. 2 Derating curve

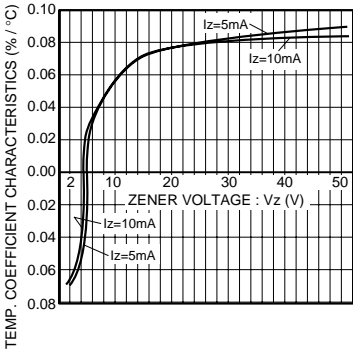


Fig.3 Zener voltage-temp.coefficient characteristics