

# Zener diode

## MTZ J Series

**●Applications**

Constant voltage control

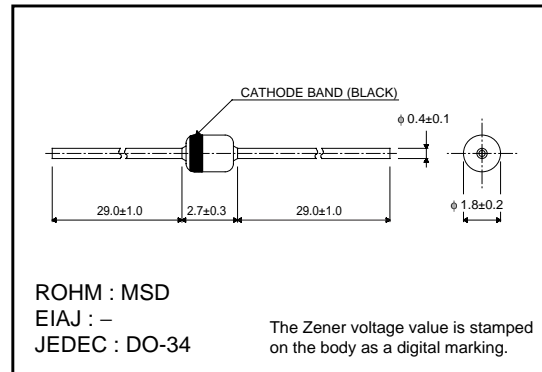
**●Features**

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

**●Construction**

Silicon epitaxial planer

**●External dimensions (Unit : mm)**



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

Parameter	Symbol	Limits	Unit
Power dissipation	P	500	mW
Junction temperature	Tj	175	°C
Storage temperature	Tstg	-65 to +175	°C

Diodes

●Electrical characteristics (Ta=25°C)

Type	Zener voltage			Operating resistance		Rising operating resistance		Reverse current	
	Vz (V)			Zz (Ω)		Zzk (Ω)		IR (μA)	
	Min.	Max.	Iz (mA)	Max.	Iz (mA)	Max.	Iz (mA)	Max.	VR (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)

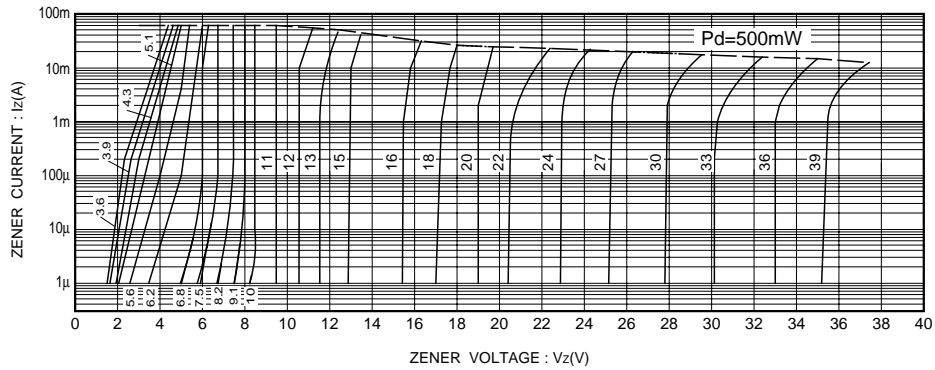


Fig.1 Zener characteristics

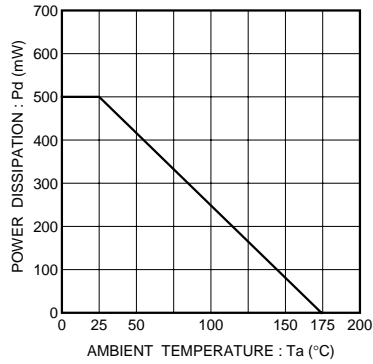


Fig.2 Derating curve

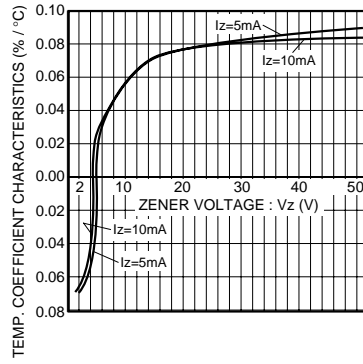
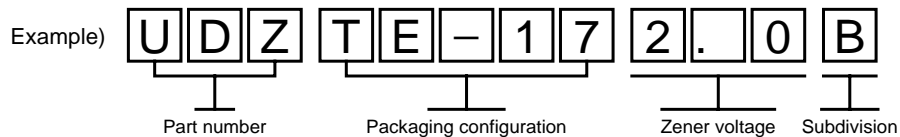


Fig.3 Zener voltage-temp.coefficient characteristics

●Makeup of the part number

- Please follow the part number designation when the order is placed.
- Fill in from the left, leaving any extra boxes empty on the right.
- Please refer packing specification about packing form.

●Zener diodes



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