

Zener diode

MTZ J Series

●Applications

Constant voltage control

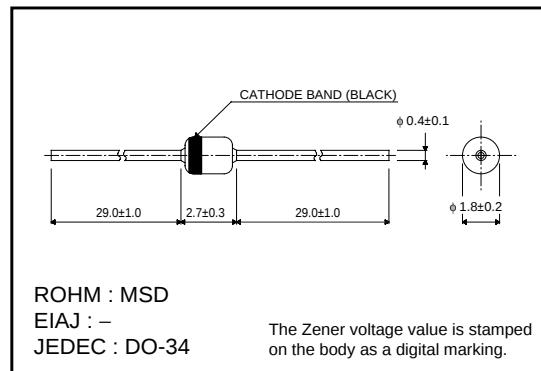
●Features

- 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	
	V _Z (V)			Z _Z (Ω)		Z _{ZK} (Ω)		I _R (μA)	
	Min.	Max.	I _Z (mA)	Max.	I _Z (mA)	Max.	I _Z (mA)	Max.	V _R (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)

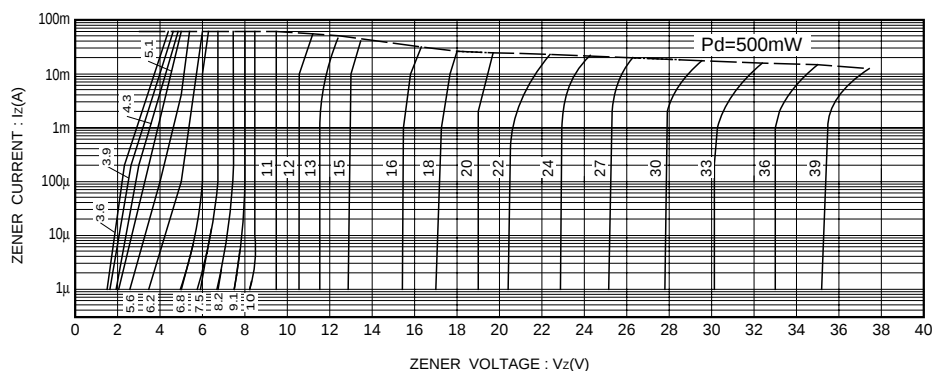


Fig.1 Zener characteristics

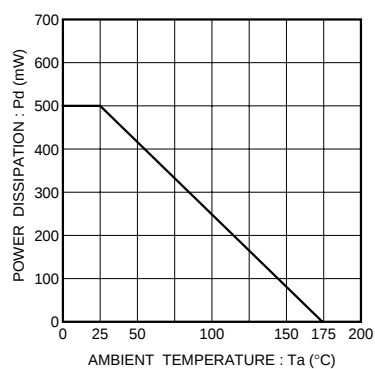


Fig. 2 Derating curve

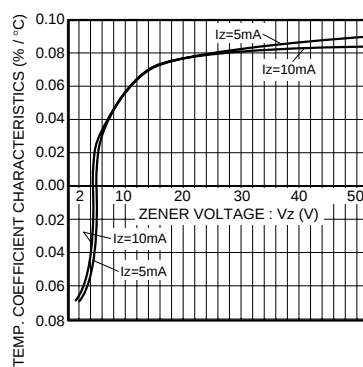
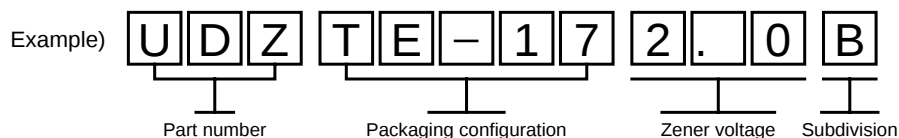


Fig.3 Zener voltage-temp.coefficient characteristics

●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



Notes

- No technical content pages of this document may be reproduced in any form or transmitted by any means without prior permission of ROHM CO.,LTD.
- The contents described herein are subject to change without notice. The specifications for the product described in this document are for reference only. Upon actual use, therefore, please request that specifications to be separately delivered.
- Application circuit diagrams and circuit constants contained herein are shown as examples of standard use and operation. Please pay careful attention to the peripheral conditions when designing circuits and deciding upon circuit constants in the set.
- Any data, including, but not limited to application circuit diagrams information, described herein are intended only as illustrations of such devices and not as the specifications for such devices. ROHM CO.,LTD. disclaims any warranty that any use of such devices shall be free from infringement of any third party's intellectual property rights or other proprietary rights, and further, assumes no liability of whatsoever nature in the event of any such infringement, or arising from or connected with or related to the use of such devices.
- Upon the sale of any such devices, other than for buyer's right to use such devices itself, resell or otherwise dispose of the same, no express or implied right or license to practice or commercially exploit any intellectual property rights or other proprietary rights owned or controlled by
- ROHM CO., LTD. is granted to any such buyer.
- Products listed in this document use silicon as a basic material.
Products listed in this document are no antiradiation design.

The products listed in this document are designed to be used with ordinary electronic equipment or devices (such as audio visual equipment, office-automation equipment, communications devices, electrical appliances and electronic toys).

Should you intend to use these products with equipment or devices which require an extremely high level of reliability and the malfunction of which would directly endanger human life (such as medical instruments, transportation equipment, aerospace machinery, nuclear-reactor controllers, fuel controllers and other safety devices), please be sure to consult with our sales representative in advance.

About Export Control Order in Japan

Products described herein are the objects of controlled goods in Annex 1 (Item 16) of Export Trade Control Order in Japan.

In case of export from Japan, please confirm if it applies to "objective" criteria or an "informed" (by MITI clause) on the basis of "catch all controls for Non-Proliferation of Weapons of Mass Destruction.