

# Zener diode

## MTZJ33B

●Applications

Constant voltage control

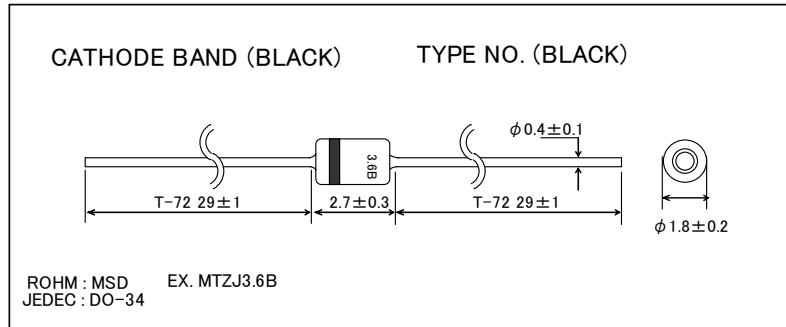
●Features

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

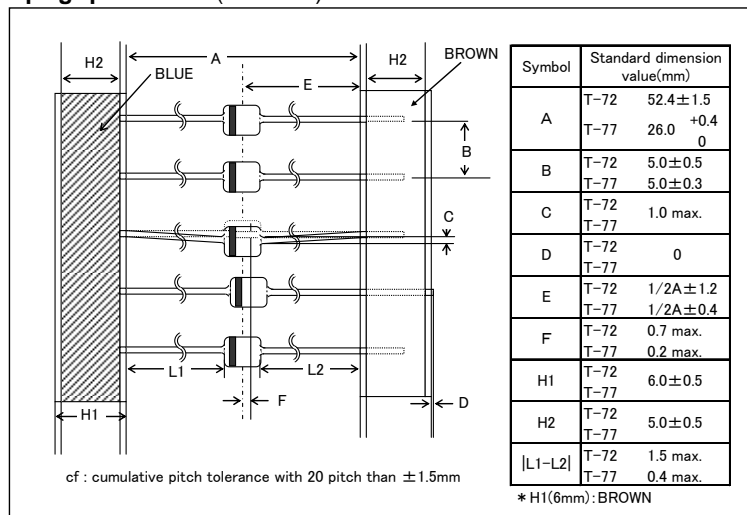
●Construction

Silicon planer

●Dimensions (Unit : mm)



●Taping specification (Unit : 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 to +175	°C

## Diodes

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

TYP.	Symbol								
	Zener voltage : Vz(V)			Operating resistance : Zz(Ω)		Rising operating resistance : Zz(Ω)		Reverse current : IR(μA)	
	MIN.	MAX.	Iz(mA)	MAX.	Iz(mA)	MAX.	Iz(mA)	MAX.	VR(V)
MTZJ 3.6B	3.600	3.845	5.0	100	5.0	1000	1.0	10.0	1.0
MTZJ 3.9B	3.890	4.160	5.0	100	5.0	1000	1.0	5.0	1.0
MTZJ 4.3B	4.170	4.430	5.0	100	5.0	1000	1.0	5.0	1.0
MTZJ 4.7B	4.550	4.800	5.0	80	5.0	900	0.5	5.0	1.0
MTZJ 5.1B	4.940	5.200	5.0	70	5.0	1200	0.5	5.0	1.5
MTZJ 5.6B	5.450	5.730	5.0	40	5.0	900	0.5	5.0	2.5
MTZJ 6.2B	5.960	6.270	5.0	30	5.0	500	0.5	5.0	3.0
MTZJ 6.8B	6.490	6.830	5.0	20	5.0	150	0.5	2.0	3.5
MTZJ 7.5B	7.070	7.450	5.0	20	5.0	120	0.5	0.5	4.0
MTZJ 8.2B	7.780	8.190	5.0	20	5.0	120	0.5	0.5	5.0
MTZJ 9.1B	8.570	9.010	5.0	20	5.0	120	0.5	0.5	6.0
MTZJ 10B	9.410	9.900	5.0	20	5.0	120	0.5	0.2	7.0
MTZJ 11B	10.500	11.050	5.0	20	5.0	120	0.5	0.2	8.0
MTZJ 12B	11.440	12.030	5.0	25	5.0	110	0.5	0.2	9.0
MTZJ 13B	12.550	13.210	5.0	25	5.0	110	0.5	0.2	10.0
MTZJ 15B	13.890	14.620	5.0	25	5.0	110	0.5	0.2	11.0
MTZJ 16B	15.250	16.040	5.0	25	5.0	150	0.5	0.2	12.0
MTZJ 18B	16.820	17.700	5.0	30	5.0	150	0.5	0.2	13.0
MTZJ 20B	18.630	19.590	5.0	30	5.0	200	0.5	0.2	15.0
MTZJ 22B	20.640	21.710	5.0	30	5.0	200	0.5	0.2	17.0
MTZJ 24B	22.610	23.770	5.0	35	5.0	200	0.5	0.2	19.0
MTZJ 27B	24.970	26.260	5.0	45	5.0	250	0.5	0.2	21.0
MTZJ 30B	27.700	29.130	5.0	55	5.0	250	0.5	0.2	23.0
MTZJ 33B	30.320	31.880	5.0	65	5.0	250	0.5	0.2	25.0
MTZJ 36B	32.790	34.490	5.0	75	5.0	250	0.5	0.2	27.0
MTZJ 39B	35.360	37.190	5.0	85	5.0	250	0.5	0.2	30.0

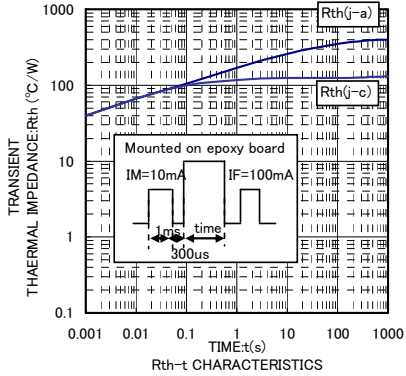
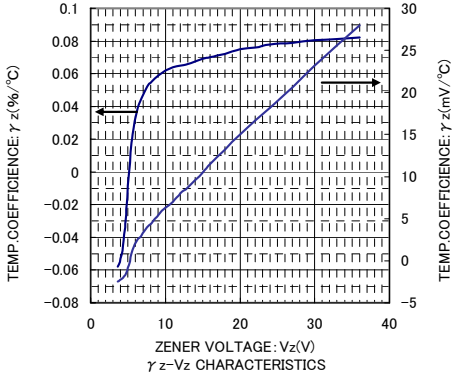
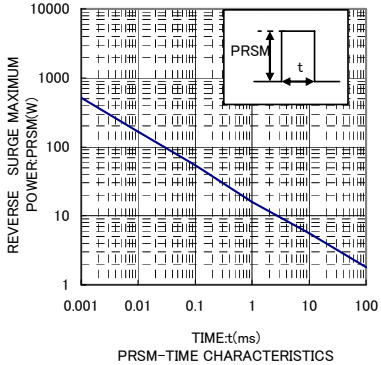
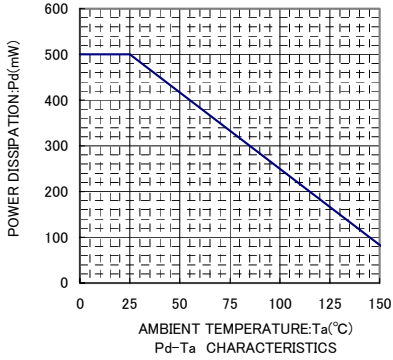
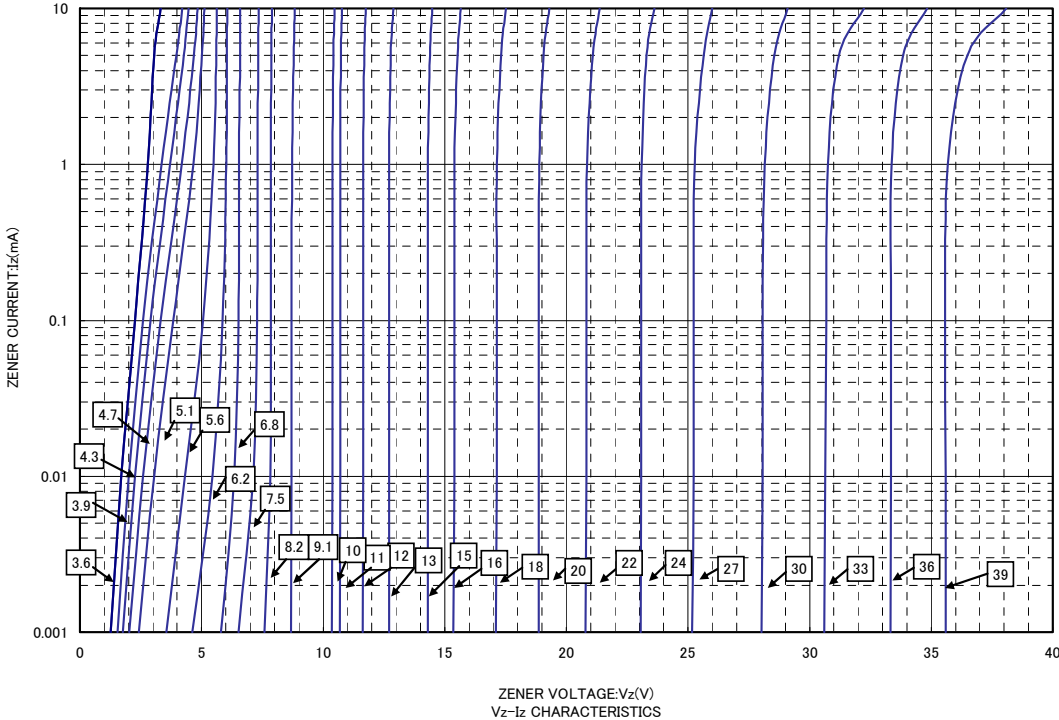
(1 )The zener voltage(Vz) is measured 40ms after power is supplied.

(2 )The operating resistances(Zz,Zzk) are measured by superimposing a minute alternating current on the regulated current(Iz)

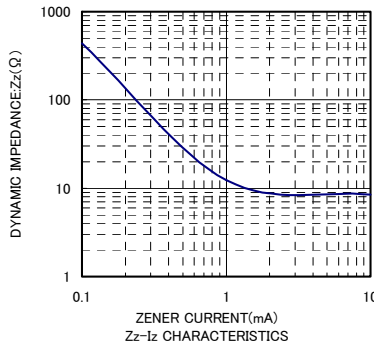
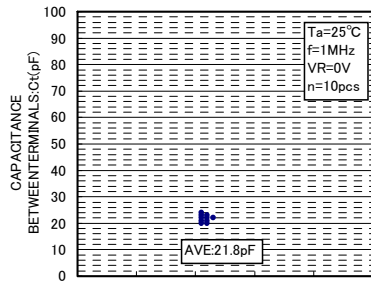
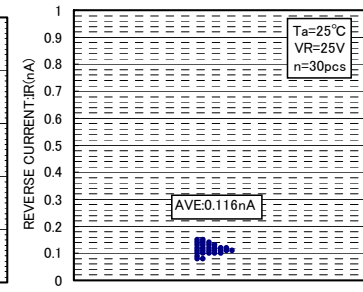
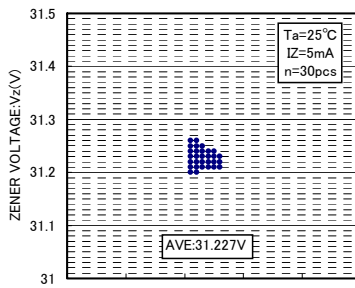
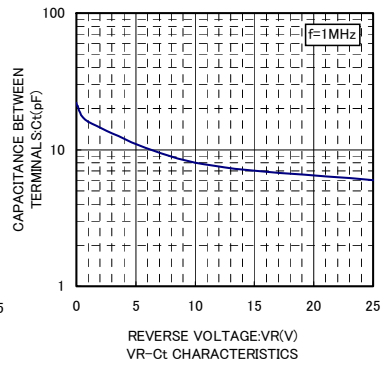
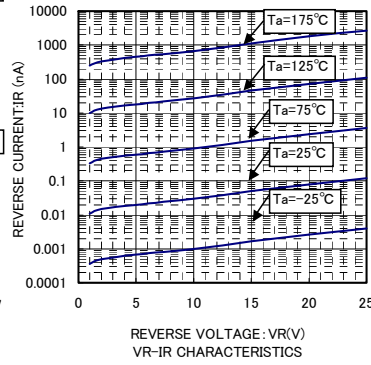
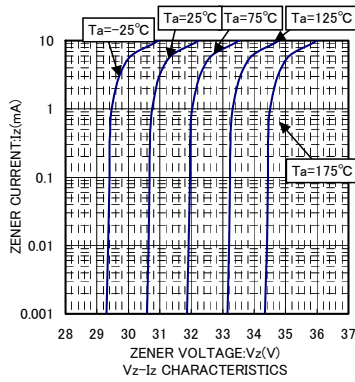
## ●Type NO.

TYPE	TYPE NO.	TYPE	TYPE NO.
MTZJ 3.6B	3.6B	MTZJ 12B	12B
MTZJ 3.9B	3.9B	MTZJ 13B	13B
MTZJ 4.3B	4.3B	MTZJ 15B	15B
MTZJ 4.7B	4.7B	MTZJ 16B	16B
MTZJ 5.1B	5.1B	MTZJ 18B	18B
MTZJ 5.6B	5.6B	MTZJ 20B	20B
MTZJ 6.2B	6.2B	MTZJ 22B	22B
MTZJ 6.8B	6.8B	MTZJ 24B	24B
MTZJ 7.5B	7.5B	MTZJ 27B	27B
MTZJ 8.2B	8.2B	MTZJ 30B	30B
MTZJ 9.1B	9.1B	MTZJ 33B	33B
MTZJ 10B	10B	MTZJ 36B	36B
MTZJ 11B	11B	MTZJ 39B	39B

Diodes



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 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.

It is our top priority to supply products with the utmost quality and reliability. However, there is always a chance of failure due to unexpected factors. Therefore, please take into account the derating characteristics and allow for sufficient safety features, such as extra margin, anti-flammability, and fail-safe measures when designing in order to prevent possible accidents that may result in bodily harm or fire caused by component failure. ROHM cannot be held responsible for any damages arising from the use of the products under conditions out of the range of the specifications or due to non-compliance with the NOTES specified in this catalog.

Thank you for your accessing to ROHM product informations.

More detail product informations and catalogs are available, please contact your nearest sales office.

**ROHM** Customer Support System

THE AMERICAS / EUROPE / ASIA / JAPAN

[www.rohm.com](http://www.rohm.com)

Contact us : [webmaster@rohm.co.jp](mailto:webmaster@rohm.co.jp)