Zener diode

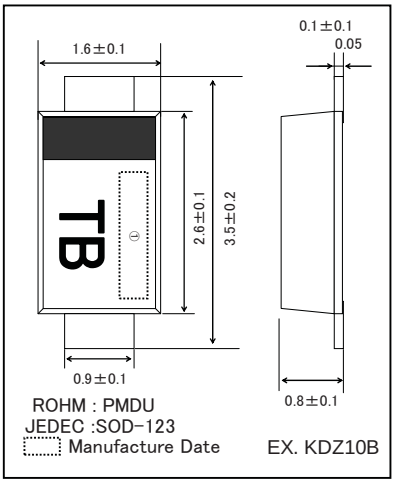
KDZ18B

●**Applications**
Voltage regulation

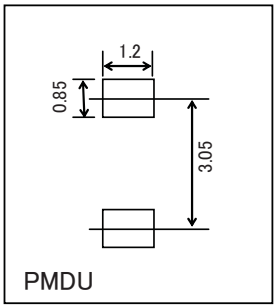
●**Features**
1) Small power mold type. (PMDU)
2) High ESD tolerance

●**Construction**
Silicon epitaxial planar

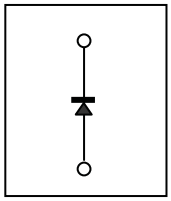
●**Dimensions** (Unit : mm)



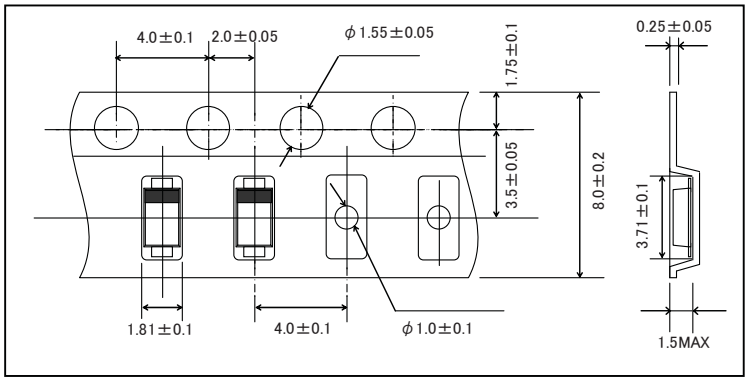
●**Land size figure** (Unit : mm)



●**Structure**



●**Taping dimensions** (Unit : mm)



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

Parameter	Symbol	Limits	Unit
Power dissipation	P	1000	mW
Junction temperature	Tj	150	℃
Storage temperature	Tstg	-55 to +150	℃

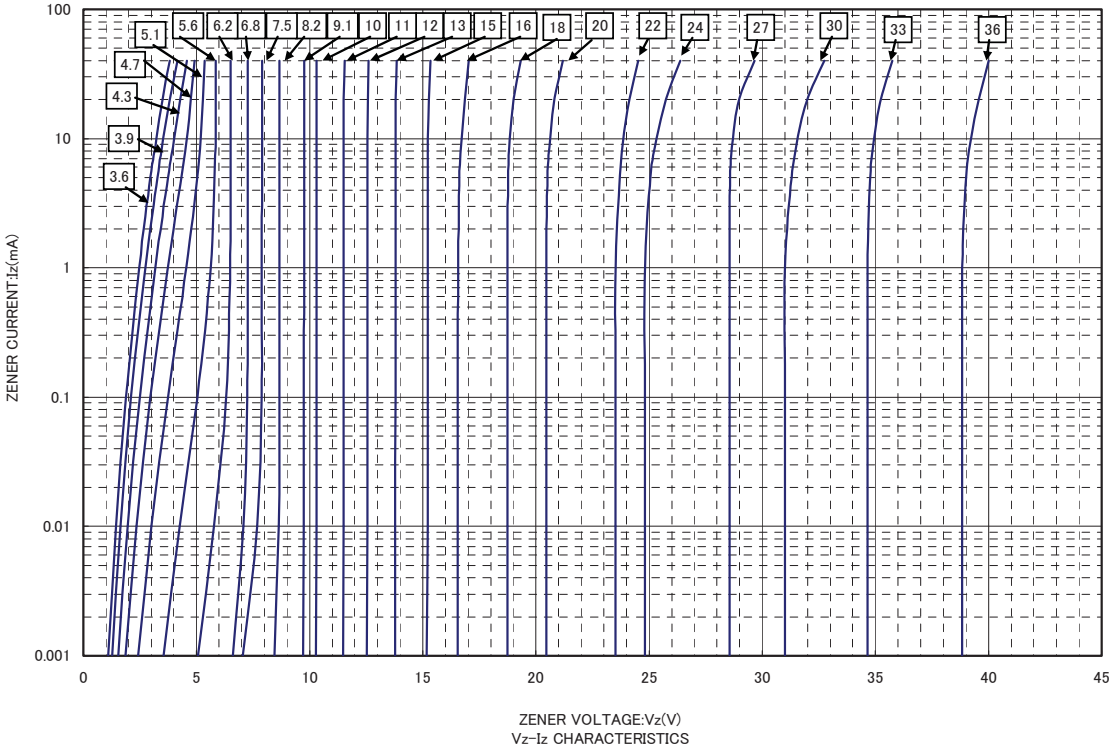
●**Electrical characteristics** (Ta=25°C)

TYP.	Symbol					
	Zener voltage: Vz(V)				Reverse current: IR(μA)	
	MIN.	TYP.	MAX.	Iz(mA)	MAX.	VR(V)
KDZ 3.6B	3.600	3.813	4.000	40	60	1.0
KDZ 3.9B	3.900	4.136	4.400	40	40	1.0
KDZ 4.3B	4.300	4.572	4.800	40	20	1.0
KDZ 4.7B	4.700	4.924	5.200	40	20	1.0
KDZ 5.1B	5.100	5.368	5.700	40	20	1.0
KDZ 5.6B	5.600	5.856	6.300	40	20	1.5
KDZ 6.2B	6.200	6.509	7.000	40	20	3.0
KDZ 6.8B	6.800	7.280	7.700	40	20	3.5
KDZ 7.5B	7.500	7.889	8.400	40	20	4.0
KDZ 8.2B	8.200	8.655	9.300	40	20	5.0
KDZ 9.1B	9.100	9.747	10.200	40	20	6.0
KDZ 10B	10.000	10.310	11.200	40	10	7.0
KDZ 11B	11.000	11.510	12.300	20	10	8.0
KDZ 12B	12.000	12.500	13.500	20	10	9.0
KDZ 13B	13.300	13.820	15.000	20	10	10.0
KDZ 15B	14.700	15.350	16.500	20	10	11.0
KDZ 16B	16.200	16.860	18.300	20	10	12.0
KDZ 18B	18.000	19.000	20.300	20	10	13.0
KDZ 20B	20.000	20.820	22.400	20	10	15.0
KDZ 22B	22.000	23.850	24.500	10	10	17.0
KDZ 24B	24.000	25.310	27.600	10	10	19.0
KDZ 27B	27.000	28.700	30.800	10	10	21.0
KDZ 30B	30.000	31.570	34.000	10	10	23.0
KDZ 33B	33.000	34.950	37.000	10	10	25.0
KDZ 36B	36.000	39.240	40.000	10	10	27.0

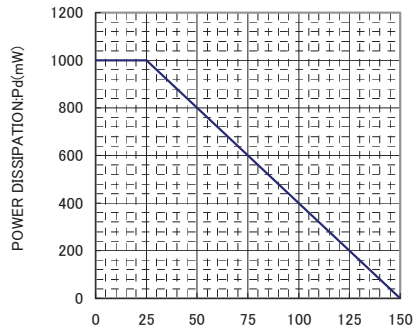
※The Zener voltage (Vz) is measured 40ms after power is supplied.

●**Marking** (TYPE NO.)

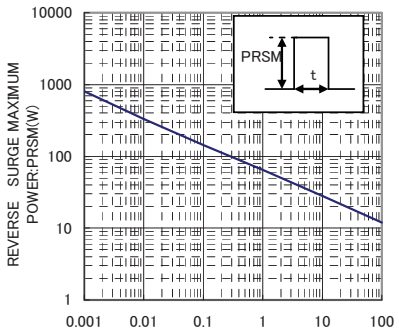
TYPE	TYPE NO.	TYPE	TYPE NO.
KDZ 3.6B	GB	KDZ 12B	VB
KDZ 3.9B	HB	KDZ 13B	WB
KDZ 4.3B	JB	KDZ 15B	XB
KDZ 4.7B	KB	KDZ 16B	YB
KDZ 5.1B	LB	KDZ 18B	ZB
KDZ 5.6B	MB	KDZ 20B	AD
KDZ 6.2B	NB	KDZ 22B	BD
KDZ 6.8B	PB	KDZ 24B	CD
KDZ 7.5B	QB	KDZ 27B	DD
KDZ 8.2B	RB	KDZ 30B	ED
KDZ 9.1B	SB	KDZ 33B	FD
KDZ 10B	TB	KDZ 36B	GD
KDZ 11B	UB		



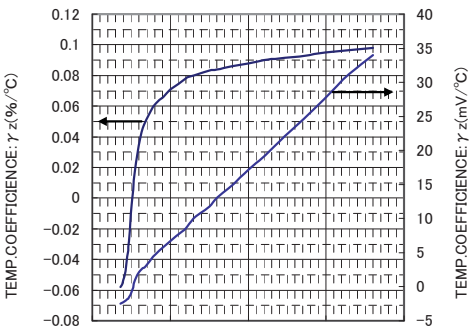
Vz–Iz CHARACTERISTICS



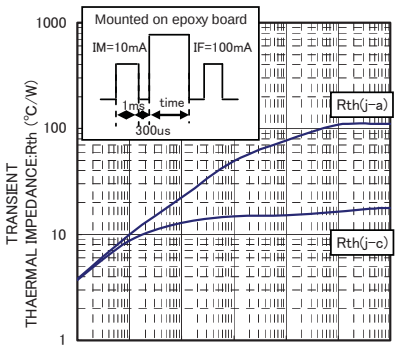
Pd–Ta CHARACTERISTICS



PRSM–TIME CHARACTERISTICS

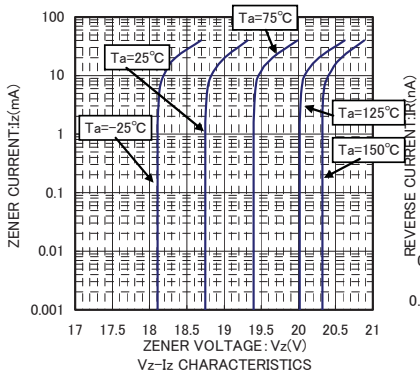


γz–Vz CHARACTERISTICS

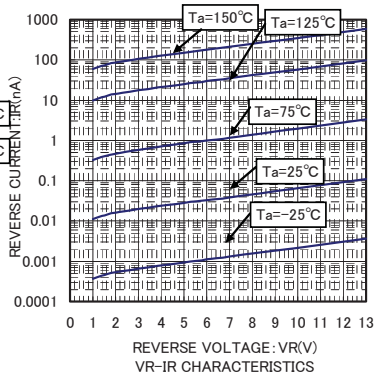


Rth–t CHARACTERISTICS

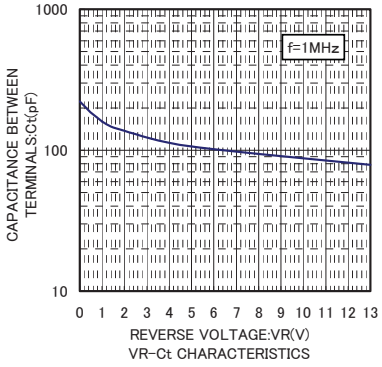
●**Electrical characteristic curves** (Ta=25°C)



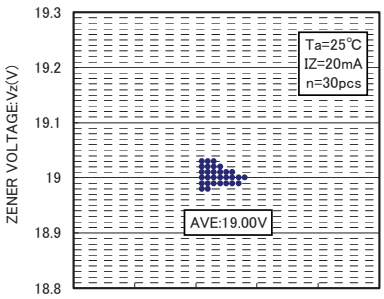
Vz-Iz CHARACTERISTICS



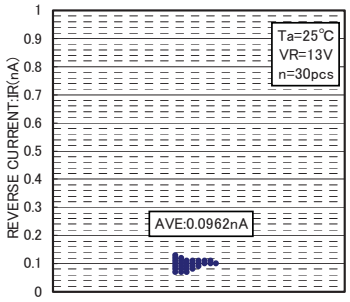
VR-IR CHARACTERISTICS



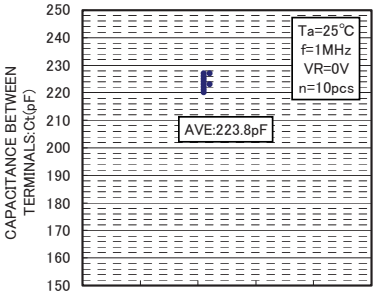
VR-Ct CHARACTERISTICS



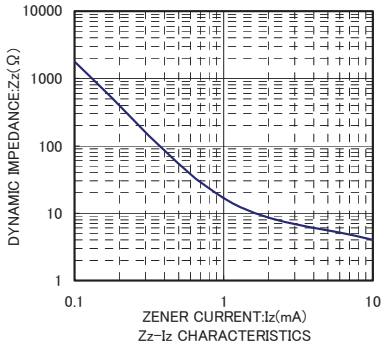
Vz DISPERSION MAP



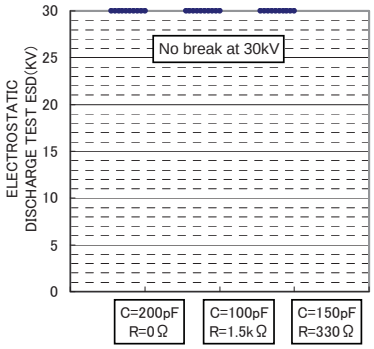
IR DISPERSION MAP



Ct DISPERSION MAP



Zz-Iz CHARACTERISTICS



ESD DISPERSION MAP

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

Contact us : webmaster@rohm.co.jp

Copyright © 2008 ROHM CO.,LTD.

ROHM CO., LTD. 21 Saiin Mizosaki-cho, Ukyo-ku, Kyoto 615-8585, Japan
TEL : +81-75-311-2121
FAX : +81-75-315-0172