KDZ series Datasheet

### Application

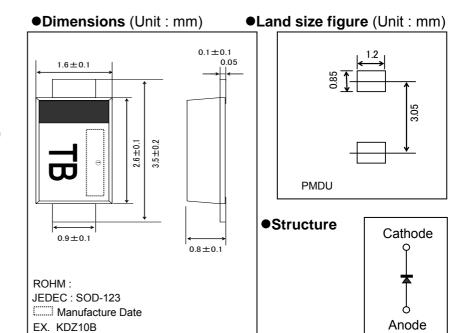
Voltage regulation

#### Features

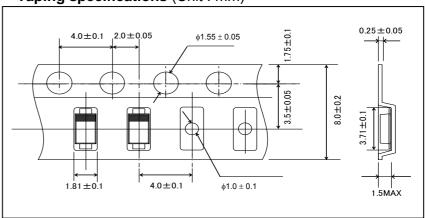
- 1) Small power mold type. (PMDU)
- 2) High ESD tolerance

#### Construction

Silicon epitaxial planar



# ● Taping specifications (Unit: mm)



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

Parameter	Symbol	Limits	Unit
Power dissipation	Р	1000	mW
Junction temperature	Tj	150	°C
Storage temperature	Tstg	-55 to +150	°C

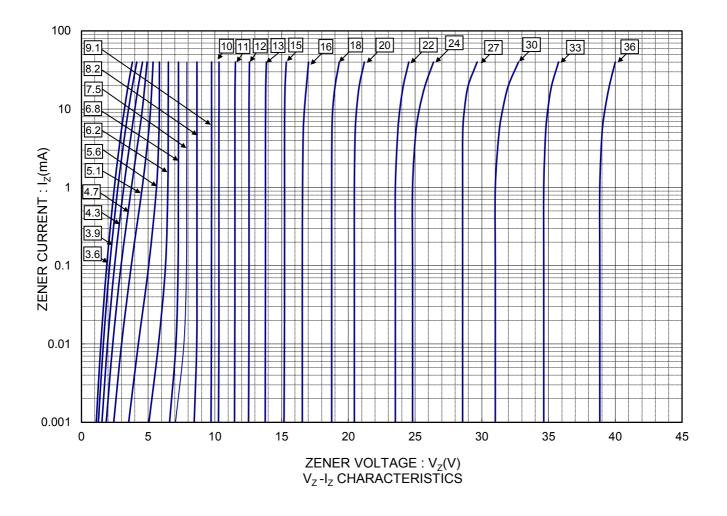
### ●Electrical characteristics (Ta= 25°C)

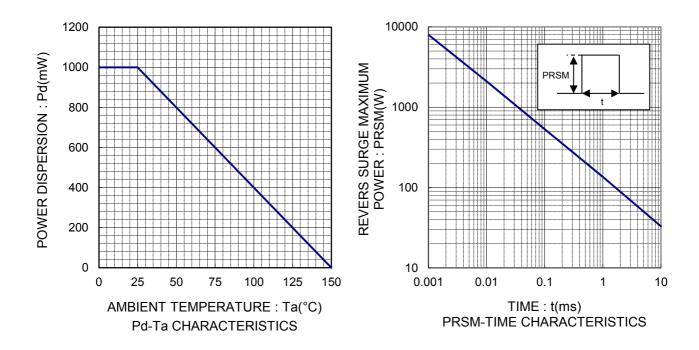
	Symbol					
TYP.	Zener voltage : V <sub>Z</sub> (V)				Reverse current	
111.					: I <sub>R</sub> (μA)	
	MIN.	TYP.	MAX.	$I_Z(mA)$	MAX.	$V_R(V)$
KDZ 3.6B	3.600	3.813	4.000	40.0	60.0	1.0
KDZ 3.9B	3.900	4.136	4.400	40.0	40.0	1.0
KDZ 4.3B	4.300	4.572	4.800	40.0	20.0	1.0
KDZ 4.7B	4.700	4.924	5.200	40.0	20.0	1.0
KDZ 5.1B	5.100	5.368	5.700	40.0	20.0	1.0
KDZ 5.6B	5.600	5.856	6.300	40.0	20.0	1.5
KDZ 6.2B	6.200	6.509	7.000	40.0	20.0	3.0
KDZ 6.8B	6.800	7.280	7.700	40.0	20.0	3.5
KDZ 7.5B	7.500	7.889	8.400	40.0	20.0	4.0
KDZ 8.2B	8.200	8.655	9.300	40.0	20.0	5.0
KDZ 9.1B	9.100	9.747	10.200	40.0	20.0	6.0
KDZ 10B	10.000	10.310	11.200	40.0	10.0	7.0
KDZ 11B	11.000	11.510	12.300	20.0	10.0	8.0
KDZ 12B	12.000	12.500	13.500	20.0	10.0	9.0
KDZ 13B	13.300	13.820	15.000	20.0	10.0	10.0
KDZ 15B	14.700	15.350	16.500	20.0	10.0	11.0
KDZ 16B	16.200	16.860	18.300	20.0	10.0	12.0
KDZ 18B	18.000	19.000	20.300	20.0	10.0	13.0
KDZ 20B	20.000	20.820	22.400	20.0	10.0	15.0
KDZ 22B	22.000	23.850	24.500	10.0	10.0	17.0
KDZ 24B	24.000	25.310	27.600	10.0	10.0	19.0
KDZ 27B	27.000	28.700	30.800	10.0	10.0	21.0
KDZ 30B	30.000	31.570	34.000	10.0	10.0	23.0
KDZ 33B	33.000	34.950	37.000	10.0	10.0	25.0
KDZ 36B	36.000	39.240	40.000	10.0	10.0	27.0

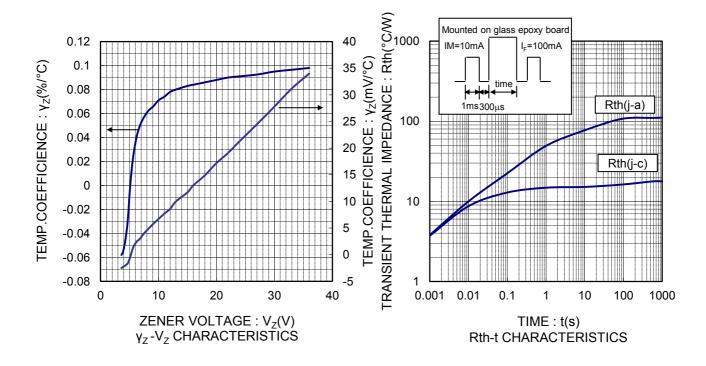
<sup>\*</sup>The Zener voltage (Vz) is measured 40ms after power is supplied.

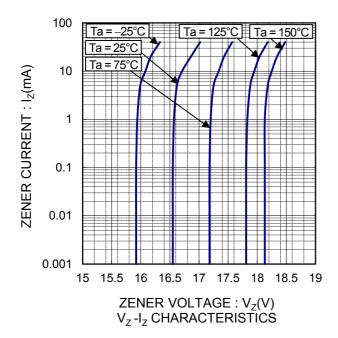
# ●MARKING (TYPE NO.)

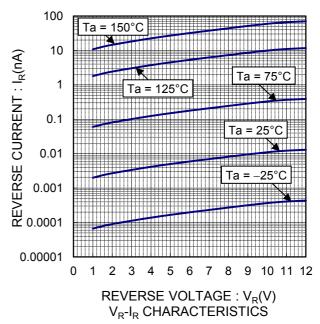
TYPE	TYPE NO.	TYPE	TYPE NO.	
KDZ 3.6B	GB	KDZ 12B	VB	
KDZ 3.9B	HB	KDZ 13B	WB	
KDZ 4.3B	JB	KDZ 15B	ХВ	
KDZ 4.7B	KB	KDZ 16B	YB	
KDZ 5.1B	LB	KDZ 18B	ZB	
KDZ 5.6B	MB	KDZ 20B	AD	
KDZ 6.2B	NB	KDZ 22B	BD	
KDZ 6.8B	PB	KDZ 24B	CD	
KDZ 7.5B	QB	KDZ 27B	DD	
KDZ 8.2B	RB	KDZ 30B	ED	
KDZ 9.1B	SB	KDZ 33B	FD	
KDZ 10B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

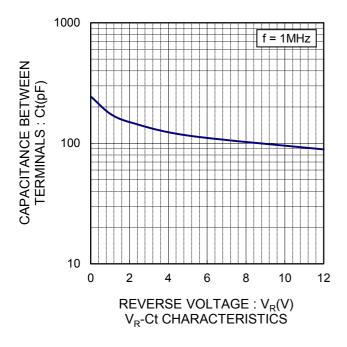


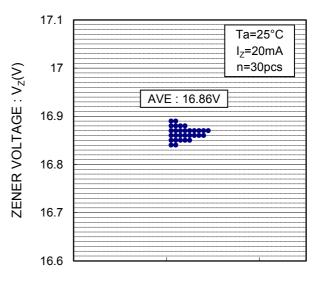


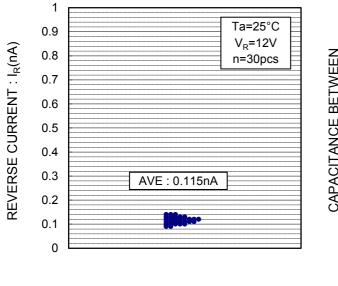


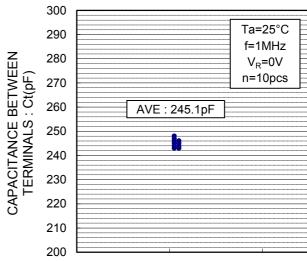






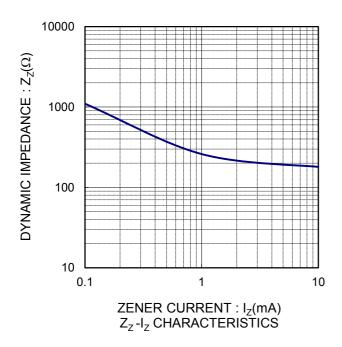


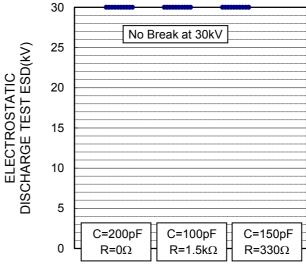




I<sub>R</sub> DISPERSION MAP

Ct DISPERSION MAP





**ESD DISPERSION MAP** 

#### Notes

- 1) The information contained herein is subject to change without notice.
- Before you use our Products, please contact our sales representative and verify the latest specifications:
- 3) Although ROHM is continuously working to improve product reliability and quality, semiconductors can break down and malfunction due to various factors. Therefore, in order to prevent personal injury or fire arising from failure, please take safety measures such as complying with the derating characteristics, implementing redundant and fire prevention designs, and utilizing backups and fail-safe procedures. ROHM shall have no responsibility for any damages arising out of the use of our Poducts beyond the rating specified by ROHM
- 4) Examples of application circuits, circuit constants and any other information contained herein are provided only to illustrate the standard usage and operations of the Products. The peripheral conditions must be taken into account when designing circuits for mass production.
- 5) The technical information specified herein is intended only to show the typical functions of and examples of application circuits for the Products. ROHM does not grant you, explicitly or implicitly, any license to use or exercise intellectual property or other rights held by ROHM or any other parties. ROHM shall have no responsibility whatsoever for any dispute arising out of the use of such technical information.
- 6) The Products are intended for use in general electronic equipment (i.e. AV/OA devices, communication, consumer systems, gaming/entertainment sets) as well as the applications indicated in this document.
- 7) The Products specified in this document are not designed to be radiation tolerant.
- 8) For use of our Products in applications requiring a high degree of reliability (as exemplified below), please contact and consult with a ROHM representative: transportation equipment (i.e. cars, ships, trains), primary communication equipment, traffic lights, fire/crime prevention, safety equipment, medical systems, servers, solar cells, and power transmission systems.
- 9) Do not use our Products in applications requiring extremely high reliability, such as aerospace equipment, nuclear power control systems, and submarine repeaters.
- 10) ROHM shall have no responsibility for any damages or injury arising from non-compliance with the recommended usage conditions and specifications contained herein.
- 11) ROHM has used reasonable care to ensur the accuracy of the information contained in this document. However, ROHM does not warrants that such information is error-free, and ROHM shall have no responsibility for any damages arising from any inaccuracy or misprint of such information.
- 12) Please use the Products in accordance with any applicable environmental laws and regulations, such as the RoHS Directive. For more details, including RoHS compatibility, please contact a ROHM sales office. ROHM shall have no responsibility for any damages or losses resulting non-compliance with any applicable laws or regulations.
- 13) When providing our Products and technologies contained in this document to other countries, you must abide by the procedures and provisions stipulated in all applicable export laws and regulations, including without limitation the US Export Administration Regulations and the Foreign Exchange and Foreign Trade Act.
- 14) This document, in part or in whole, may not be reprinted or reproduced without prior consent of ROHM.



Thank you for your accessing to ROHM product informations. More detail product informations and catalogs are available, please contact us.

# ROHM Customer Support System

http://www.rohm.com/contact/