Zener diode

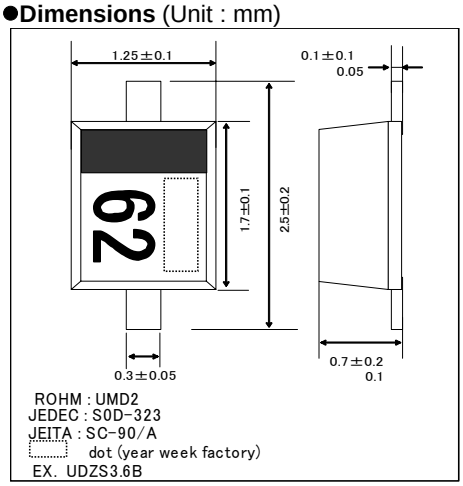
UDZS15B

●Applications
Constant voltage control

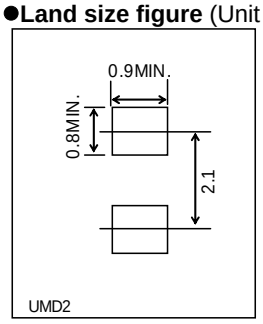
●Features
1) Compact, 2-pin mini-mold type for high-density mounting. (UMD2)
2) High reliability.
3) Can be mounted automatically, using chip mounter.

●Construction
Silicon epitaxial planar

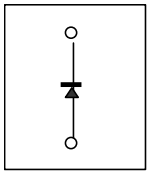
●Dimensions (Unit : mm)



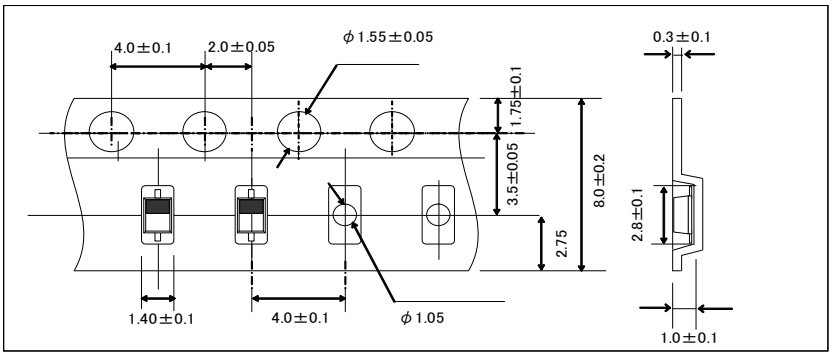
●Land size figure (Unit : mm)



●Structure



● Taping specifications (Unit : mm)



●Absolute maximum ratings (Ta=25°C)

Parameter	Symbol	Limits	Unit
Power dissipation	P	200	mW
Junction temperature	Tj	150	℃
Storage temperature	Tstg	-55 to +150	℃
Operating temperature	Topr	-55 to +150	℃

© 2012 ROHM Co., Ltd. All rights reserved.

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

TYP.	Symbol								
	Zener voltage : Vz(V)			Operating resistance : Zz(Ω)		Rising operataing resistance : Zz(Ω)		Reverse current : IR(uA)	
	MIN.	MAX.	Iz(mA)	MAX.	Iz(mA)	MAX.	Iz(mA)	MAX.	VR(V)
UDZS 3.6B	3.600	3.845	5.0	100	5.0	1000	1.0	10.0	1.0
UDZS 3.9B	3.890	4.160	5.0	100	5.0	1000	1.0	5.0	1.0
UDZS 4.3B	4.170	4.430	5.0	100	5.0	1000	1.0	5.0	1.0
UDZS 4.7B	4.550	4.750	5.0	100	5.0	800	0.5	2.0	1.0
UDZS 5.1B	4.980	5.200	5.0	80	5.0	500	0.5	2.0	1.5
UDZS 5.6B	5.490	5.730	5.0	60	5.0	200	0.5	1.0	2.5
UDZS 6.2B	6.060	6.330	5.0	60	5.0	100	0.5	1.0	3.0
UDZS 6.8B	6.650	6.930	5.0	40	5.0	60	0.5	0.5	3.5
UDZS 7.5B	7.280	7.600	5.0	30	5.0	60	0.5	0.5	4.0
UDZS 8.2B	8.020	8.360	5.0	30	5.0	60	0.5	0.5	5.0
UDZS 9.1B	8.850	9.230	5.0	30	5.0	60	0.5	0.5	6.0
UDZS 10B	9.770	10.210	5.0	30	5.0	60	0.5	0.1	7.0
UDZS 11B	10.760	11.220	5.0	30	5.0	60	0.5	0.1	8.0
UDZS 12B	11.740	12.240	5.0	30	5.0	80	0.5	0.1	9.0
UDZS 13B	12.910	13.490	5.0	37	5.0	80	0.5	0.1	10.0
UDZS 15B	14.340	14.980	5.0	42	5.0	80	0.5	0.1	11.0
UDZS 16B	15.850	16.510	5.0	50	5.0	80	0.5	0.1	12.0
UDZS 18B	17.560	18.350	5.0	65	5.0	80	0.5	0.1	13.0
UDZS 20B	19.520	20.390	5.0	85	5.0	100	0.5	0.1	15.0
UDZS 22B	21.540	22.470	5.0	100	5.0	100	0.5	0.1	17.0
UDZS 24B	23.720	24.780	5.0	120	5.0	120	0.5	0.1	19.0
UDZS 27B	26.190	27.530	5.0	150	5.0	150	0.5	0.1	21.0
UDZS 30B	29.190	30.690	5.0	200	5.0	200	0.5	0.1	23.0
UDZS 33B	32.150	33.790	5.0	250	5.0	250	0.5	0.1	25.0
UDZS 36B	35.070	36.870	5.0	300	5.0	300	0.5	0.1	27.0

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

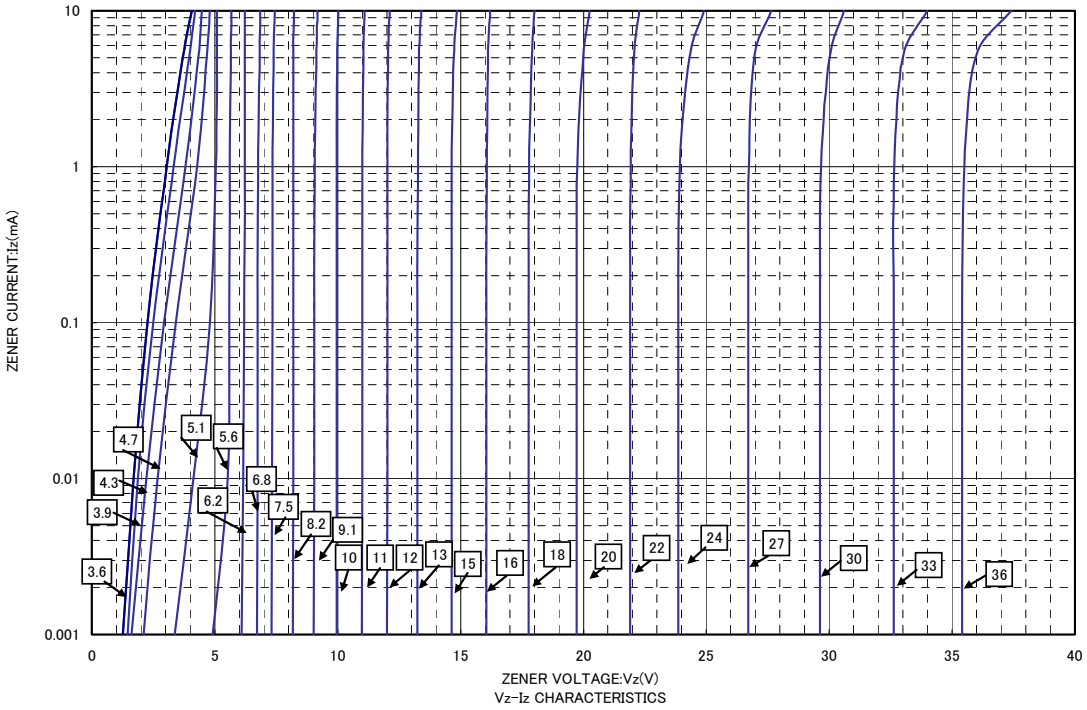
(2)The operating resistances(Zz,Zzk) are measured by superimposing a minute alternating current on the regulated current(Iz)

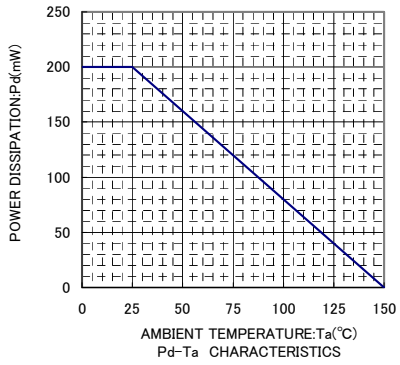
●**Type No.**

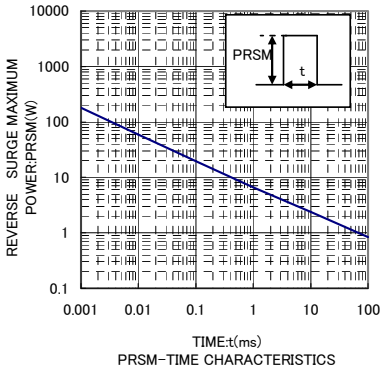
TYPE	TYPE NO.	TYPE	TYPE NO.
UDZS 3.6B	62	UDZS 12B	25
UDZS 3.9B	72	UDZS 13B	35
UDZS 4.3B	82	UDZS 15B	45
UDZS 4.7B	92	UDZS 16B	55
UDZS 5.1B	A2	UDZS 18B	65
UDZS 5.6B	C2	UDZS 20B	75
UDZS 6.2B	E2	UDZS 22B	85
UDZS 6.8B	F2	UDZS 24B	95
UDZS 7.5B	H2	UDZS 27B	A5
UDZS 8.2B	J2	UDZS 30B	C5
UDZS 9.1B	L2	UDZS 33B	E5
UDZS 10B	05	UDZS 36B	F5
UDZS 11B	15		

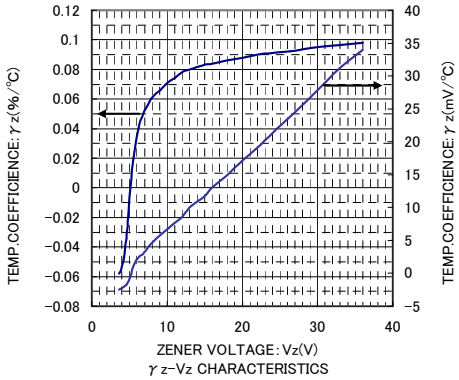
© 2012 ROHM Co., Ltd. All rights reserved.

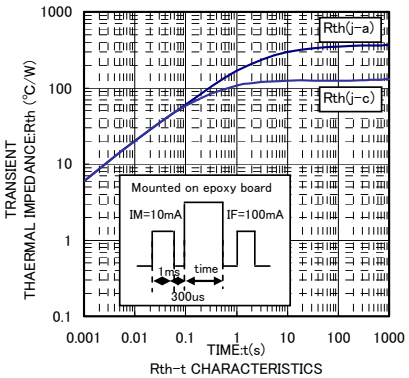
●**Electrical characteristic curves** (Ta=25°C)



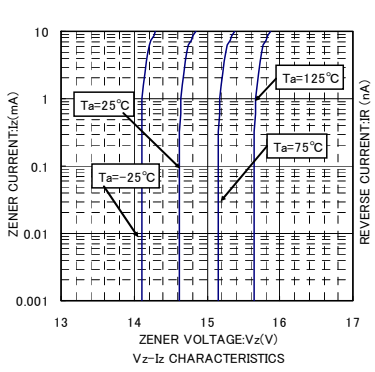




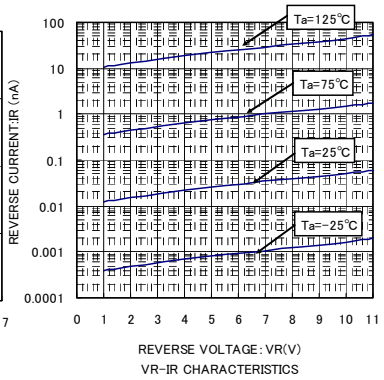




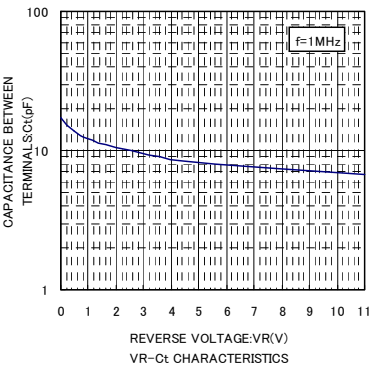
© 2012 ROHM Co., Ltd. All rights reserved.



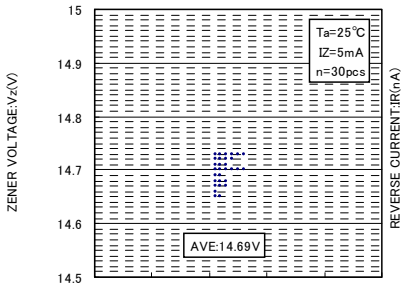
Vz-Iz CHARACTERISTICS



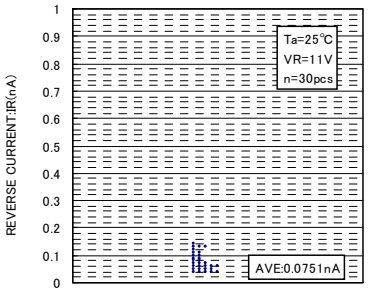
VR-IR CHARACTERISTICS



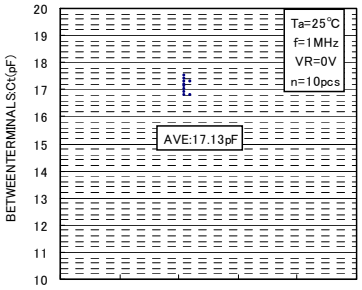
VR-Ct CHARACTERISTICS



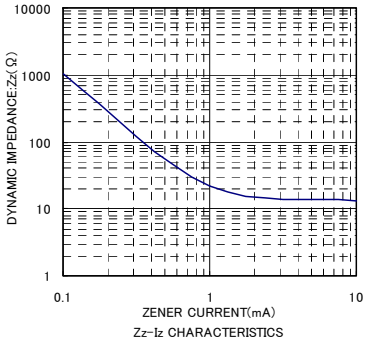
Vz DISPERSION MAP



IR DISPERSION MAP



Ct DISPERSION MAP



Zz-Iz CHARACTERISTICS

© 2012 ROHM Co., Ltd. All rights reserved.

Notes

No copying or reproduction of this document, in part or in whole, is permitted without the consent of ROHM Co.,Ltd.

The content specified herein is subject to change for improvement without notice.

The content specified herein is for the purpose of introducing ROHM's products (hereinafter "Products"). If you wish to use any such Product, please be sure to refer to the specifications, which can be obtained from ROHM upon request.

Examples of application circuits, circuit constants and any other information contained herein illustrate the standard usage and operations of the Products. The peripheral conditions must be taken into account when designing circuits for mass production.

Great care was taken in ensuring the accuracy of the information specified in this document. However, should you incur any damage arising from any inaccuracy or misprint of such information, ROHM shall bear no responsibility for such damage.

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 and other parties. ROHM shall bear no responsibility whatsoever for any dispute arising from the use of such technical information.

The Products specified in this document are intended to be used with general-use electronic equipment or devices (such as audio visual equipment, office-automation equipment, communication devices, electronic appliances and amusement devices).

The Products specified in this document are not designed to be radiation tolerant.

While ROHM always makes efforts to enhance the quality and reliability of its Products, a Product may fail or malfunction for a variety of reasons.

Please be sure to implement in your equipment using the Products safety measures to guard against the possibility of physical injury, fire or any other damage caused in the event of the failure of any Product, such as derating, redundancy, fire control and fail-safe designs. ROHM shall bear no responsibility whatsoever for your use of any Product outside of the prescribed scope or not in accordance with the instruction manual.

The Products are not designed or manufactured to be used with any equipment, device or system which requires an extremely high level of reliability the failure or malfunction of which may result in a direct threat to human life or create a risk of human injury (such as a medical instrument, transportation equipment, aerospace machinery, nuclear-reactor controller, fuel-controller or other safety device). ROHM shall bear no responsibility in any way for use of any of the Products for the above special purposes. If a Product is intended to be used for any such special purpose, please contact a ROHM sales representative before purchasing.

If you intend to export or ship overseas any Product or technology specified herein that may be controlled under the Foreign Exchange and the Foreign Trade Law, you will be required to obtain a license or permit under the Law.

ROHM SEMICONDUCTOR

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/

© 2012 ROHM Co., Ltd. All rights reserved.