Zener diodes

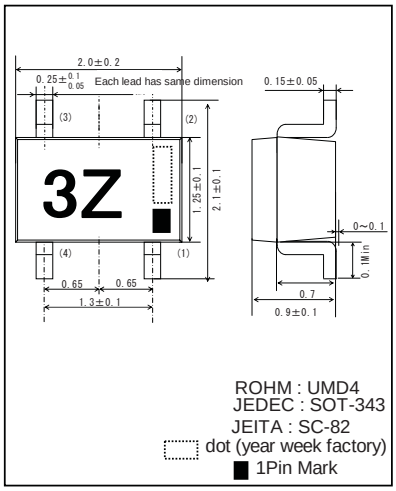
UMZ22K

●**Applications**
Constant voltage control

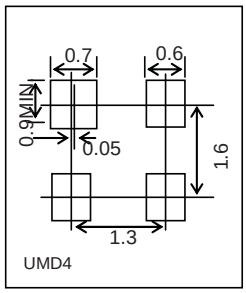
●**Features**
1) Ultra Small mold type.
(UMD4)
2) High reliability

●**Construction**
Silicon epitaxial planar

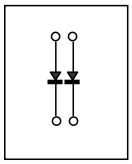
●**Dimensions** (Unit : mm)



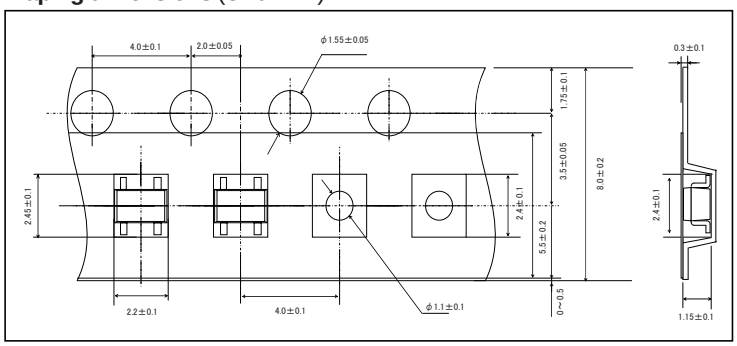
●**Land size figure** (Unit : mm)



●**Structure**



●**Taping dimensions** (Unit : mm)



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

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

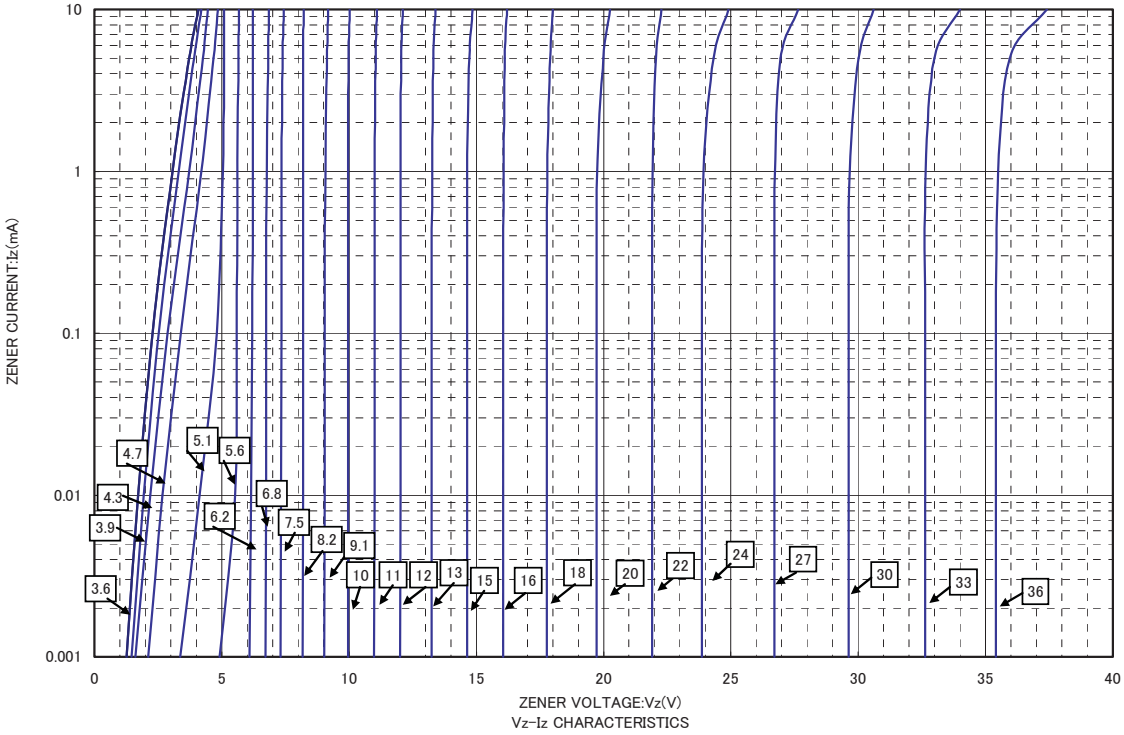
●**Electrical characteristics** (Ta=25°C)

TYP.	Symbol				
	Zener voltage : Vz(V)			Reverse current : IR(uA)	
	MIN.	MAX.	Iz(mA)	MAX.	VR(V)
UMZ3.6K	3.600	3.845	5.0	10.0	1.0
UMZ3.9K	3.890	4.160	5.0	5.0	1.0
UMZ4.3K	4.170	4.430	5.0	5.0	1.0
UMZ4.7K	4.550	4.750	5.0	2.0	1.0
UMZ5.1K	4.980	5.200	5.0	2.0	1.5
UMZ5.6K	5.490	5.730	5.0	1.0	2.5
UMZ6.2K	6.060	6.330	5.0	1.0	3.0
UMZ6.8K	6.650	6.930	5.0	0.5	3.5
UMZ7.5K	7.280	7.600	5.0	0.5	4.0
UMZ8.2K	8.020	8.360	5.0	0.5	5.0
UMZ9.1K	8.850	9.230	5.0	0.5	6.0
UMZ10K	9.770	10.210	5.0	0.1	7.0
UMZ11K	10.760	11.220	5.0	0.1	8.0
UMZ12K	11.740	12.240	5.0	0.1	9.0
UMZ13K	12.910	13.490	5.0	0.1	10.0
UMZ15K	14.340	14.980	5.0	0.1	11.0
UMZ16K	15.850	16.510	5.0	0.1	12.0
UMZ18K	17.560	18.350	5.0	0.1	13.0
UMZ20K	19.520	20.390	5.0	0.1	15.0
UMZ22K	21.540	22.470	5.0	0.1	17.0
UMZ24K	23.720	24.780	5.0	0.1	19.0
UMZ27K	26.190	27.530	5.0	0.1	21.0
UMZ30K	29.190	30.690	5.0	0.1	23.0
UMZ33K	32.150	33.790	5.0	0.1	25.0
UMZ36K	35.070	36.870	5.0	0.1	27.0

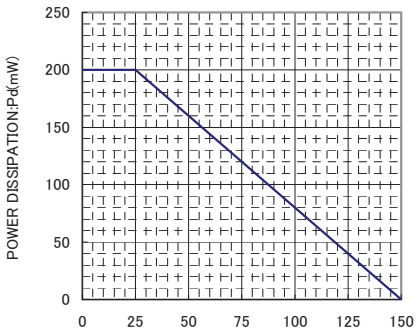
(1)The zener voltage(Vz) is measured 40ms after power is supplied.

●**MARKING (TYPE NO.)**

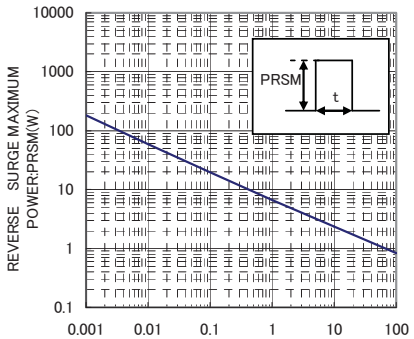
TYPE	TYPE NO.	TYPE	TYPE NO.
UMZ 3.6K	5U	UMZ 12K	2L
UMZ 3.9K	5V	UMZ 13K	5B
UMZ 4.3K	5W	UMZ 15K	2M
UMZ 4.7K	5X	UMZ 16K	2N
UMZ 5.1K	5Y	UMZ 18K	2P
UMZ 5.6K	3V	UMZ 20K	2Q
UMZ 6.2K	5Z	UMZ 22K	2R
UMZ 6.8K	3X	UMZ 24K	2S
UMZ 7.5K	2E	UMZ 27K	2T
UMZ 8.2K	2H	UMZ 30K	2U
UMZ 9.1K	5E	UMZ 33K	2V
UMZ 10K	3Z	UMZ 36K	2W
UMZ 11K	2K		



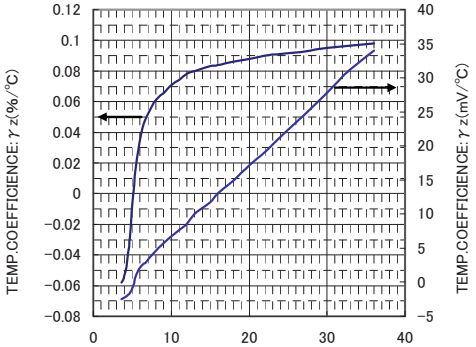
Vz-Iz CHARACTERISTICS



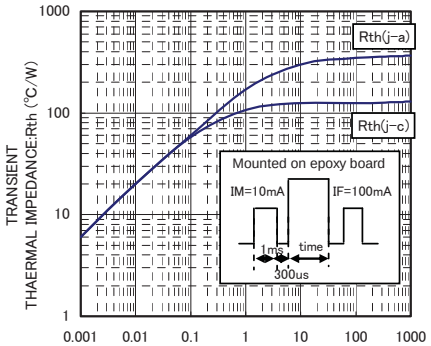
Pd-Ta CHARACTERISTICS



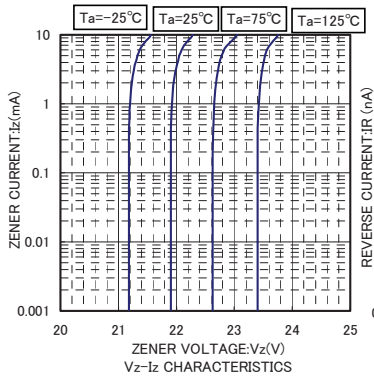
PRSM-TIME CHARACTERISTICS



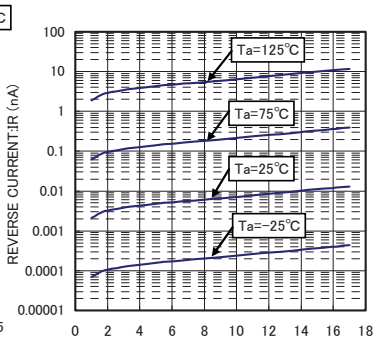
γz-Vz CHARACTERISTICS



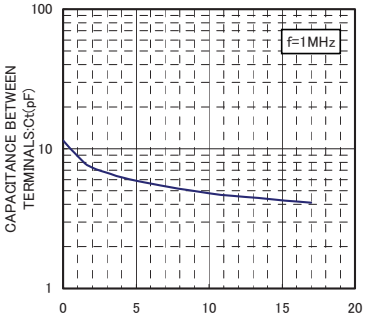
Rth-t CHARACTERISTICS



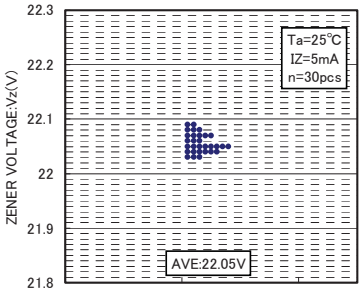
Vz–Iz CHARACTERISTICS



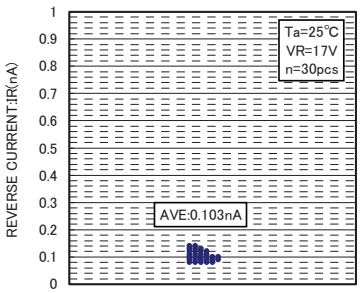
VR–IR CHARACTERISTICS



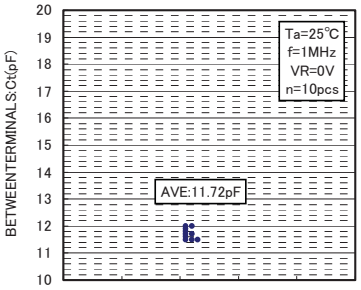
VR–Ct CHARACTERISTICS



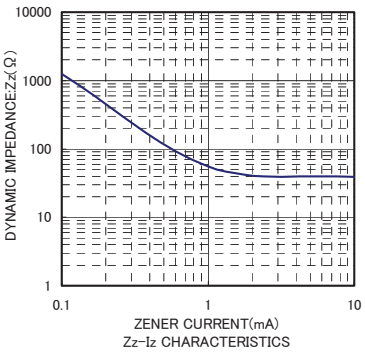
Vz DISPERSION MAP



IR DISPERSION MAP



Ct DISPERSION MAP



Zz–Iz CHARACTERISTICS

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