Zener diode

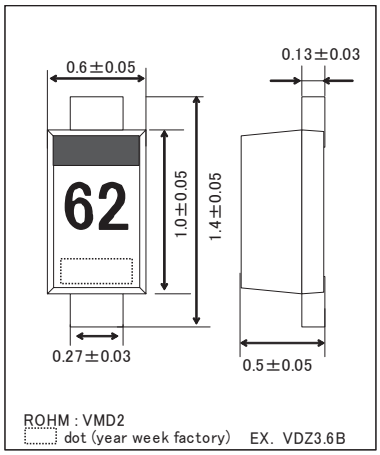
VDZ16B

●**Application**
Voltage regulation

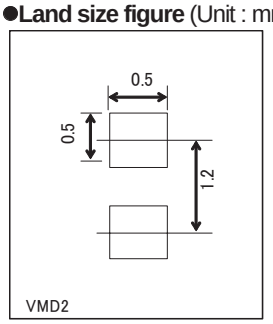
●**Features**
1) Ultra small mold type (VMD2).
2) High reliability.
3) By chip-mounter, automatic mounting is possible.

●**Construction**
Silicon Epitaxial Planer

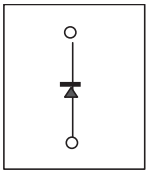
●**External dimensions** (Unit : mm)



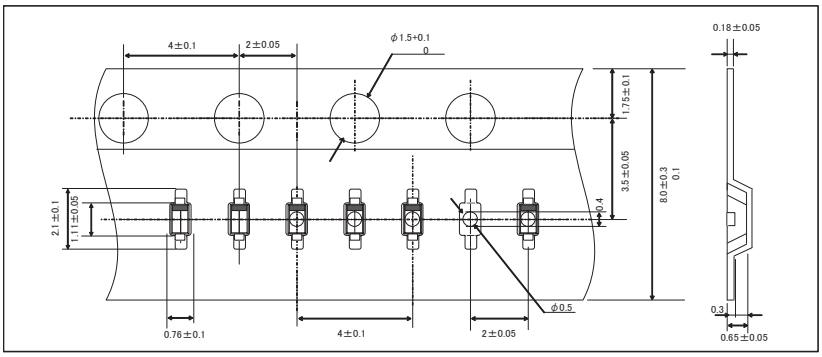
●**Land size figure** (Unit : mm)



●**Structure**



●**Taping specification** (Unit : mm)



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

Parameter	Symbol	Limits	Unit
Power dissipation	P	100	mW
Junction temperature	Tj	150	℃
Storage temperature	Tstg	-55 to +150	℃
Operating temperature	Topr	-55 to +150	℃

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

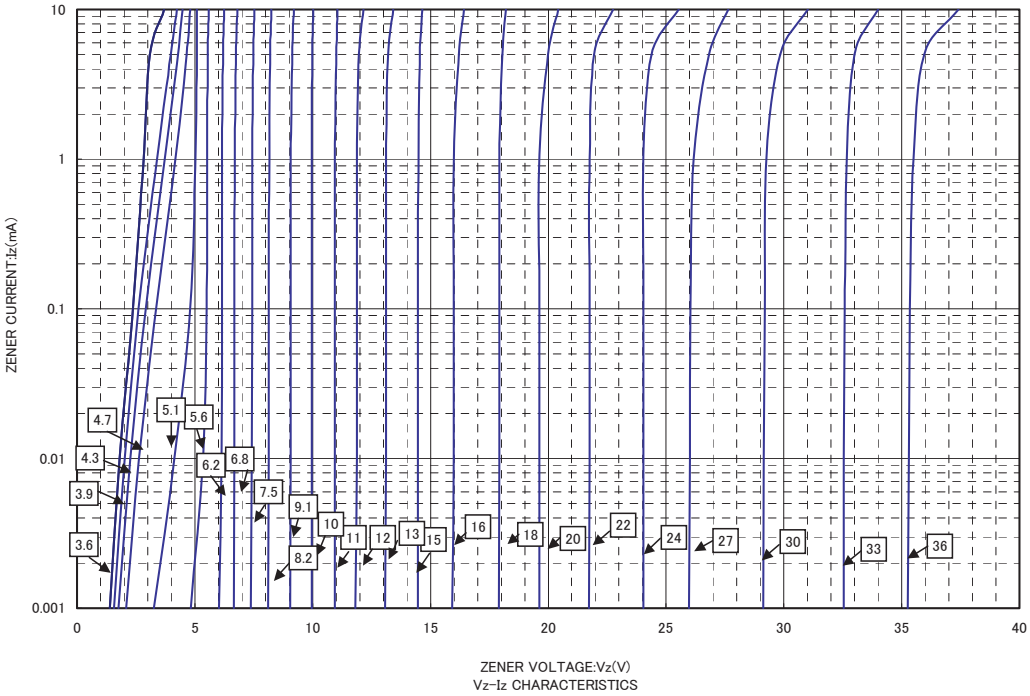
TYP.	Symbol								
	Zener voltage: Vz(V)			Operating resistance: Zz(Ω)		Rising operating resistance: Zz(Ω)		Reverse current: IR(uA)	
	MIN.	MAX.	Iz(mA)	MAX.	Iz(mA)	MAX.	Iz(mA)	MAX.	VR(V)
VDZ 3.6B	3.600	3.845	5.0	100	5.0	1000	1.0	10.0	1.0
VDZ 3.9B	3.890	4.160	5.0	100	5.0	1000	1.0	5.0	1.0
VDZ 4.3B	4.170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

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

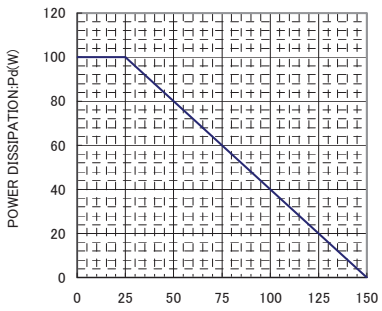
(2)The operating resistances(Zz,Zzk) are measured by superimposing a minute alternating current on the regulated current(Iz)

●**Type No.**

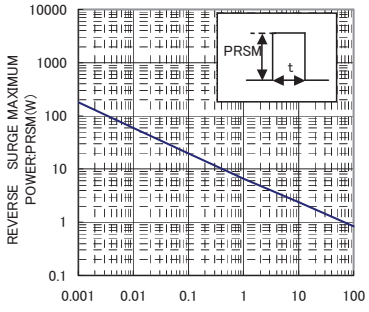
TYPE	TYPE NO.	TYPE	TYPE NO.
VDZ 3.6B	62	VDZ 12B	25
VDZ 3.9B	72	VDZ 13B	35
VDZ 4.3B	82	VDZ 15B	45
VDZ 4.7B	92	VDZ 16B	55
VDZ 5.1B	A2	VDZ 18B	65
VDZ 5.6B	C2	VDZ 20B	75
VDZ 6.2B	E2	VDZ 22B	85
VDZ 6.8B	F2	VDZ 24B	95
VDZ 7.5B	H2	VDZ 27B	A5
VDZ 8.2B	J2	VDZ 30B	C5
VDZ 9.1B	L2	VDZ 33B	E5
VDZ 10B	05	VDZ 36B	F5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



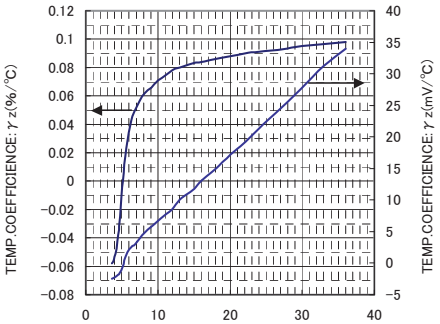
Vz-Iz CHARACTERISTICS



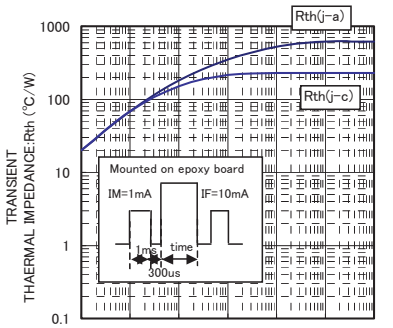
Pd-Ta CHARACTERISTICS



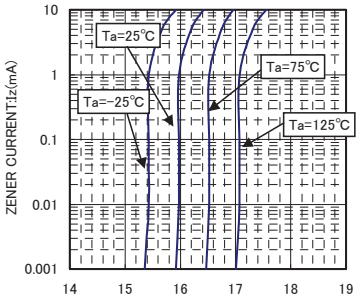
PRSM-TIME CHARACTERISTICS



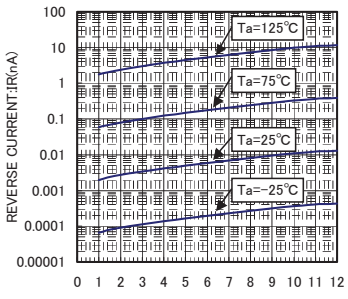
γz-Vz CHARACTERISTICS



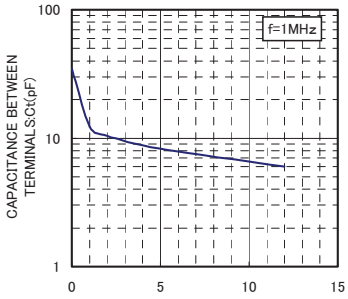
Rth-t CHARACTERISTICS



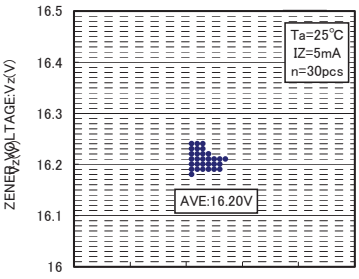
Vz-Iz CHARACTERISTICS



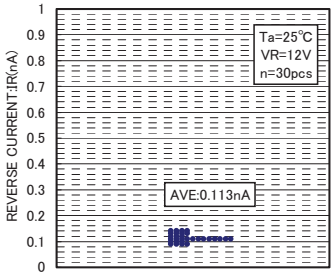
VR-IR CHARACTERISTICS



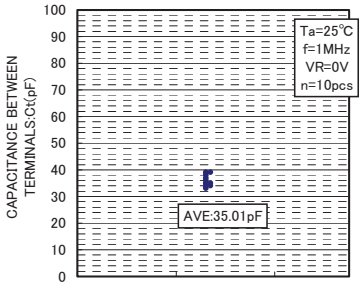
VR-Ct CHARACTERISTICS



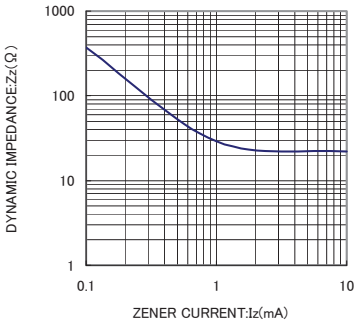
Vz DISPERSION MAP



IR DISPERSION MAP



Ct DISPERSION MAP



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