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Zener diode

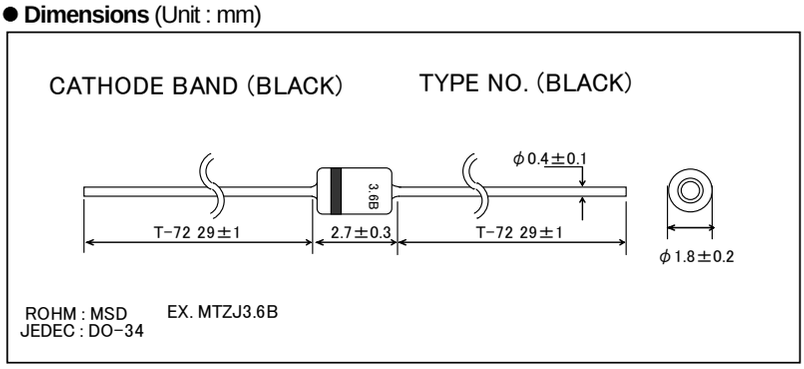
MTZJ10B

●**Applications**
Constant voltage control

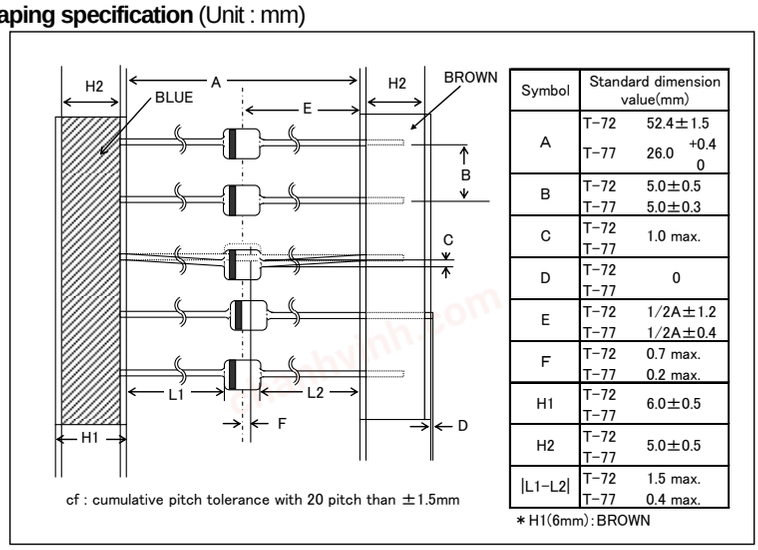
●**Features**
1) Glass sealed envelope. (MSD)
2) High reliability.

●**Construction**
Silicon planer

● **Dimensions** (Unit : mm)



●**Taping specification** (Unit : mm)



Symbol	Standard dimension value(mm)	
A	T-72	52.4±1.5
	T-77	26.0 +0.4 0
B	T-72	5.0±0.5
	T-77	5.0±0.3
C	T-72 T-77	1.0 max.
D	T-72 T-77	0
E	T-72	1/2A±1.2
	T-77	1/2A±0.4
F	T-72	0.7 max.
	T-77	0.2 max.
H1	T-72 T-77	6.0±0.5
H2	T-72 T-77	5.0±0.5
|L1-L2|	T-72	1.5 max.
	T-77	0.4 max.

＊H1(6mm):BROWN

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

Parameter	Symbol	Limits	Unit
Power dissipation	P	500	mW
Junction temperature	Tj	175	℃
Storage temperature	Tstg	-65 to +175	℃

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●**Electrical characteristics curves** (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)
MTZJ 3.6B	3.600	3.845	5.0	100	5.0	1000	1.0	10.0	1.0
MTZJ 3.9B	3.890	4.160	5.0	100	5.0	1000	1.0	5.0	1.0
MTZJ 4.3B	4.170	4.430	5.0	100	5.0	1000	1.0	5.0	1.0
MTZJ 4.7B	4.550	4.800	5.0	80	5.0	900	0.5	5.0	1.0
MTZJ 5.1B	4.940	5.200	5.0	70	5.0	1200	0.5	5.0	1.5
MTZJ 5.6B	5.450	5.730	5.0	40	5.0	900	0.5	5.0	2.5
MTZJ 6.2B	5.960	6.270	5.0	30	5.0	500	0.5	5.0	3.0
MTZJ 6.8B	6.490	6.830	5.0	20	5.0	150	0.5	2.0	3.5
MTZJ 7.5B	7.070	7.450	5.0	20	5.0	120	0.5	0.5	4.0
MTZJ 8.2B	7.780	8.190	5.0	20	5.0	120	0.5	0.5	5.0
MTZJ 9.1B	8.570	9.010	5.0	20	5.0	120	0.5	0.5	6.0
MTZJ 10B	9.410	9.900	5.0	20	5.0	120	0.5	0.2	7.0
MTZJ 11B	10.500	11.050	5.0	20	5.0	120	0.5	0.2	8.0
MTZJ 12B	11.440	12.030	5.0	25	5.0	110	0.5	0.2	9.0
MTZJ 13B	12.550	13.210	5.0	25	5.0	110	0.5	0.2	10.0
MTZJ 15B	13.890	14.620	5.0	25	5.0	110	0.5	0.2	11.0
MTZJ 16B	15.250	16.040	5.0	25	5.0	150	0.5	0.2	12.0
MTZJ 18B	16.820	17.700	5.0	30	5.0	150	0.5	0.2	13.0
MTZJ 20B	18.630	19.590	5.0	30	5.0	200	0.5	0.2	15.0
MTZJ 22B	20.640	21.710	5.0	30	5.0	200	0.5	0.2	17.0
MTZJ 24B	22.610	23.770	5.0	35	5.0	200	0.5	0.2	19.0
MTZJ 27B	24.970	26.260	5.0	45	5.0	250	0.5	0.2	21.0
MTZJ 30B	27.700	29.130	5.0	55	5.0	250	0.5	0.2	23.0
MTZJ 33B	30.320	31.880	5.0	65	5.0	250	0.5	0.2	25.0
MTZJ 36B	32.790	34.490	5.0	75	5.0	250	0.5	0.2	27.0
MTZJ 39B	35.360	37.190	5.0	85	5.0	250	0.5	0.2	30.0

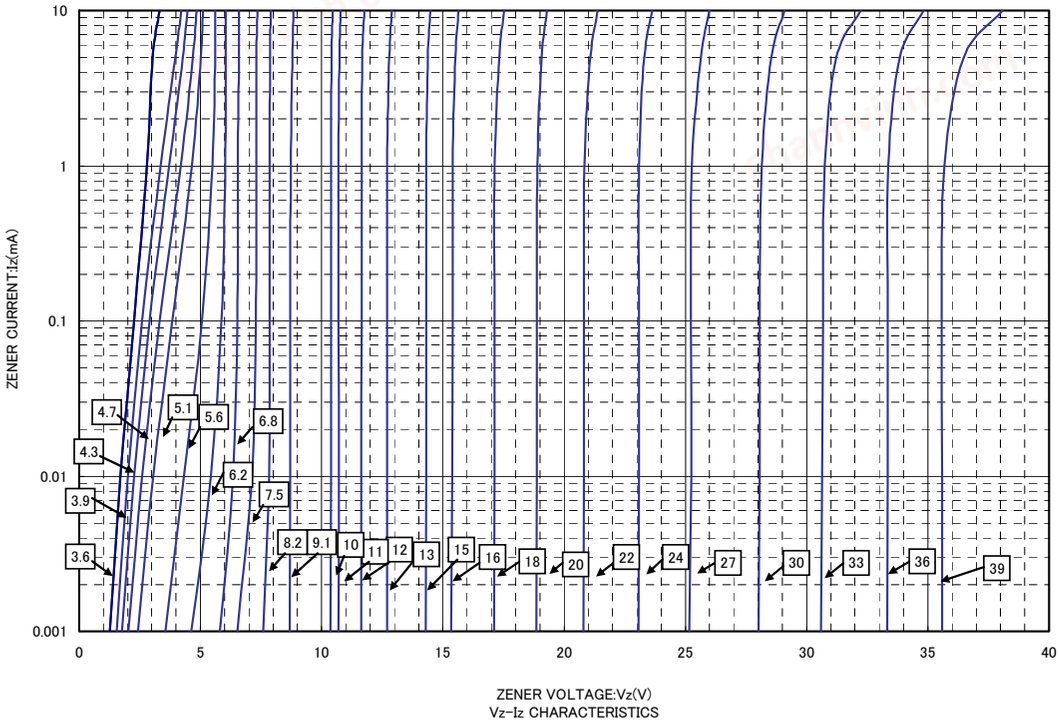
(1)The zener voltage(Vz) is measured 40ms after power is supplied.

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

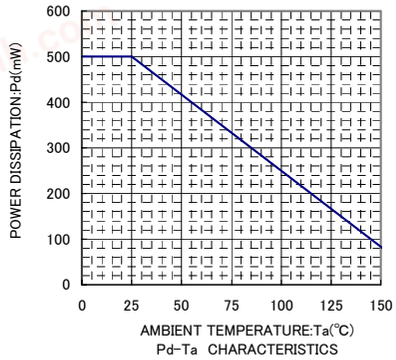
●**Type NO.**

TYPE	TYPE NO.	TYPE	TYPE NO.
MTZJ 3.6B	3.6B	MTZJ 12B	12B
MTZJ 3.9B	3.9B	MTZJ 13B	13B
MTZJ 4.3B	4.3B	MTZJ 15B	15B
MTZJ 4.7B	4.7B	MTZJ 16B	16B
MTZJ 5.1B	5.1B	MTZJ 18B	18B
MTZJ 5.6B	5.6B	MTZJ 20B	20B
MTZJ 6.2B	6.2B	MTZJ 22B	22B
MTZJ 6.8B	6.8B	MTZJ 24B	24B
MTZJ 7.5B	7.5B	MTZJ 27B	27B
MTZJ 8.2B	8.2B	MTZJ 30B	30B
MTZJ 9.1B	9.1B	MTZJ 33B	33B
MTZJ 10B	10B	MTZJ 36B	36B
MTZJ 11B	11B	MTZJ 39B	39B

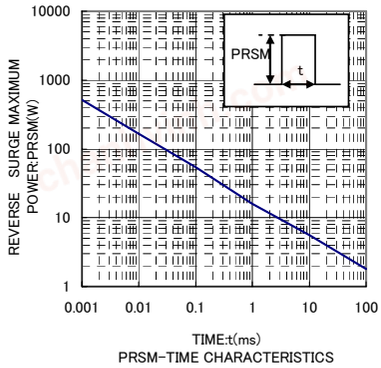
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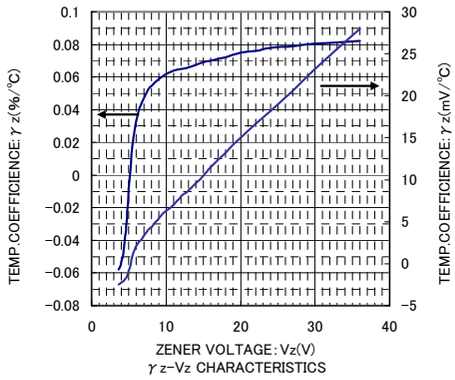
Vz-Iz CHARACTERISTICS



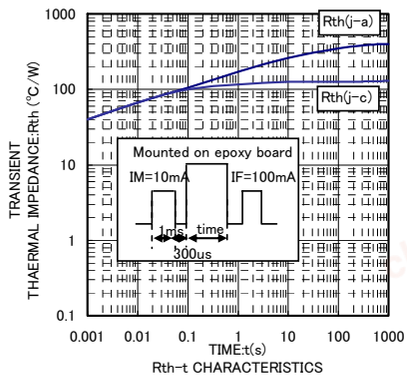
Pd-Ta CHARACTERISTICS



PRSM-TIME CHARACTERISTICS

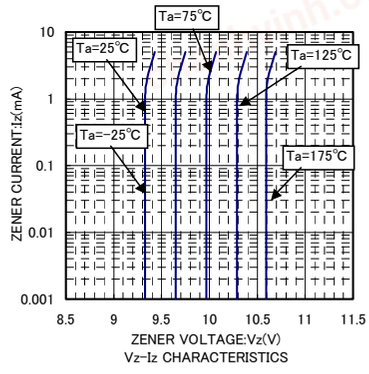


γz-Vz CHARACTERISTICS

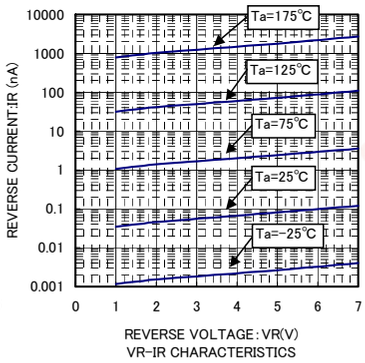


Rth-t CHARACTERISTICS

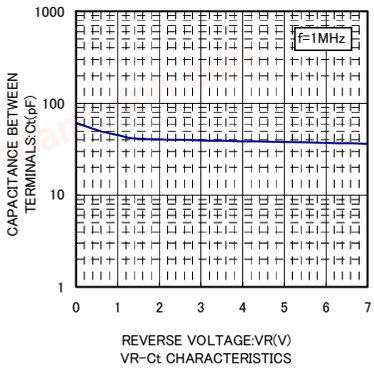
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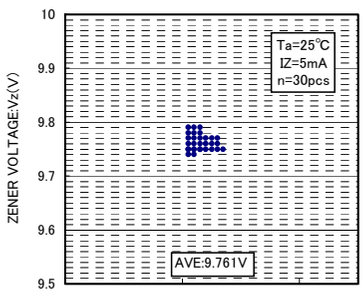
Vz-Iz CHARACTERISTICS



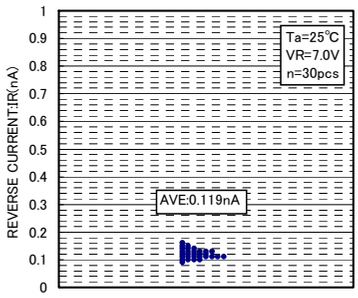
VR-IR CHARACTERISTICS



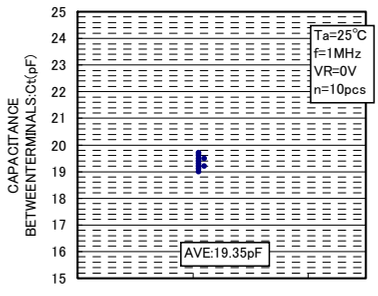
VR-Ct CHARACTERISTICS



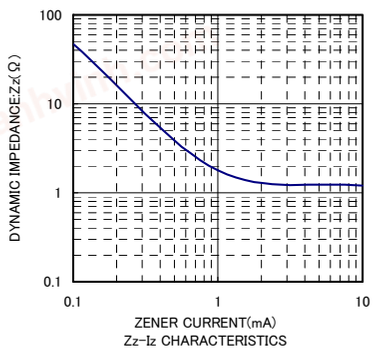
Vz DISRESION MAP



IR DISRESION MAP



Ct DISRESION MAP



Zz-Iz CHARACTERISTICS

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