



ZENER DIODES

POWER DISSIPATION: 500 mW

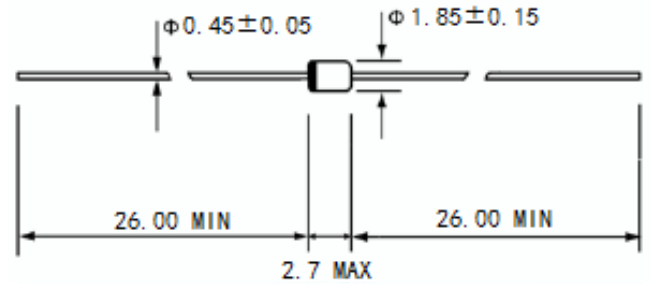
FEATURES

- ◇ Glass sealed envelope
- ◇ High reliability
- ◇ Silicon epitaxial planer
- ◇ Constsnt voltage contral

MECHANICAL DATA

- ◇ Case:DO-34, glass case
- ◇ Approx. weight: 0.093 grams.

DO-34(GLASS)



Dimensions in millimeters

MAXIMUM RATINGS ($T_A=25^\circ\text{C}$)

	SYMBOL	VALUE	UNIT
Zener current (see table "characteristics")			
Power dissipation	P_{tot}	500	mW
Maximum junction temperature	T_J	175	$^\circ\text{C}$
Storage temperature range	T_s	-55---+175	$^\circ\text{C}$

	SYMBOL	MIN	TYP	MAX	UNIT
Thermal resistance junction to ambient	$R_{\theta JA}$	—	—	300 ¹⁾	$^\circ\text{C/W}$
Forward voltage at $I_F=100\text{mA}$	V_F	—	—	1.0	V

NOTES: (1) Valid provided that leads at a distance of 10 mm from case are kept at ambient temperature.

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ELECTRICAL CHARACTERISTICS (T_A=25°C)

Type	Nominal zener voltage				Test current	Maximum dynamic impedance			Maximum reverse leakage current	
	V _Z (V)					I _{ZT}	Z _{ZT} @I _{ZT}	Z _{ZK} @I _{ZK}	I _{ZK}	I _R
	A	B	C	D	mA	Ω	Ω	mA	μA	V
MTZJ2.0	1.880~2.100	2.020~2.200	-	-	5	100	1000	0.5	120	0.5
MTZJ2.2	2.120~2.300	2.220~2.410	-	-	5	100	1000	0.5	120	0.7
MTZJ2.4	2.330~2.520	2.430~2.630	-	-	5	100	1000	0.5	120	1
MTZJ2.7	2.540~2.750	2.940~2.910	-	-	5	110	1000	0.5	100	1
MTZJ3.0	2.850~3.070	3.010~3.220	-	-	5	120	1000	0.5	50	1
MTZJ3.3	3.160~3.380	3.320~3.530	-	-	5	120	1000	0.5	20	1
MTZJ3.6	3.455~3.695	3.600~3.845	-	-	5	100	1000	1	10	1
MTZJ3.9	3.74~4.01	3.89~4.16	-	-	5	100	1000	1	5	1
MTZJ4.3	4.04~4.29	4.17~4.43	4.30~4.57	-	5	100	1000	1	5	1
MTZJ4.7	4.44~4.68	4.55~4.80	4.68~4.93	-	5	80	900	1	5	1
MTZJ5.1	4.81~5.07	4.94~5.20	5.09~5.37	-	5	80	800	1	5	1.5
MTZJ5.6	5.28~5.55	5.45~5.73	5.61~5.91	-	5	60	500	1	5	2.5
MTZJ6.2	5.78~6.09	5.96~6.27	6.12~6.44	-	5	60	300	1	5	3
MTZJ6.8	6.29~6.63	6.49~6.83	6.66~7.01	-	5	20	150	0.5	2	3.5
MTZJ7.5	6.85~7.22	7.07~7.45	7.29~7.67	-	5	20	120	0.5	0.5	4
MTZJ8.2	7.53~7.92	7.78~8.19	8.03~8.45	-	5	20	120	0.5	0.5	5
MTZJ9.1	8.29~8.73	8.57~9.01	8.83~9.30	-	5	25	120	0.5	0.5	6
MTZJ10	9.12~9.59	9.41~9.90	9.70~10.20	9.94~10.44	5	30	120	0.5	0.2	7
MTZJ11	10.18~10.71	10.50~11.05	10.82~11.38	-	5	30	120	0.5	0.2	8
MTZJ12	11.13~11.71	11.44~12.03	11.74~12.35	-	5	30	110	0.5	0.2	9
MTZJ13	12.11~12.75	12.55~13.21	12.99~13.66	-	5	35	110	0.5	0.2	10
MTZJ15	13.44~14.13	13.89~14.62	14.35~15.09	-	5	40	110	0.5	0.2	11
MTZJ16	14.80~15.57	15.25~16.04	15.69~16.51	-	5	40	150	0.5	0.2	12
MTZJ18	16.22~17.06	16.82~17.70	17.42~18.33	-	5	45	150	0.5	0.2	13
MTZJ20	18.02~18.96	18.63~19.59	19.23~20.00	19.72~20.72	5	55	200	0.5	0.2	15
MTZJ22	20.15~21.20	20.64~21.71	21.08~22.17	21.52~22.63	5	30	200	0.5	0.2	17
MTZJ24	22.05~23.18	22.61~23.77	23.12~24.31	23.63~24.85	5	35	200	0.5	0.2	19
MTZJ27	24.26~25.52	24.97~26.26	25.63~26.95	25.29~27.64	5	45	200	0.5	0.2	21
MTZJ30	26.99~28.39	27.70~29.13	28.36~29.82	29.02~30.51	5	55	200	0.5	0.2	23
MTZJ33	29.68~31.22	30.32~31.88	30.90~32.50	31.49~33.11	5	65	200	0.5	0.2	25
MTZJ36	32.14~33.79	32.79~34.49	33.40~35.13	34.01~35.77	5	75	200	0.5	0.2	27
MTZJ39	34.68~36.47	35.36~37.19	36.00~37.85	36.63~38.52	5	85	200	0.5	0.2	30
MTZJ39E	37.36~39.29				5	85	200	0.5	0.2	30
MTZJ39F	38.14~40.11				5	85	200	0.5	0.2	30
MTZJ39G	38.94~40.80				5	85	200	0.5	0.2	30
MTZJ43	40.00~45.00				5	95	-	-	0.2	33
MTZJ47	44.00~49.00				5	95	-	-	0.2	36
MTZJ51	48.00~54.00				5	110	-	-	0.2	39
MTZJ56	53.00~60.00				5	110	-	-	0.2	43

FIG.1 – BREAKDOWN CHARACTERISTICS

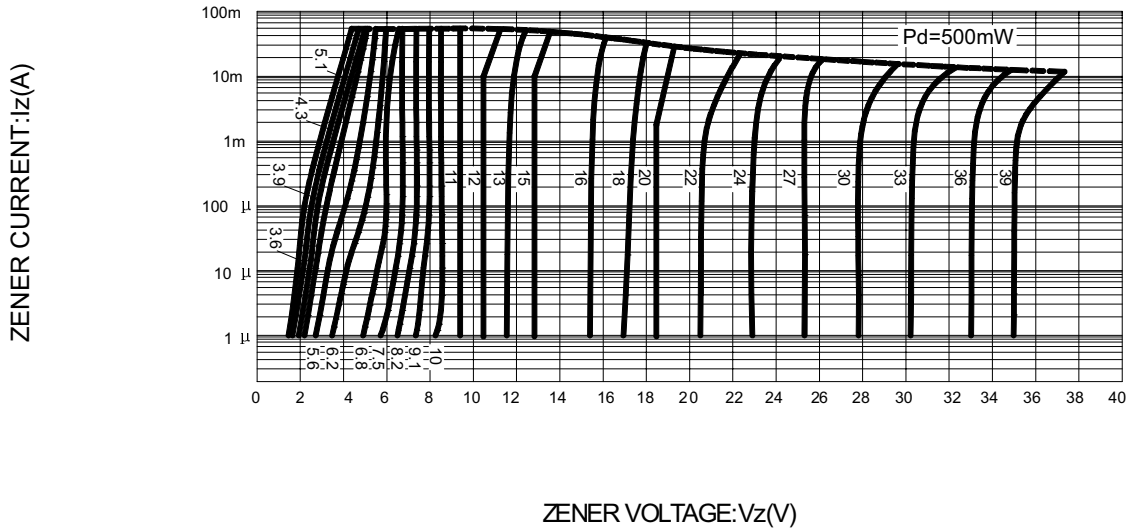


FIG.2 – TEMPERATURE COEFFICIENT

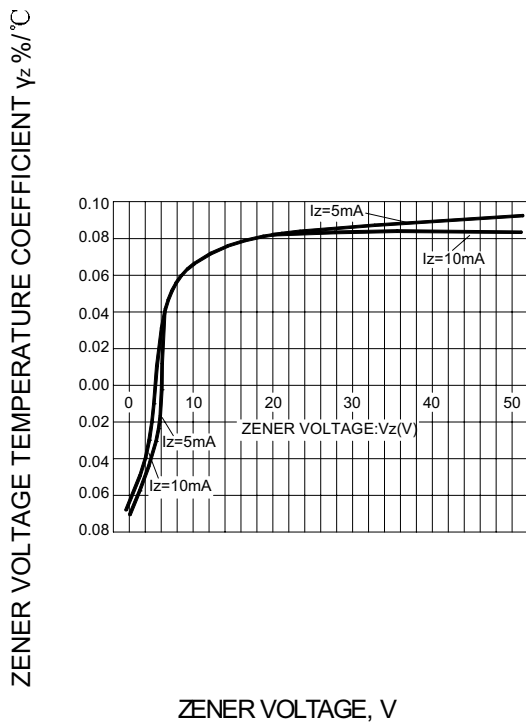


FIG.3 – ADMISSIBLE POWER DISSIPATION VERSUS AMBIENT TEMPERATURE

