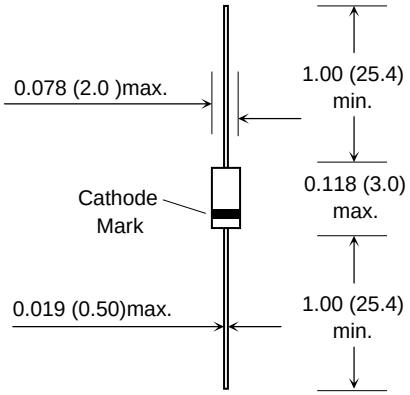
SYNSEMI SEMICONDUCTOR

MTZJ Series

ZENER DIODES

P_D : 500 mW

DO - 34 Glass



Dimensions in inches and (millimeters)

FEATURES :

* High peak reverse power dissipation
* High reliability
* Low leakage current
* Pb / RoHS Free

MECHANICAL DATA

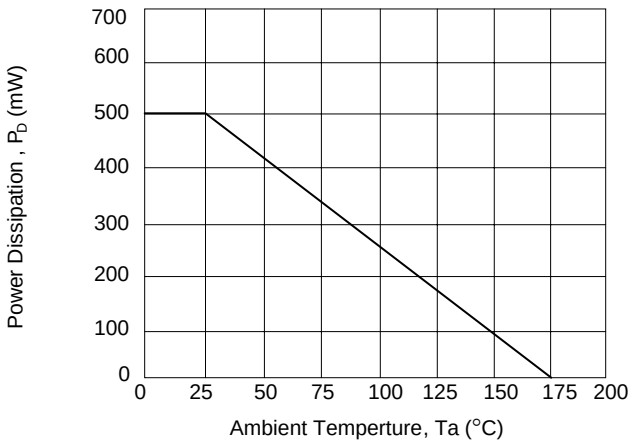
Case: DO-34 Glass Case
Weight: approx. 0.093g

MAXIMUM RATINGS

Rating at 25 °C ambient temperature unless otherwise specified

Parameter	Symbol	Value	Unit
Power Dissipation	P_D	500	mW
Junction Temperature	Tj	175	°C
Storage Temperature Range	T_{stg}	- 65 to + 175	°C

Derating Curve



Rev. 04 : March 25, 2005

SYNSEMI SEMICONDUCTOR

ELECTRICAL CHARACTERISTICS

Rating at 25 °C ambient temperature unless otherwise specifie

Type	Zener Voltage V_Z @ I_{ZT}												Test Current	Maximum Zener Impedance			Maximum Reverse Current	
	Suffix A			Suffix B			Suffix C			Suffix D								
	Min. (V)	Nom. (V)	Max. (V)	Min. (V)	Nom. (V)	Max. (V)	Min. (V)	Nom. (V)	Max. (V)	Min. (V)	Nom. (V)	Max. (V)	I_{ZT} (mA)	Z_{ZT} @ I_{ZT} (Ω)	Z_{Zk} @ I_{ZK} (Ω)	I_{ZK} (mA)	I_R @ (μA)	V_R (V)
MTZJ2.0	1.89	2.00	2.11	2.02	2.11	2.20	-	-	-	-	-	-	5	100	1000	0.5	120	0.5
MTZJ2.2	2.11	2.20	2.29	2.22	2.32	2.42	-	-	-	-	-	-	5	100	1000	0.5	120	0.7
MTZJ2.4	2.34	2.44	2.54	2.43	2.53	2.63	-	-	-	-	-	-	5	100	1000	0.5	120	1
MTZJ2.7	2.54	2.65	2.76	2.69	2.8	2.91							5	100	1000	0.5	100	1
MTZJ3.0	2.85	2.96	3.07	3.01	3.12	3.23	-	-	-	-	-	-	5	120	1000	0.5	50	1
MTZJ3.3	3.16	3.27	3.38	3.32	3.43	3.54	-	-	-	-	-	-	5	120	1000	0.5	20	1
MTZJ3.6	3.45	3.58	3.70	3.60	3.72	3.845	-	-	-	-	-	-	5	100	1000	1.0	10	1
MTZJ3.9	3.74	3.88	4.01	3.89	4.03	4.16	-	-	-	-	-	-	5	100	1000	1.0	5	1
MTZJ4.3	4.04	4.17	4.29	4.17	4.30	4.43	-	-	-	-	-	-	5	100	1000	1.0	5	1
MTZJ4.7	4.44	4.56	4.67	4.55	4.68	4.80	-	-	-	-	-	-	5	80	900	0.5	5	1
MTZJ5.1	4.81	4.94	5.06	4.94	5.07	5.20	5.08	5.23	5.37	-	-	-	5	70	1200	1.0	5	1.5
MTZJ5.6	5.11	5.42	5.55	5.45	5.59	5.72	5.61	5.76	5.90	-	-	-	5	40	900	1.0	5	2.5
MTZJ6.2	5.78	5.94	6.09	5.96	6.12	6.27	6.12	6.28	6.43	-	-	-	5	30	500	1.0	5	3
MTZJ6.8	6.33	6.46	6.62	6.49	6.66	6.82	6.66	6.84	7.01	-	-	-	5	20	150	0.5	2	3.5
MTZJ7.5	6.85	7.04	7.22	7.07	7.26	7.44	7.29	7.48	7.66	-	-	-	5	20	120	0.5	0.5	4
MTZJ8.2	7.53	7.73	7.92	7.79	8.00	8.20	8.03	8.24	8.44	-	-	-	5	20	120	0.5	0.5	5
MTZJ9.1	8.28	8.51	8.73	8.57	8.79	9.00	8.83	9.07	9.30	-	-	-	5	20	120	0.5	0.5	6
MTZJ10	9.13	9.36	9.59	9.41	9.66	9.90	9.70	9.95	10.19	9.94	10.20	10.45	5	20	120	0.5	0.2	7
MTZJ11	10.14	10.40	10.66	10.53	10.80	11.07	10.82	11.10	11.37	-	-	-	5	20	120	0.5	0.2	8
MTZJ12	11.11	11.40	11.68	11.40	11.70	11.99	11.70	12.00	12.30	-	-	-	5	25	110	0.5	0.2	9
MTZJ13	12.07	12.40	12.72	12.56	12.90	13.23	12.96	13.30	13.63	-	-	-	5	25	110	0.5	0.2	10
MTZJ14	12.75	13.20	13.43	13.24	13.60	13.95	13.65	14.00	14.40				5	25	110	0.5	0.2	10.5
MTZJ15	13.45	13.80	14.14	13.92	14.30	14.67	14.33	14.70	15.06	-	-	-	5	25	110	0.5	0.2	11
MTZJ16	14.82	15.20	15.58	15.21	15.60	15.99	15.69	16.10	16.50	-	-	-	5	25	150	0.5	0.2	12
MTZJ18	16.19	16.60	17.02	16.87	17.30	17.73	17.39	17.80	18.21	-	-	-	5	30	150	0.5	0.2	13
MTZJ20	18.04	18.50	18.96	18.62	19.10	19.58	19.21	19.70	20.19	19.70	20.20	20.71	5	30	200	0.5	0.2	15
MTZJ22	20.18	20.70	21.22	20.67	21.20	21.73	21.06	21.60	22.14	21.55	22.10	22.65	5	30	200	0.5	0.2	17
MTZJ24	22.04	22.60	23.17	22.62	23.20	23.78	23.11	23.70	24.29	23.60	24.20	24.81	5	35	200	0.5	0.2	19
MTZJ27	24.28	24.90	25.52	24.96	25.60	26.24	26.33	27.00	27.68	26.54	27.00	27.46	5	45	250	0.5	0.2	21
MTZJ30	27.01	27.70	28.39	27.69	28.40	29.11	28.37	29.10	29.83	29.06	29.80	30.55	5	55	250	0.5	0.2	23
MTZJ33	29.64	30.40	31.16	30.32	31.10	31.88	30.91	31.70	32.49	31.49	32.30	33.11	5	65	250	0.5	0.2	25
MTZJ36	32.18	33.00	33.83	32.76	33.60	34.44	33.44	34.30	35.16	34.03	34.90	35.77	5	75	250	0.5	0.2	27
MTZJ39	34.71	35.60	36.49	35.47	36.30	37.13	35.98	36.90	37.82	36.66	37.60	38.54	5	85	250	0.5	0.2	30

Note : 1. The Zener voltage is measured 40ms after power is supplied.