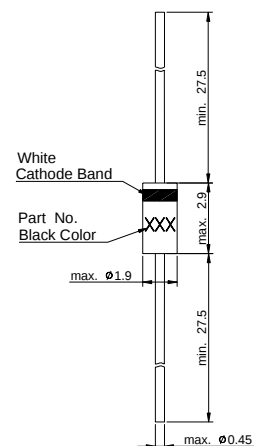


ZENER DIODES

Constant Voltage Control Applications

Features

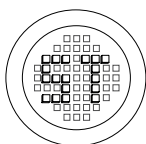
- Glass sealed envelope. (MSD)
- High reliability.



Glass case JEDEC DO-34
Dimensions in mm

Absolute Maximum Ratings ($T_a = 25^\circ\text{C}$)

	Symbol	Value	Unit
Power Dissipation	P_{tot}	500	mW
Junction Temperature	T_j	175	$^\circ\text{C}$
Storage Temperature Range	T_s	-65 to +175	$^\circ\text{C}$



®

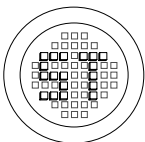
РАДИОТЕХ

Тел.: (495) 795-0805
Факс: (495) 234-1603
Эл. почта: info@rct.ru
Веб: www.rct.ru

MTZ J Series

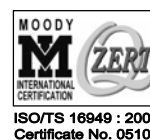
Characteristics at $T_a = 25^\circ\text{C}$

TYPE	Zener Voltage			Operating resistance		Rising operating resistance		Reverse current	
	V_Z (V)			Z_Z (Ω)		Z_{ZK} (Ω)		I_R (μA)	
	Min.	Max	I_Z (mA)	Max	I_Z (mA)	Max	I_Z (mA)	Max	V_R (V)
MTZ J 2.0A	1.880	2.100	5	100	5	1000	0.5	120	0.5
MTZ J 2.0B	2.020	2.200							
MTZ J 2.2A	2.120	2.300	5	100	5	1000	0.5	120	0.7
MTZ J 2.2B	2.220	2.410							
MTZ J 2.4A	2.330	2.520	5	100	5	1000	0.5	120	1.0
MTZ J 2.4B	2.430	2.630							
MTZ J 2.7A	2.540	2.750	5	110	5	1000	0.5	100	1.0
MTZ J 2.7B	2.690	2.910							
MTZ J 3.0A	2.850	3.070	5	120	5	1000	0.5	50	1.0
MTZ J 3.0B	3.010	3.220							
MTZ J 3.3A	3.160	3.380	5	120	5	1000	0.5	20	1.0
MTZ J 3.3B	3.320	3.530							
MTZ J 3.6A	3.455	3.695	5	100	5	1000	1	10	1.0
MTZ J 3.6B	3.600	3.845							
MTZ J 3.9A	3.740	4.010	5	100	5	1000	1	5	1.0
MTZ J 3.9B	3.890	4.160							
MTZ J 4.3A	4.040	4.290	5	100	5	1000	1	5	1.0
MTZ J 4.3B	4.170	4.430							
MTZ J 4.3C	4.300	4.570	5	80	5	900	0.5	5	1.0
MTZ J 4.7A	4.440	4.680							
MTZ J 4.7B	4.550	4.800	5	70	5	1200	0.5	5	1.5
MTZ J 4.7C	4.680	4.930							
MTZ J 5.1A	4.810	5.070	5	40	5	900	0.5	5	2.5
MTZ J 5.1B	4.940	5.200							
MTZ J 5.1C	5.090	5.370	5	30	5	500	0.5	5	3.0
MTZ J 5.6A	5.280	5.550							
MTZ J 5.6B	5.450	5.730	5	20	5	150	0.5	2	3.5
MTZ J 5.6C	5.610	5.910							
MTZ J 6.2A	5.780	6.090	5	20	5	120	0.5	0.5	4.0
MTZ J 6.2B	5.960	6.270							
MTZ J 6.2C	6.120	6.440	5	20	5	120	0.5	0.5	5.0
MTZ J 6.8A	6.290	6.630							
MTZ J 6.8B	6.490	6.830	5	20	5	120	0.5	0.5	6.0
MTZ J 6.8C	6.660	7.010							
MTZ J 7.5A	6.850	7.220	5	20	5	120	0.5	0.5	7.0
MTZ J 7.5B	7.070	7.450							
MTZ J 7.5C	7.290	7.670	5	20	5	120	0.5	0.2	7.0
MTZ J 8.2A	7.530	7.920							
MTZ J 8.2B	7.780	8.190	5	20	5	120	0.5	0.2	7.0
MTZ J 8.2C	8.030	8.450							
MTZ J 9.1A	8.290	8.730	5	20	5	120	0.5	0.2	7.0
MTZ J 9.1B	8.570	9.010							
MTZ J 9.1C	8.830	9.300	5	20	5	120	0.5	0.2	7.0
MTZ J 10A	9.120	9.590							
MTZ J 10B	9.410	9.900	5	20	5	120	0.5	0.2	7.0
MTZ J 10C	9.700	10.200							



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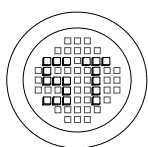


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MTZ J Series

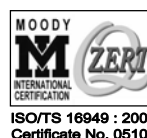
Characteristics at Ta = 25°C

TYPE	Zener Voltage			Operating resistance		Rising operating resistance		Reverse current	
	V _Z (V)			Z _Z (Ω)		Z _{ZK} (Ω)		I _R (μA)	
	Min.	Max	I _Z (mA)	Max	I _Z (mA)	Max	I _Z (mA)	Max	V _R (V)
MTZ J 10D	9.940	10.440	5	20	5	120	0.5	0.2	7.0
MTZ J 11A	10.180	10.710	5	20	5	120	0.5	0.2	8.0
MTZ J 11B	10.500	11.050							
MTZ J 11C	10.820	11.380							
MTZ J 12A	11.130	11.710	5	25	5	110	0.5	0.2	9.0
MTZ J 12B	11.440	12.030							
MTZ J 12C	11.740	12.350							
MTZ J 13A	12.110	12.750	5	25	5	110	0.5	0.2	10
MTZ J 13B	12.550	13.210							
MTZ J 13C	12.990	13.660							
MTZ J 15A	13.440	14.130	5	25	5	110	0.5	0.2	11
MTZ J 15B	13.890	14.620							
MTZ J 15C	14.350	15.090							
MTZ J 16A	14.800	15.570	5	25	5	150	0.5	0.2	12
MTZ J 16B	15.250	16.040							
MTZ J 16C	15.690	16.510							
MTZ J 18A	16.220	17.060	5	30	5	150	0.5	0.2	13
MTZ J 18B	16.820	17.700							
MTZ J 18C	17.420	18.330							
MTZ J 20A	18.020	18.960	5	30	5	200	0.5	0.2	15
MTZ J 20B	18.630	19.590							
MTZ J 20C	19.230	20.220							
MTZ J 20D	19.720	20.720	5	30	5	200	0.5	0.2	17
MTZ J 22A	20.150	21.200							
MTZ J 22B	20.640	21.710							
MTZ J 22C	21.080	22.170	5	35	5	200	0.5	0.2	19
MTZ J 22D	21.520	22.630							
MTZ J 24A	22.050	23.180							
MTZ J 24B	22.610	23.770	5	45	5	250	0.5	0.2	21
MTZ J 24C	23.120	24.310							
MTZ J 24D	23.630	24.850							
MTZ J 27A	24.260	25.520	5	55	5	250	0.5	0.2	23
MTZ J 27B	24.970	26.260							
MTZ J 27C	25.630	26.950							
MTZ J 27D	26.290	27.640	5	65	5	250	0.5	0.2	25
MTZ J 30A	26.990	28.390							
MTZ J 30B	27.700	29.130							
MTZ J 30C	28.360	29.820	5	75	5	250	0.5	0.2	27
MTZ J 30D	29.020	30.510							
MTZ J 33A	29.680	31.220							
MTZ J 33B	30.320	31.880	5	75	5	250	0.5	0.2	27
MTZ J 33C	30.900	32.500							
MTZ J 33D	31.490	33.110							
MTZ J 36A	32.140	33.790	5	75	5	250	0.5	0.2	27
MTZ J 36B	32.790	34.490							
MTZ J 36C	33.400	35.130							



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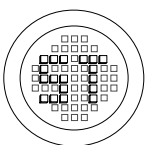
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MTZ J Series

Characteristics at Ta = 25°C

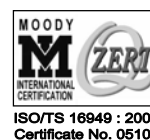
TYPE	Zener Voltage			Operating resistance		Rising operating resistance		Reverse current	
	V _Z (V)			Z _Z (Ω)		Z _{ZK} (Ω)		I _R (μA)	
	Min.	Max	I _Z (mA)	Max.	I _Z (mA)	Max	I _Z (mA)	Max	V _R (V)
MTZ J 36D	34.010	35.770	5	75	5	250	0.5	0.2	27
MTZ J 39A	34.680	36.470	5	85	5	250	0.5	0.2	30
MTZ J 39B	35.360	37.190							
MTZ J 39C	36.000	37.850							
MTZ J 39D	36.630	38.520							
MTZ J 39E	37.360	39.290							
MTZ J 39F	38.140	40.110							
MTZ J 39G	38.940	40.800							
MTZ J43	40.000	45.000	5	90	5	250	0.5	0.2	33
MTZ J47	44.000	49.000	5	90	5	250	0.5	0.2	36
MTZ J51	48.000	54.000	5	110	5	250	0.5	0.2	39
MTZ J56	53.000	60.000	5	110	5	250	0.5	0.2	43

Tested with pulses tp = 20 ms.



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MTZ J Series

Fig.1- Zener Characteristics

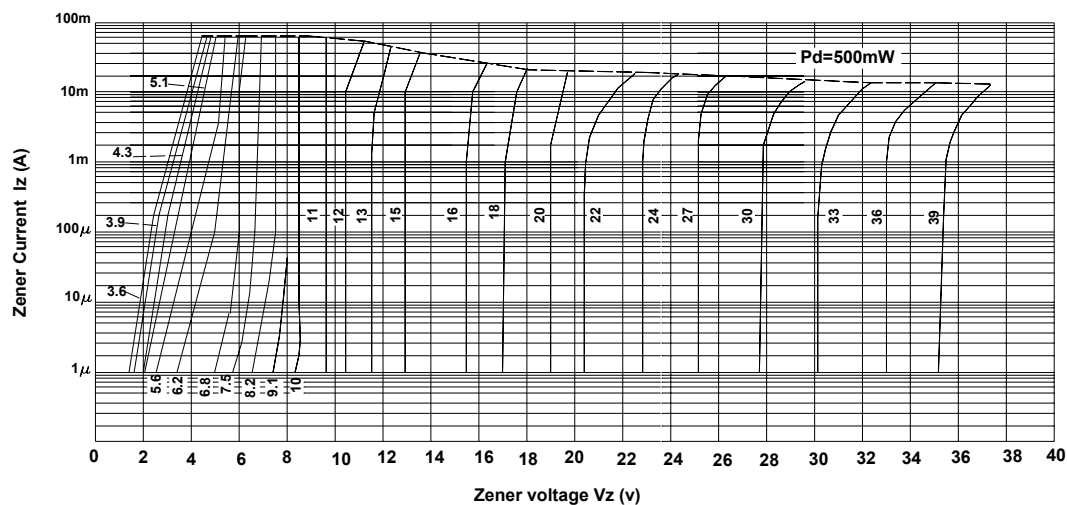


Fig. 2 Derating curve

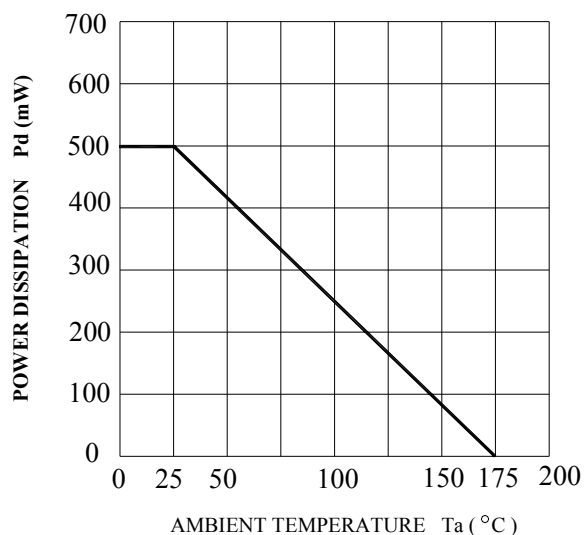
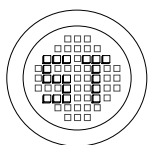
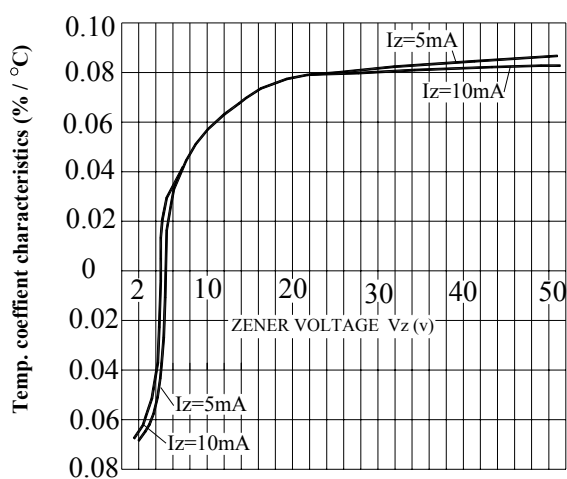
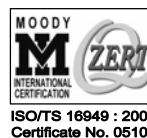


Fig. 3 Zener voltage temp. coefficient characteristics



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