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MZ4728A - MZ4764A
MZ1110A - MZ1200A

SILICON ZENER DIODES

V_Z : 3.3 - 200 Volts
P_D : 1 Watt

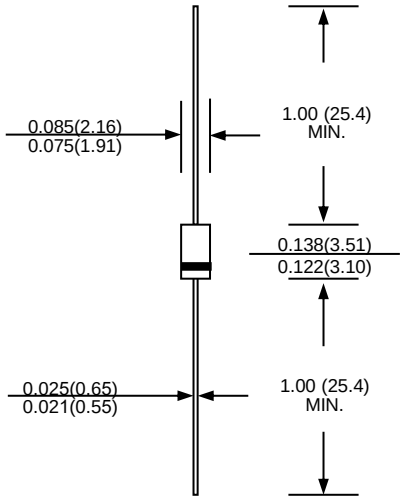
FEATURES :

* Complete voltage range 3.3 to 200 Volts
* High peak reverse power dissipation
* High reliability
* Low leakage current
* Pb / RoHS Free

MECHANICAL DATA :

* Case : M1A Molded plastic
* Epoxy : UL94V-O rate flame retardant
* Lead : Axial lead solderable per MIL-STD-202, method 208 guaranteed
* Polarity : Color band denotes cathode end
* Mounting position : Any
* Weight : 0.20 gram (approximately)

M1A



Dimensions in inches and (millimeters)

MAXIMUM RATINGS

Rating at 25 °C ambient temperature unless otherwise specified.

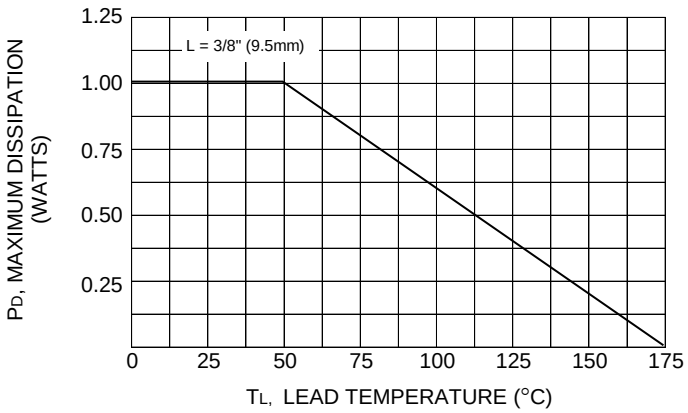
Rating	Symbol	Value	Unit
DC Power Dissipation at T_L = 50 °C (Note1)	P_D	1.0	Watt
Maximum Forward Voltage at I_F = 200 mA	V_F	1.2	Volts
Maximum Thermal Resistance Junction to Ambient Air (Note2)	$R_{\Theta JA}$	170	K / W
Junction Temperature Range	T_J	- 55 to + 175	°C
Storage Temperature Range	T_{STG}	- 55 to + 175	°C

Notes :

(1) T_L = Lead temperature at 3/8 " (9.5mm) from body

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

Fig. 1 POWER TEMPERATURE DERATING CURVE



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ELECTRICAL CHARACTERISTICS (Rating at 25 °C ambient temperature unless otherwise specified)

Type	Nominal Zener Voltage		Maximum Zener Impedance			Maximum Reverse Leakage Current		Maximum DC Zener Current	Maximum Surge Current
	V_Z @ I_{ZT}	I_{ZT}	Z_{ZT} @ I_{ZT}	Z_{ZK} @ I_{ZK}	I_{ZK}	I_R @ V_R		I_{ZM}	I_{RM} (2)
	(V)	(mA)	(Ω)	(Ω)	(mA)	(μA)	(V)	(mA)	(mApk)
MZ4728A	3.3	76.0	10	400	1.0	100	1.0	276	1380
MZ4729A	3.6	69.0	10	400	1.0	100	1.0	252	1260
MZ4730A	3.9	64.0	9.0	400	1.0	50	1.0	234	1190
MZ4731A	4.3	58.0	9.0	400	1.0	10	1.0	217	1070
MZ4732A	4.7	53.0	8.0	500	1.0	10	1.0	193	970
MZ4733A	5.1	49.0	7.0	550	1.0	10	1.0	178	890
MZ4734A	5.6	45.0	5.0	600	1.0	10	2.0	162	810
MZ4735A	6.2	41.0	2.0	700	1.0	10	3.0	146	730
MZ4736A	6.8	37.0	3.5	700	1.0	10	4.0	133	660
MZ4737A	7.5	34.0	4.0	700	0.5	10	5.0	121	605
MZ4738A	8.2	31.0	4.5	700	0.5	10	6.0	110	550
MZ4739A	9.1	28.0	5.0	700	0.5	10	7.0	100	500
MZ4740A	10	25.0	7.0	700	0.25	10	7.6	91	454
MZ4741A	11	23.0	8.0	700	0.25	5.0	8.4	83	414
MZ4742A	12	21.0	9.0	700	0.25	5.0	9.1	76	380
MZ4743A	13	19.0	10	700	0.25	5.0	9.9	69	344
MZ4744A	15	17.0	14	700	0.25	5.0	11.4	61	305
MZ4745A	16	15.5	16	700	0.25	5.0	12.2	57	285
MZ4746A	18	14.0	20	750	0.25	5.0	13.7	50	250
MZ4747A	20	12.5	22	750	0.25	5.0	15.2	45	225
MZ4748A	22	11.5	23	750	0.25	5.0	16.7	41	205
MZ4749A	24	10.5	25	750	0.25	5.0	18.2	38	190
MZ4750A	27	9.5	35	750	0.25	5.0	20.6	34	170
MZ4751A	30	8.5	40	1000	0.25	5.0	22.8	30	150
MZ4752A	33	7.5	45	1000	0.25	5.0	25.1	27	135
MZ4753A	36	7.0	50	1000	0.25	5.0	27.4	25	125
MZ4754A	39	6.5	60	1000	0.25	5.0	29.7	23	115
MZ4755A	43	6.0	70	1500	0.25	5.0	32.7	22	110
MZ4756A	47	5.5	80	1500	0.25	5.0	35.8	19	95
MZ4757A	51	5.0	95	1500	0.25	5.0	38.8	18	90
MZ4758A	56	4.5	110	2000	0.25	5.0	42.6	16	80
MZ4759A	62	4.0	125	2000	0.25	5.0	47.1	14	70
MZ4760A	68	3.7	150	2000	0.25	5.0	51.7	13	65
MZ4761A	75	3.3	175	2000	0.25	5.0	56.0	12	60
MZ4762A	82	3.0	200	3000	0.25	5.0	62.2	11	55
MZ4763A	91	2.8	250	3000	0.25	5.0	69.2	10	50
MZ4764A	100	2.5	350	3000	0.25	5.0	76.0	9.0	45
MZ1110A	110	2.3	450	4000	0.25	5.0	83.6	8.6	40
MZ1120A	120	2.0	550	4500	0.25	5.0	91.2	7.8	37
MZ1130A	130	1.9	700	5000	0.25	5.0	98.8	7.0	34
MZ1150A	150	1.7	1000	6000	0.25	5.0	114.0	6.4	30
MZ1160A	160	1.6	1100	6500	0.25	5.0	121.6	5.8	28
MZ1180A	180	1.4	1200	7000	0.25	5.0	136.8	5.2	25
MZ1200A	200	1.2	1900	9990	0.25	5.0	152.0	4.7	22

Notes :

(1) The type number listed have a standard tolerance on the nominal zener voltage of ± 5%.

(2) The revese surge current is a non-repetitive, 8.3ms pulse width square wave or equivalent sine-wave superimposed on IZT per JEDEC Method

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