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MZ4728C - MZ4764C
MZ1110C - MZ1300C

SILICON ZENER DIODES

V_Z : 3.3 - 200 Volts
P_D : 1 Watt

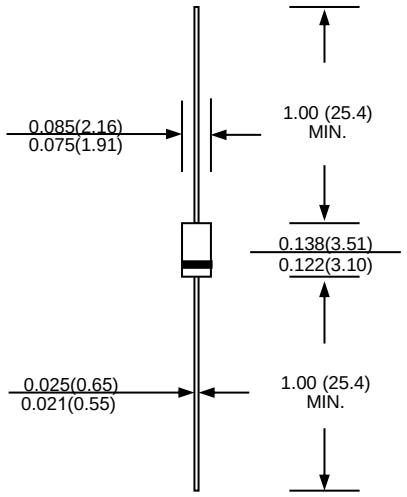
FEATURES :

* 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.

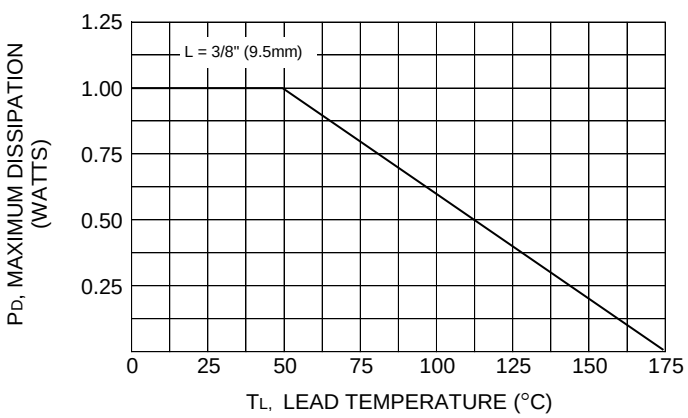
Rating	Symbol	Value	Unit
DC Power Dissipation at T_L = 50 °C (Note1)	P_D	1.0	Watt
Maximum Forward Voltage at I_F = 200 mA	V_F	1.2	Volts
Maximum Thermal Resistance Junction to Ambient Air (Note2)	$R_{\Theta JA}$	170	K / W
Junction Temperature Range	T_J	- 55 to + 175	°C
Storage Temperature Range	T_{STG}	- 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)
MZ4728C	3.3	76.0	10	400	1.0	100	1.0	276	1380
MZ4729C	3.6	69.0	10	400	1.0	100	1.0	252	1260
MZ4730C	3.9	64.0	9.0	400	1.0	50	1.0	234	1190
MZ4731C	4.3	58.0	9.0	400	1.0	10	1.0	217	1070
MZ4732C	4.7	53.0	8.0	500	1.0	10	1.0	193	970
MZ4733C	5.1	49.0	7.0	550	1.0	10	1.0	178	890
MZ4734C	5.6	45.0	5.0	600	1.0	10	2.0	162	810
MZ4735C	6.2	41.0	2.0	700	1.0	10	3.0	146	730
MZ4736C	6.8	37.0	3.5	700	1.0	10	4.0	133	660
MZ4737C	7.5	34.0	4.0	700	0.5	10	5.0	121	605
MZ4738C	8.2	31.0	4.5	700	0.5	10	6.0	110	550
MZ4739C	9.1	28.0	5.0	700	0.5	10	7.0	100	500
MZ4740C	10	25.0	7.0	700	0.25	10	7.6	91	454
MZ4741C	11	23.0	8.0	700	0.25	5.0	8.4	83	414
MZ4742C	12	21.0	9.0	700	0.25	5.0	9.1	76	380
MZ4743C	13	19.0	10	700	0.25	5.0	9.9	69	344
MZ4744C	15	17.0	14	700	0.25	5.0	11.4	61	305
MZ4745C	16	15.5	16	700	0.25	5.0	12.2	57	285
MZ4746C	18	14.0	20	750	0.25	5.0	13.7	50	250
MZ4747C	20	12.5	22	750	0.25	5.0	15.2	45	225
MZ4748C	22	11.5	23	750	0.25	5.0	16.7	41	205
MZ4749C	24	10.5	25	750	0.25	5.0	18.2	38	190
MZ4750C	27	9.5	35	750	0.25	5.0	20.6	34	170
MZ4751C	30	8.5	40	1000	0.25	5.0	22.8	30	150
MZ4752C	33	7.5	45	1000	0.25	5.0	25.1	27	135
MZ4753C	36	7.0	50	1000	0.25	5.0	27.4	25	125
MZ4754C	39	6.5	60	1000	0.25	5.0	29.7	23	115
MZ4755C	43	6.0	70	1500	0.25	5.0	32.7	22	110
MZ4756C	47	5.5	80	1500	0.25	5.0	35.8	19	95
MZ4757C	51	5.0	95	1500	0.25	5.0	38.8	18	90
MZ4758C	56	4.5	110	2000	0.25	5.0	42.6	16	80
MZ4759C	62	4.0	125	2000	0.25	5.0	47.1	14	70
MZ4760C	68	3.7	150	2000	0.25	5.0	51.7	13	65
MZ4761C	75	3.3	175	2000	0.25	5.0	56.0	12	60
MZ4762C	82	3.0	200	3000	0.25	5.0	62.2	11	55
MZ4763C	91	2.8	250	3000	0.25	5.0	69.2	10	50
MZ4764C	100	2.5	350	3000	0.25	5.0	76.0	9.0	45
MZ1110C	110	2.3	450	4000	0.25	5.0	83.6	8.6	40
MZ1120C	120	2.0	550	4500	0.25	5.0	91.2	7.8	37
MZ1130C	130	1.9	700	5000	0.25	5.0	98.8	7.0	34
MZ1150C	150	1.7	1000	6000	0.25	5.0	114.0	6.4	30
MZ1160C	160	1.6	1100	6500	0.25	5.0	121.6	5.8	28
MZ1180C	180	1.4	1200	7000	0.25	5.0	136.8	5.2	25
MZ1200C	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 ± 2 %.

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

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