Certificate TH97/10561QM Certificate TW00/17276EM

1N4728C - 1N4764C
Z1110C - Z1300C

SILICON ZENER DIODES

V_Z : 3.3 - 300 Volts
P_D : 1 Watt

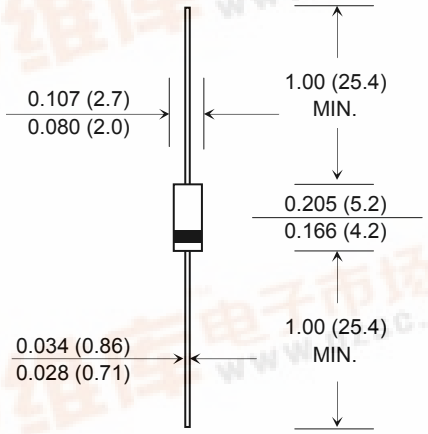
FEATURES :

* Complete voltage range 3.3 to 300 Volts
* High peak reverse power dissipation
* High reliability
* Low leakage current
* Pb / RoHS Free

MECHANICAL DATA

* Case : DO-41 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 : 0.339 gram

DO - 41



Dimensions in inches and (millimeters)

MAXIMUM RATINGS

Rating at 25°C ambient temperature unless otherwise specified.

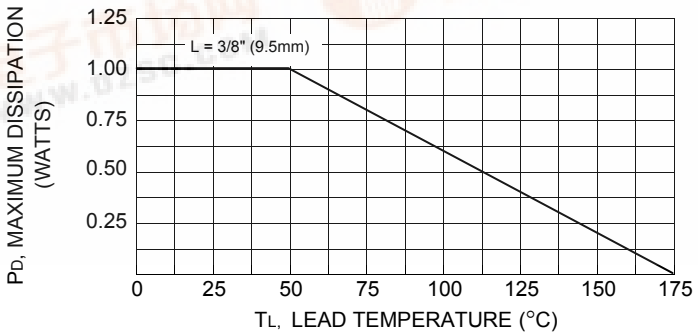
Rating	Symbol	Value	Unit
DC Power Dissipation at T_L = 50 °C (Note1)	P_D	1.0	Watt
Maximum Forward Voltage at I_F = 200 mA	V_F	1.2	Volts
Maximum Thermal Resistance Junction to Ambient Air (Note2)	$R_{\Theta JA}$	170	K / W
Junction Temperature Range	T_J	- 55 to + 175	°C
Storage Temperature Range	T_{STG}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



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)
1N4728C	3.3	76.0	10	400	1.0	100	1.0	276	1380
1N4729C	3.6	69.0	10	400	1.0	100	1.0	252	1260
1N4730C	3.9	64.0	9.0	400	1.0	50	1.0	234	1190
1N4731C	4.3	58.0	9.0	400	1.0	10	1.0	217	1070
1N4732C	4.7	53.0	8.0	500	1.0	10	1.0	193	970
1N4733C	5.1	49.0	7.0	550	1.0	10	1.0	178	890
1N4734C	5.6	45.0	5.0	600	1.0	10	2.0	162	810
1N4735C	6.2	41.0	2.0	700	1.0	10	3.0	146	730
1N4736C	6.8	37.0	3.5	700	1.0	50	4.0	133	660
1N4737C	7.5	34.0	4.0	700	0.5	50	5.0	121	605
1N4738C	8.2	31.0	4.5	700	0.5	50	6.0	110	550
1N4739C	9.1	28.0	5.0	700	0.5	50	7.0	100	500
1N4740C	10	25.0	7.0	700	0.25	50	7.6	91	454
1N4741C	11	23.0	8.0	700	0.25	50	8.4	83	414
1N4742C	12	21.0	9.0	700	0.25	5.0	9.1	76	380
1N4743C	13	19.0	10	700	0.25	5.0	9.9	69	344
1N4744C	15	17.0	14	700	0.25	5.0	11.4	61	305
1N4745C	16	15.5	16	700	0.25	5.0	12.2	57	285
1N4746C	18	14.0	20	750	0.25	5.0	13.7	50	250
1N4747C	20	12.5	22	750	0.25	5.0	15.2	45	225
1N4748C	22	11.5	23	750	0.25	5.0	16.7	41	205
1N4749C	24	10.5	25	750	0.25	5.0	18.2	38	190
1N4750C	27	9.5	35	750	0.25	5.0	20.6	34	170
1N4751C	30	8.5	40	1000	0.25	5.0	22.8	30	150
1N4752C	33	7.5	45	1000	0.25	5.0	25.1	27	135
1N4753C	36	7.0	50	1000	0.25	5.0	27.4	25	125
1N4754C	39	6.5	60	1000	0.25	5.0	29.7	23	115
1N4755C	43	6.0	70	1500	0.25	5.0	32.7	22	110
1N4756C	47	5.5	80	1500	0.25	5.0	35.8	19	95
1N4757C	51	5.0	95	1500	0.25	5.0	38.8	18	90
1N4758C	56	4.5	110	2000	0.25	5.0	42.6	16	80
1N4759C	62	4.0	125	2000	0.25	5.0	47.1	14	70
1N4760C	68	3.7	150	2000	0.25	5.0	51.7	13	65
1N4761C	75	3.3	175	2000	0.25	5.0	56.0	12	60
1N4762C	82	3.0	200	3000	0.25	5.0	62.2	11	55
1N4763C	91	2.8	250	3000	0.25	5.0	69.2	10	50
1N4764C	100	2.5	350	3000	0.25	5.0	76.0	9.0	45
Z1110C	110	2.3	450	4000	0.25	5.0	83.6	8.6	40
Z1120C	120	2.0	550	4500	0.25	5.0	91.2	7.8	37
Z1130C	130	1.9	700	5000	0.25	5.0	98.8	7.0	34
Z1150C	150	1.7	1000	6000	0.25	5.0	114.0	6.4	30
Z1160C	160	1.6	1100	6500	0.25	5.0	121.6	5.8	28
Z1180C	180	1.4	1200	7000	0.25	5.0	136.8	5.2	25
Z1200C	200	1.2	1900	9990	0.25	5.0	152.0	4.7	22
Z1240C	240	0.93	1800	8500	0.25	5.0	182.4	3.8	19
Z1250C	250	0.90	2000	9000	0.25	5.0	190	3.6	18
Z1270C	270	0.82	2100	9000	0.25	5.0	205	3.3	16
Z1300C	300	0.75	2300	9500	0.25	5.0	228	3.0	15

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