Certificate Number: Q10561

Certificate Number: E17276

ZY3.6 ~ ZY200

SILICON ZENER DIODES

V_Z : 3.6 - 200 Volts
P_D : 2 Watts

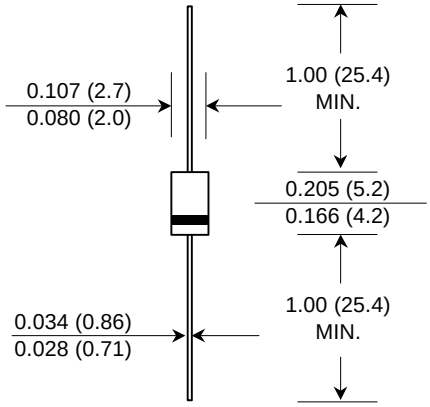
FEATURES :

* Silicon power zener diode
* 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	P_{tot}	2.0(1)	W
Thermal Resistance Junction to Ambient Air	RθJA	60(1)	°C/W
Junction Temperature	Tj	150	°C
Storage Temperature Range	Ts	- 55 to + 150	°C

Note : 1) Valid provided that leads are kept at ambient temperature at a distance of 10 mm from case

ELECTRICAL CHARACTERISTICS (Tj = 25 °C unless otherwise specified)

Type No.	Zener Voltage[2] at I_{ZT} V_Z (V)		Dynamic resistance at I_{ZT}	Temp. coeff. of Zener Voltage at I_{ZT}	Test Current	Maximum Reverse at I_R = 1 mA	Admissible Zener Current[1] at Ta = 25 °C
	min.	max.	max. r_{zj} (W)	α_{VZ} (10^{-4}/K)	I_{ZT} (mA)	V_R (V)	I_Z (mA)
ZY3.6	3.4	3.8	7	-7…+2	100	-	440
ZY3.9	3.7	4.1	7	-7…+2	100	-	410
ZY4.3	4.0	4.6	7	-7…+3	100	-	360
ZY4.7	4.4	5.0	7	-7…+4	100	-	330
ZY5.1	4.8	5.4	5	-6…+5	100	-	300
ZY5.6	5.2	6.0	2	-3…+5	100	>1.5	275
ZY6.2	5.8	6.6	2	-1…+6	100	>1.5	245
ZY6.8	6.4	7.2	1	0…+7	100	>2	220
ZY7.5	7.0	7.9	1	0…+7	100	>2	200
ZY8.2	7.7	8.7	1	+3…+8	100	>3.5	180
ZY9.1	8.5	9.6	4	+3…+8	50	>7.4	165
ZY10	9.4	10.6	4	+5…+9	50	>8.2	145
ZY11	10.4	11.6	7	+5…+10	50	>9.2	135
ZY12	11.4	12.7	7	+5…+10	50	>10	120
ZY13	12.4	14.1	10	+5…+10	50	>10.7	110
ZY15	13.8	15.8	10	+5…+10	50	>12	98
ZY16	15.3	17.1	15	+6…+11	25	>13.3	90
ZY18	16.8	19.1	15	+6…+11	25	>14.7	80
ZY20	18.8	21.2	15	+6…+11	25	>16.5	72
ZY22	20.8	23.3	15	+6…+11	25	>18.3	66
ZY24	22.8	25.6	15	+6…+11	25	>20.1	60
ZY27	25.1	28.9	15	+6…+11	25	>22.5	53
ZY30	28	32	15	+6…+11	25	>25.1	48
ZY33	31	35	15	+6…+11	25	>27.8	44
ZY36	34	38	40	+6…+11	10	>30.2	40
ZY39	37	41	40	+6…+11	10	>32.9	37
ZY43	40	46	45	+7…+12	10	>35.6	33
ZY47	44	50	45	+7…+12	10	>39.2	30
ZY51	48	54	60	+7…+12	10	>42.8	27
ZY56	52	60	60	+7…+12	10	>47.3	25
ZY62	58	66	80	+8…+13	10	>51.7	21
ZY68	64	72	80	+8…+13	10	>57.1	20
ZY75	70	79	100	+8…+13	10	>63.2	18
ZY82	77	88	100	+8…+13	10	>68.6	16
ZY91	85	96	200	+9…+13	5	>75.7	15
ZY100	94	106	200	+9…+13	5	>83.7	13
ZY110	104	116	250	+9…+13	5	>92.6	12
ZY120	114	127	250	+9…+13	5	>101.6	11
ZY130	124	141	300	+9…+13	5	>110.5	10
ZY150	138	156	300	+9…+13	5	>123	9
ZY160	153	171	350	+9…+13	5	>136	8.5
ZY180	168	191	350	+9…+13	5	>149	8
ZY200	168	212	350	+9 … +13	5	>167	7.5

Notes : 1) Valid provided that leads are kept at ambient temperature at a distance of 10 mm from case

2) Tested with pulses tp = 5 ms