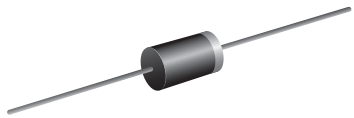
ZY3.6 -ZY200

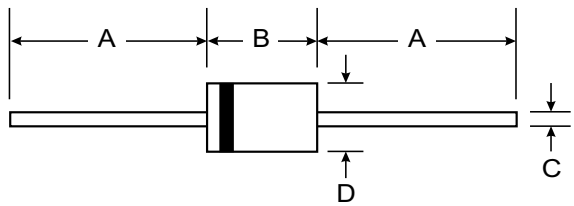
AXIAL LEADED SILICON ZENER DIODES

VOLTAGE RANGE: 3.6 - 200V
POWER: 2.0Watts



Features

- Complete Voltage Range 3.6 to 200 Volts
- High peak reverse power dissipation
- High reliability
- Low leakage current



Mechanical Data

- Case : DO-15 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

RoHS COMPLIANT

DO-15		
Dim	**Min**	**Max**
A	25.40	—
B	5.50	7.62
C	0.686	0.889
D	2.60	3.60
All Dimensions in mm		

Maximum Ratings @ T_A = 25°C unless otherwise specified

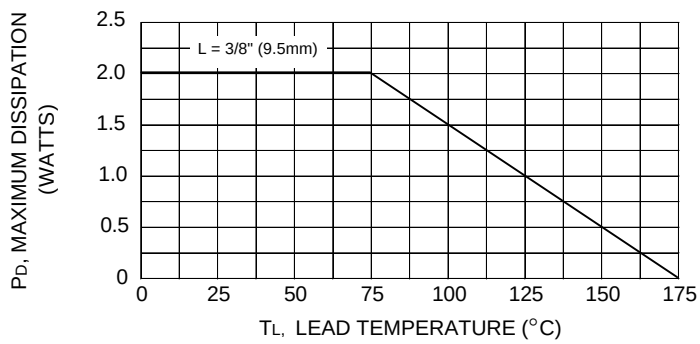
Rating	Symbol	Value	Unit
DC Power Dissipation at T_L = 75 °C (Note1)	P_D	2.0	Watts
Maximum Forward Voltage at I_F = 200 mA	V_F	1.2	Volts
Maximum Thermal Resistance Junction to Ambient Air (Note2)	RθJA	60	K / W
Junction Temperature Range	T_J	- 55 to + 175	°C
Storage Temperature Range	Ts	- 55 to + 175	°C

Note :

(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



TYPE	Nominal Zener Voltage		Maximum Zener Impedance			Maximum Reverse Leakage Current		Maximum DC Zener Current
	V_Z @ I_{ZT}	I_{ZT}	Z_{ZT} @ I_{ZT}	Z_{ZK} @ I_{ZK}	I_{ZK}	I_R @ V_R		I_{ZM}
	(V)	(mA)	(Ω)	(Ω)	(mA)	(μA)	(V)	(mA)
ZY3.6	3.6	139	5.0	400	1.0	80	1.0	504
ZY3.9	3.9	128	5.0	400	1.0	30	1.0	468
ZY4.3	4.3	116	4.5	400	1.0	20	1.0	434
ZY4.7	4.7	106	4.5	550	1.0	5.0	1.0	386
ZY5.1	5.1	98.0	3.5	600	1.0	5.0	1.0	356
ZY5.6	5.6	89.5	2.5	500	1.0	5.0	2.0	324
ZY6.2	6.2	80.5	1.5	700	1.0	5.0	3.0	292
ZY6.8	6.8	73.5	2.0	700	1.0	5.0	4.0	266
ZY7.5	7.5	66.5	2.0	700	0.5	50	5.0	242
ZY8.2	8.2	61.0	2.3	700	0.5	50	6.0	220
ZY9.1	9.1	55.0	2.5	700	0.5	50	7.0	200
ZY10	10	50.0	3.5	700	0.25	50	7.6	182
ZY11	11	45.5	4.0	700	0.25	50	8.4	166
ZY12	12	41.5	4.5	700	0.25	1.0	9.1	152
ZY13	13	38.5	5.0	700	0.25	0.5	9.9	138
ZY14	14	35.7	5.5	700	0.25	0.5	10.6	130
ZY15	15	33.4	7.0	700	0.25	0.5	11.4	122
ZY16	16	31.2	8.0	700	0.25	0.5	12.2	114
ZY17	17	29.4	9.0	750	0.25	0.5	13.0	107
ZY18	18	27.8	10	750	0.25	0.5	13.7	100
ZY19	19	26.3	11	750	0.25	0.5	14.4	95
ZY20	20	25.0	11	750	0.25	0.5	15.2	90
ZY22	22	22.8	12	750	0.25	0.5	16.7	82
ZY24	24	20.8	13	750	0.25	0.5	18.2	76
ZY27	27	18.5	18	750	0.25	0.5	20.6	68
ZY30	30	16.6	20	1000	0.25	0.5	22.5	60
ZY33	33	15.1	23	1000	0.25	0.5	25.1	55
ZY36	36	13.9	25	1000	0.25	0.5	27.4	50
ZY39	39	12.8	30	1000	0.25	0.5	29.7	47
ZY43	43	11.6	35	1500	0.25	0.5	32.7	43
ZY47	47	10.6	40	1500	0.25	0.5	35.8	39
ZY51	51	9.8	48	1500	0.25	0.5	38.8	36
ZY56	56	9.0	55	2000	0.25	0.5	42.6	32
ZY62	62	8.1	60	2000	0.25	0.5	47.1	29
ZY68	68	7.4	75	2000	0.25	0.5	51.7	27
ZY75	75	6.7	90	2000	0.25	0.5	56.0	24
ZY82	82	6.1	100	3000	0.25	0.5	62.2	22
ZY91	91	5.5	125	3000	0.25	0.5	69.2	20
ZY100	100	5.0	175	3000	0.25	0.5	76.0	18
ZY110	110	4.5	250	4000	0.25	0.5	83.6	17
ZY120	120	4.2	325	4500	0.25	0.5	91.2	15
ZY130	130	3.8	400	5000	0.25	0.5	98.8	14
ZY140	140	3.6	500	5500	0.25	0.5	106.4	13
ZY150	150	3.3	575	6000	0.25	0.5	114.0	12
ZY160	160	3.1	650	6500	0.25	0.5	121.6	11
ZY170	170	2.9	675	7000	0.25	0.5	130.4	11
ZY180	180	2.8	725	7000	0.25	0.5	136.8	10
ZY190	190	2.6	825	8000	0.25	0.5	144.8	10
ZY200	200	2.5	900	8000	0.25	0.5	152.0	9.0

Note :

(1) Suffix " 5 " indicates ± 5.0% tolerance, suffix " 10 " indicates ± 10.0% tolerance.