

# Z1110 - Z1400

V<sub>Z</sub> : 110 - 400 Volts

P<sub>D</sub> : 1 Watt

## FEATURES :

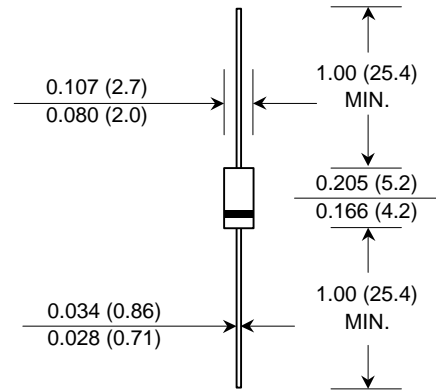
- \* Complete voltage range 110 to 400 Volts
- \* High peak reverse power dissipation
- \* High reliability
- \* Low leakage current

## 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

# SILICON ZENER DIODES

## 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 <sub>L</sub> = 50 °C (Note1)	P <sub>D</sub>	1.0	Watt
Maximum Forward Voltage at I <sub>F</sub> = 200 mA	V <sub>F</sub>	1.2	Volts
Maximum Thermal Resistance Junction to Ambient Air (Note2)	R <sub>θJA</sub>	170	K / W
Junction Temperature Range	T <sub>J</sub>	- 55 to + 175	°C
Storage Temperature Range	T <sub>s</sub>	- 55 to + 175	°C

Note : (1) T<sub>L</sub> = 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.

## 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
	V <sub>Z</sub> @ I <sub>ZT</sub>	I <sub>ZT</sub>	Z <sub>ZT</sub> @ I <sub>ZT</sub>	Z <sub>ZK</sub> @ I <sub>ZK</sub>	I <sub>ZK</sub>	I <sub>R</sub> @ V <sub>R</sub>	I <sub>ZM</sub>	
	(V)	(mA)	(Ω)	(Ω)	(mA)	(μA)	(V)	(mA)
Z1110	110	2.3	450	4000	0.25	5.0	83.6	8.6
Z1120	120	2.0	550	4500	0.25	5.0	91.2	7.8
Z1130	130	1.9	700	5000	0.25	5.0	98.8	7.0
Z1150	150	1.7	1000	6000	0.25	5.0	114.0	6.4
Z1160	160	1.6	1100	6500	0.25	5.0	121.6	5.8
Z1180	180	1.4	1200	7000	0.25	5.0	136.8	5.2
Z1200	200	1.2	1500	8000	0.25	5.0	152.0	4.7
Z1240	240	0.93	1800	8500	0.25	5.0	182.4	3.8
Z1250	250	0.90	2000	9000	0.25	5.0	190	3.6
Z1270	270	0.82	2100	9000	0.25	5.0	205	3.3
Z1300	300	0.75	2300	9500	0.25	5.0	228	3.0
Z1330	330	0.70	2500	9500	0.25	5.0	250	2.8
Z1380	380	0.60	2700	9500	0.25	5.0	288	2.4
Z1400	400	0.55	2800	9500	0.25	5.0	304	2.3

Note : (1) The type number listed have a standard tolerance on the nominal zener voltage of ±10%.  
 A standard tolerance of ±5% on individual units is also available and is indicated by suffixing "A" to the standard type number.