Certificate Number: Q10561

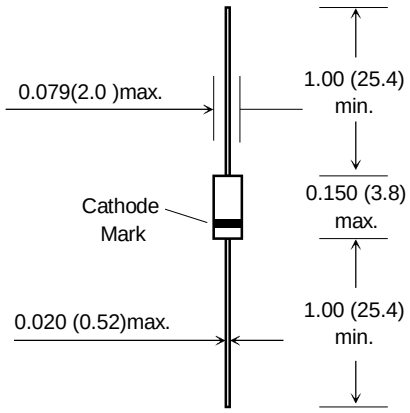
Certificate Number: E17276

1N746A - 1N759A

ZENER DIODES

V_Z : 3.3 to 12V
P_D : 500mW

DO - 35 Glass
(DO-204AH)



Dimensions in inches and (millimeters)

FEATURES :

- Silicon planar power zener diodes.
- Standard zener voltage tolerance is ± 5%
- Other tolerances are available upon request.
- Pb / RoHS Free

MECHANICAL DATA :

Case: DO-35 Glass Case
Weight: approx. 0.13g

Maximum Ratings and Thermal Characteristics

Rating at 25 °C ambient temperature unless otherwise specified.

Parameter	Symbol	Value	Unit
Zener Current see Table "Characteristics"			
Maximum Forward Voltage at I_F = 200 mA.	V_F	1.2	V
Power Dissipation at T_L = 75°C	P_D	500(1)	mW
Thermal Resistance Junction to Ambient Air	$R_{\theta JA}$	300(2)	°C/W
Junction temperature	T_J	175	°C
Storage temperature range	T_S	-65 to + 150	°C

Notes:

(1) T_L is measured 3/8" from body.

(2) Valid provided that leads at a distance of 3/8" from case are kept at ambient temperature.

ELECTRICAL CHARACTERISTICS

Rating at 25 °C ambient temperature unless otherwise specified.

Type	Nominal Zener Voltage V_Z @ I_{ZT}	Test Current I_{ZT}	Maximum Zener Impedance Z_{ZT} @ I_{ZT} (1)	Maximum Reverse Leakage Current I_R (2) @ V_R=1V		Maximum DC. Zener Current I_{ZM}
				Ta=25°C	Ta=150°C	
	(V)	(mA)	(Ω)	(μA)	(μA)	(mA)
1N746A	3.3	20	28	10	30	110
1N747A	3.6	20	24	10	30	100
1N748A	3.9	20	23	10	30	95
1N749A	4.3	20	22	2	30	85
1N750A	4.7	20	19	2	30	75
1N751A	5.1	20	17	1	20	70
1N752A	5.6	20	11	1	20	65
1N753A	6.2	20	7	0.1	20	60
1N754A	6.8	20	5	0.1	20	55
1N755A	7.5	20	6	0.1	20	50
1N756A	8.2	20	8	0.1	20	45
1N757A	9.1	20	10	0.1	20	40
1N758A	10	20	17	0.1	20	35
1N759A	12	20	30	0.1	20	30

Notes :

(1) The Zener impedance is derived from the 1 kHz AC voltage which results when an AC current having an RMS value equal to 10% of the Zener current (I_{ZT}) is superimposed on I_{ZT}. Zener impedance is measured at two points to insure a sharp knee on the breakdown curve and to eliminate unstable units.

(2) Valid provided that leads at a distance of 3/8" from case are kept at ambient temperature.

(3) The type number listed have a standard tolerance on the nominal zener voltage of ± 5.0%.