

# 1N746A - 1N759A

$V_Z$  : 3.3 to 12V

$P_D$  : 500mW

### FEATURES :

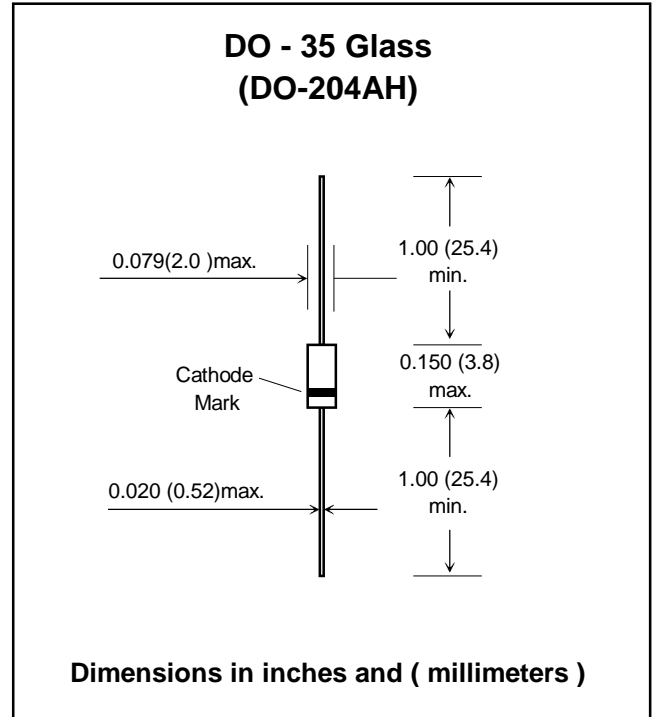
- Silicon planar power zener diodes.
- Standard zener voltage tolerance is  $\pm 5\%$
- Other tolerances are available upon request.
- **Pb / RoHS Free**

### MECHANICAL DATA :

**Case:** DO-35 Glass Case

**Weight:** approx. 0.13g

## ZENER DIODES



### 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 $T_L = 75^\circ\text{C}$	$P_D$	500 <sup>(1)</sup>	mW
Thermal Resistance Junction to Ambient Air	$R_{\theta JA}$	300 <sup>(2)</sup>	$^\circ\text{C/W}$
Junction temperature	$T_J$	175	$^\circ\text{C}$
Storage temperature range	$T_S$	-65 to + 150	$^\circ\text{C}$

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 $I_{ZM}$
				$T_a=25^\circ C$	$T_a=150^\circ C$	
				( $\mu A$ )	( $\mu A$ )	
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  $\pm 5.0\%$ .