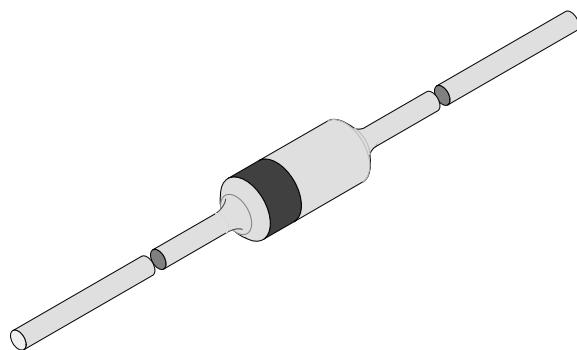


Silicon Z-Diodes

Features

- Very sharp reverse characteristic
- Very high stability
- Low reverse current level
- V_Z -tolerance $\pm 5\%$



94 9367

Applications

Voltage stabilization

Absolute Maximum Ratings

$T_j = 25^\circ\text{C}$

Parameter	Test Conditions	Type	Symbol	Value	Unit
Power dissipation	$T_L \leq 75^\circ\text{C}$		P_V	500	mW
Z-current			I_Z	P_V/V_Z	mA
Junction temperature			T_j	200	$^\circ\text{C}$
Storage temperature range			T_{stg}	-65...+200	$^\circ\text{C}$

Maximum Thermal Resistance

$T_j = 25^\circ\text{C}$

Parameter	Test Conditions	Symbol	Value	Unit
Junction ambient	$l=9.5\text{mm (}3/8"\text{)}, T_L=\text{constant}$	R_{thJA}	300	K/W

Characteristics

$T_j = 25^\circ\text{C}$

Parameter	Test Conditions	Type	Symbol	Min	Typ	Max	Unit
Forward voltage	$I_F=200\text{mA}$		V_F			1.1	V

Type	V _{Znom} ¹⁾ V	I _{ZT} for mA	r _{zjT} Ω	I _R μA max	I _{R1} * μA max	at V _R V	T _{KVZ} %/K
1N746A	3.3	20	< 28	10	30	1.0	< +0.091
1N747A	3.6	20	< 24	10	30	1.0	< +0.091
1N748A	3.9	20	< 23	10	30	1.0	< +0.092
1N749A	4.3	20	< 22	2	30	1.0	< +0.093
1N750A	4.7	20	< 19	2	30	1.0	< +0.094
1N751A	5.1	20	< 17	1	20	1.0	< +0.095
1N752A	5.6	20	< 11	1	10	1.0	< +0.095
1N753A	6.2	20	< 7	0.1	10	1.0	< +0.096
1N754A	6.8	20	< 5	0.1	20	1.0	< +0.096
1N755A	7.5	20	< 6	0.1	20	1.0	< +0.097
1N756A	8.2	20	< 8	0.1	20	1.0	< +0.097
1N757A	9.1	20	< 10	0.1	20	1.0	< +0.097
1N758A	10	20	< 17	0.1	20	1.0	< +0.098
1N759A	12	20	< 30	0.1	20	1.0	< +0.098

1) Based on dc measurement at thermal equilibrium; * T_j = 150°C
lead length = 9.5 mm (3/8");
thermal resistance of heat sink = 30 K/W.

Dimensions in mm

