

1N746A thru 1N759A

Zener Diodes

V_Z : 3.3V to 12V Power Dissipation: 500mW

Features

- Low leakage current
- Available in unidirectional
- Glass passivated junction
- Zener voltage tolerance is $\pm 5\%$
- Silicon planar power zener diodes
- Total power dissipation: Max 500mW
- Moisture sensitivity: level 1, per J-STD-020



DO-35 (DO-204AH)

Applications

Protection from high voltage, high energy transients, voltage stabilization.

Absolute Maximum Ratings ($T_A=25^\circ\text{C}$ unless otherwise noted)

Parameter	Symbol	Ratings	Unit
Power Dissipation at $T_L=75^\circ\text{C}$	P_{tot}	500	mW
Typical Thermal Resistance, Junction to Ambient	$R_{\theta JA}$	300	$^\circ\text{C/W}$
Maximum Junction Temperature	T_J	175	$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-65 to +175	$^\circ\text{C}$

Note:

1. Valid provided that leads at a distance of 9.5mm from case are kept at ambient temperature.

Electrical Specifications ($T_A=25^\circ\text{C}$ unless otherwise noted)

Part Number	Marking	V_Z at I_{ZT} (V)			I_{ZT} (mA)	Maximum Zener Impedance	Maximum Reverse Leakage at $V_R=1\text{V}$ (μA)		Maximum Zener Current
		Min	Typ	Max		Z_{ZT} at I_{ZT} (Ω)	$T_A=25^\circ\text{C}$	$T_A=151^\circ\text{C}$	I_{ZM} (mA)
1N746A	1N746A	3.14	3.3	3.47	20	28	10	30	110
1N747A	1N747A	3.42	3.6	3.78	20	24	10	30	100
1N748A	1N748A	3.71	3.9	4.10	20	23	10	30	95
1N749A	1N749A	4.09	4.3	4.52	20	22	2	30	85
1N750A	1N750A	4.47	4.7	4.94	20	19	2	30	75
1N751A	1N751A	4.85	5.1	5.36	20	17	1	20	70
1N752A	1N752A	5.32	5.6	5.88	20	11	1	20	65
1N753A	1N753A	5.89	6.2	6.51	20	7	0.1	20	60
1N754A	1N754A	6.46	6.8	7.14	20	5	0.1	20	55
1N755A	1N755A	7.13	7.5	7.88	20	6	0.1	20	50
1N756A	1N756A	7.79	8.2	8.61	20	8	0.1	20	45
1N757A	1N757A	8.65	9.1	9.56	20	10	0.1	20	40
1N758A	1N758A	9.50	10	10.50	20	17	0.1	20	35
1N759A	1N759A	11.40	12	12.60	20	30	0.1	20	30

Ratings and Characteristic Curves ($T_A=25^\circ\text{C}$ unless otherwise noted)

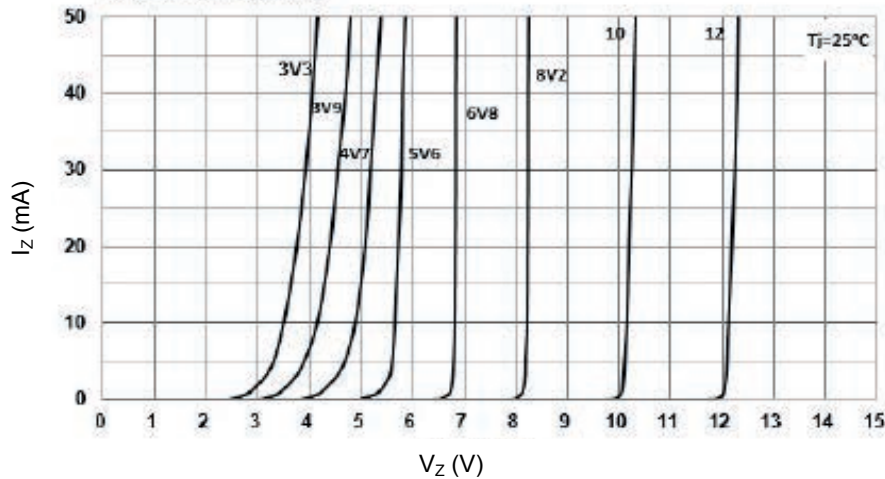


Figure 1. Breakdown Characteristics at $T_j=\text{Constant}$ (Pulsed)

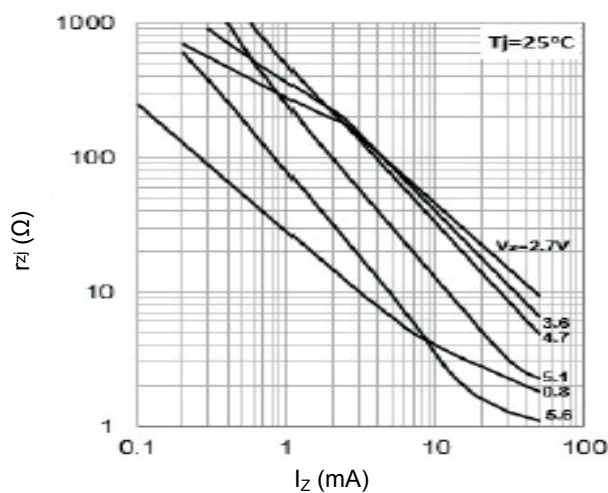


Figure 2. Dynamic Resistance vs. Zener Current

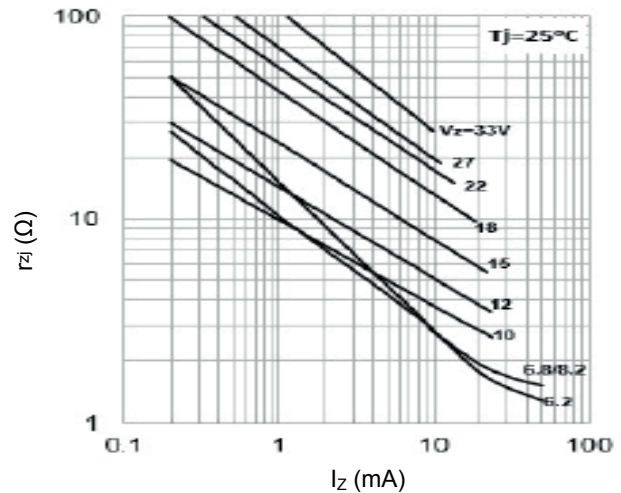


Figure 3. Dynamic Resistance vs. Zener Current

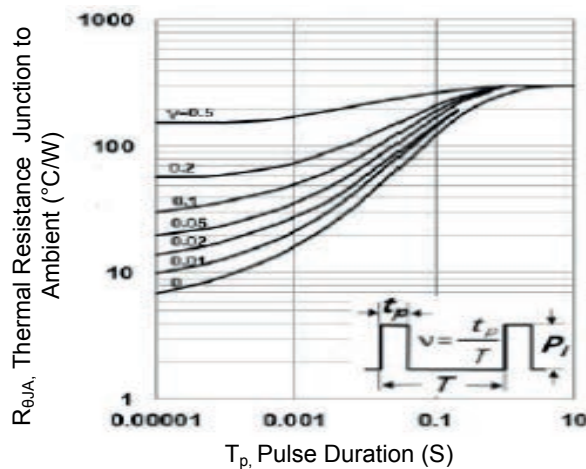


Figure 4. Pulse Thermal Resistance vs. Pulse Duration

Valid provided that leads are kept at ambient temperature at a distance of 9.5mm from case

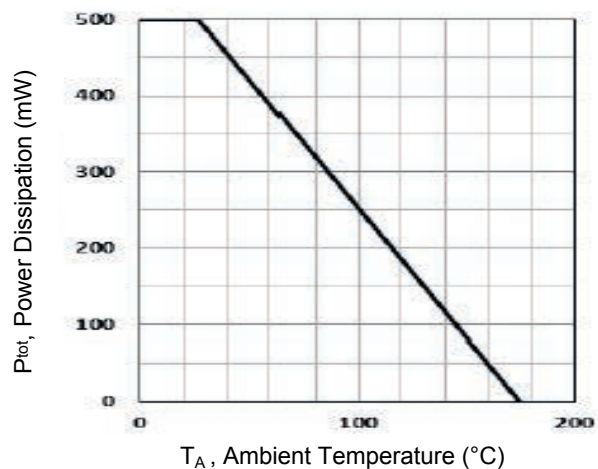


Figure 5. Admissible Power Dissipation vs. Ambient Temperature

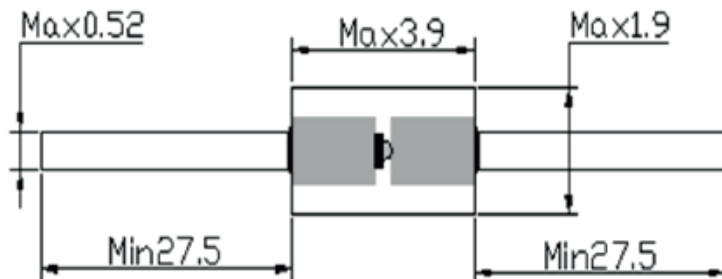
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Package Outline Dimensions DO-35 (DO-204AH)



Unit: In Millimeters

Order Information

Device	Package	Carrier	Quantity	HSF Status
1N7xxA	DO-35	Tape & Reel	5,000pcs / Reel	RoHS Compliant

For more information, please contact us at: inquiry@goodarksemi.com