

# 500mW,3.3 - 12V Zener Diodes

## **Features**

- Low leakage current
- Available in unidirectional
- Glass passivated junction
- ullet 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 <sub>A</sub> =25°C unless otherwise noted)						
Parameter	Symbol	Ratings	Unit			
Zener voltage	Vz	See Next Table	V			
Power dissipation at T <sub>L</sub> =75°C	P <sub>tot</sub>	500	mW			
Typical Thermal Resistance , Junction to Ambient	R <sub>θ</sub> ЈА	300	°C/W			
Maximum junction temperature	TJ	175	°C			
Storage temperature range	Tstg	-65 to +175	°C			

#### Note:

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



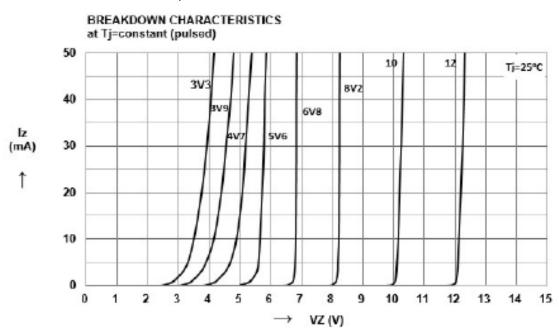
# 1N746A thru 1N759A GOOD-ARK Electronics

ctrical Characteristics (TA = 25 °C unless otherwise noted)								
Part Number	V	Vz at Izτ (V)			Maximum zener impedance	Maximum reverse leakage at V <sub>R</sub> =1V (μA)		Maximum Zener Current
	Min	Тур	Max		Z <sub>ZT</sub> at I <sub>ZT</sub> (Ω)	TA=25°C	TA=151℃	IZM (mA)
1N746A	3.14	3.3	3.47	20	28	10	30	110
1N747A	3.42	3.6	3.78	20	24	10	30	100
1N748A	3.71	3.9	4.10	20	23	10	30	95
1N749A	4.09	4.3	4.52	20	22	2	30	85
1N750A	4.47	4.7	4.94	20	19	2	30	75
1N751A	4.85	5.1	5.36	20	17	1	20	70
1N752A	5.32	5.6	5.88	20	11	1	20	65
1N753A	5.89	6.2	6.51	20	7	0.1	20	60
1N754A	6.46	6.8	7.14	20	5	0.1	20	55
1N755A	7.13	7.5	7.88	20	6	0.1	20	50
1N756A	7.79	8.2	8.61	20	8	0.1	20	45
1N757A	8.65	9.1	9.56	20	10	0.1	20	40
1N758A	9.50	10	10.50	20	17	0.1	20	35
1N759A	11.40	12	12.60	20	30	0.1	20	30

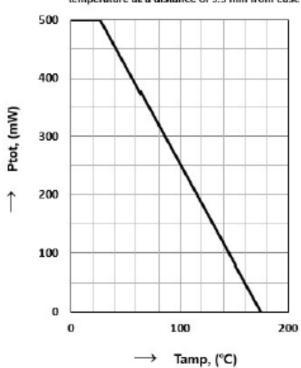


# **Ratings and Characteristics Curves**

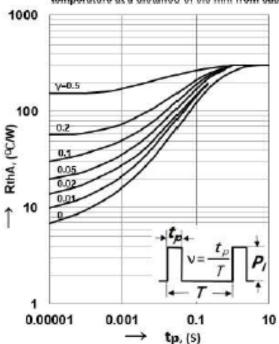
(TA = 25°C unless otherwise noted)



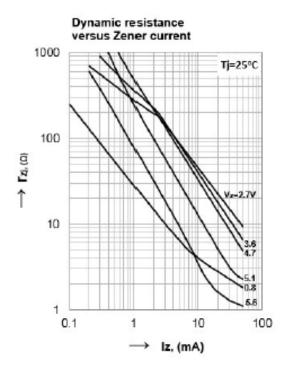
#### Admissible power dissipation versus ambient temperature Valid provided that leads are kept at ambient temperature at a distance of 9.5 mm from case

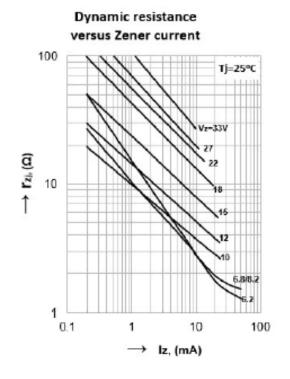


### Pulse thermal resistance versus pulse duration Valid provided that leads are kept at ambient temperature at a distance of 9.5 mm from case











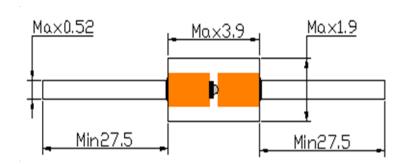
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# **Package Outline Dimensions**

in inches (millimeters)

# DO-35 (DO-204AH)

CASE DIMENSION (DO-35 Type, 52mm), Unit: mm



# **Revision History**

Document Version	Date of release	Description of changes
Rev.A	2021.06.15	Released Datasheet
Rev.B	2023.10.31	Modify document format



# 1N746A thru 1N759A

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