

1N4728A-G~1N4764A-G

SILICON ZENER DIODE

VOLTAGE 3.3 to 100 Volts **POWER** 1.0 Watts

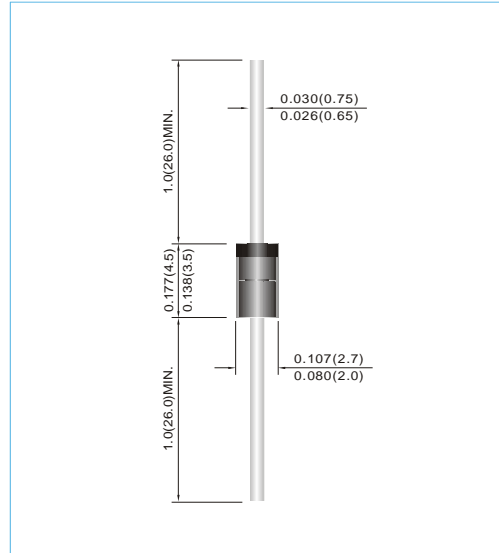
FEATURES

- Low profile package
- Built-in strain relief
- Low inductance
- High temperature soldering : 260°C /10 seconds at terminals
- Glass package has Underwriters Laboratory Flammability Classification
- In compliance with EU RoHS 2002/95/EC directives

MECHANICAL DATA

- Case: Molded Glass DO-41G
- Terminals: Axial leads, solderable per MIL-STD-750, Method 2026 guaranteed
- Polarity: Color band denotes positive end
- Mounting position:Any
- Weight: 0.012 ounce, 0.317 gram

DO-41G Unit : inch(mm)



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

Parameter	Symbol	Value	Units
Power Dissipation at Tamb = 25 °C	P _{TOT}	1*	W
Junction Temperature	T _J	-65 to +200	°C
Storage Temperature Range	T _{STG}	-65 to +200	°C

*Valid provided that leads at a distance of 10mm from case are kept at ambient temperature.

Parameter	Symbol	Min.	Typ.	Max.	Units
Thermal Resistance Junction to Ambient Air	R _{θJA}	--	--	170*	K/W
Forward Voltage at I _F = 200mA	V _F	--	--	1.2	V

*Valid provided that leads at a distance of 10mm from case are kept at ambient temperature.

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Part Number	Nominal Zener Voltage			Max. Zener Impedance				Maximum Leakage Current		Marking Code
	V _Z @ I _{ZT}			Z _{ZT} @ I _{ZT}		Z _{ZK} @ I _{ZK}		I _R @ V _R		
	Nom. V	Min. V	Max. V	Ω	mA	Ω	mA	μA	V	
1.0 Watt Zener Diodes										
1N4728A-G	3.3	3.14	3.47	10.0	76.00	400	1.00	100	1	1N4728A
1N4729A-G	3.6	3.42	3.78	10.0	69.00	400	1.0	100	1	1N4729A
1N4730A-G	3.9	3.71	4.10	9.0	64.00	400	1.0	50	1	1N4730A
1N4731A-G	4.3	4.09	4.52	9.0	58.00	400	1.0	10	1	1N4731A
1N4732A-G	4.7	4.47	4.94	8.0	53.00	500	1.0	10	1	1N4732A
1N4733A-G	5.1	4.85	5.36	7.0	49.00	550	1.0	10	1	1N4733A
1N4734A-G	5.6	5.32	5.88	5.0	45.00	600	1.0	10	2	1N4734A
1N4735A-G	6.2	5.89	6.51	2.0	41.00	700	1.0	10	3	1N4735A
1N4736A-G	6.8	6.46	7.14	3.5	37.00	700	1.0	5	4	1N4736A
1N4737A-G	7.5	7.13	7.88	4.0	34.00	700	0.5	5	5	1N4737A
1N4738A-G	8.2	7.79	8.61	4.5	31.00	700	0.5	5	6	1N4738A
1N4739A-G	9.1	8.65	9.56	5.0	28.00	700	0.5	0.5	7	1N4739A
1N4740A-G	10.0	9.50	10.50	7.0	25.00	700	0.25	0.5	7.6	1N4740A
1N4741A-G	11.0	10.45	11.55	8.0	23.00	700	0.25	0.1	8.4	1N4741A
1N4742A-G	12.0	11.40	12.60	9.0	21.00	700	0.25	0.1	9.1	1N4742A
1N4743A-G	13.0	12.35	13.65	10	19.00	700	0.25	0.1	9.9	1N4743A
1N4744A-G	15.0	14.25	15.75	14	17.00	700	0.25	0.1	11.4	1N4744A
1N4745A-G	16.0	15.20	16.80	16	15.50	700	0.25	0.1	12.2	1N4745A
1N4746A-G	18.0	17.10	18.90	20	14.00	750	0.25	0.1	13.7	1N4746A
1N4747A-G	20.0	19.00	21.00	22	12.50	750	0.25	0.1	15.2	1N4747A
1N4748A-G	22.0	20.90	23.10	23	11.50	750	0.25	0.1	16.7	1N4748A
1N4749A-G	24.0	22.80	25.20	25	10.50	750	0.25	0.1	18.2	1N4749A
1N4750A-G	27.0	25.65	28.35	35	9.50	750	0.25	0.1	20.6	1N4750A
1N4751A-G	30.0	28.50	31.50	40	8.50	1000	0.25	0.1	22.8	1N4751A
1N4752A-G	33.0	31.35	34.65	45	7.50	1000	0.25	0.1	25.1	1N4752A
1N4753A-G	36.0	34.20	37.80	50	7.00	1000	0.25	0.1	27.4	1N4753A
1N4754A-G	39.0	37.05	40.95	60	6.50	1000	0.25	0.1	29.7	1N4754A
1N4755A-G	43.0	40.85	45.15	70	6.00	1500	0.25	0.1	32.7	1N4755A
1N4756A-G	47.0	44.65	49.35	80	5.50	1500	0.25	0.1	35.8	1N4756A
1N4757A-G	51.0	48.45	53.55	95	5.00	1500	0.25	0.1	38.8	1N4757A
1N4758A-G	56.0	53.20	58.80	110	4.50	2000	0.25	0.1	42.6	1N4758A
1N4759A-G	62.0	58.90	65.10	125	4.00	2000	0.25	0.1	47.1	1N4759A
1N4760A-G	68.0	64.60	71.40	150	3.70	2000	0.25	0.1	51.7	1N4760A
1N4761A-G	75.0	71.25	78.75	175	3.30	2000	0.25	0.1	56	1N4761A
1N4762A-G	82.0	77.90	86.10	200	3.00	3000	0.25	0.1	62.2	1N4762A
1N4763A-G	91.0	86.45	95.55	250	2.80	3000	0.25	0.1	69.2	1N4763A
1N4764A-G	100	95.00	105.00	350	2.50	3000	0.25	0.1	76	1N4764A

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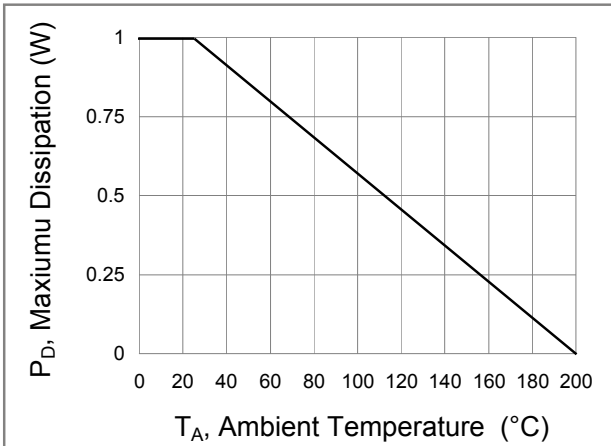


Fig.1 Steady-State Power Derating Curve

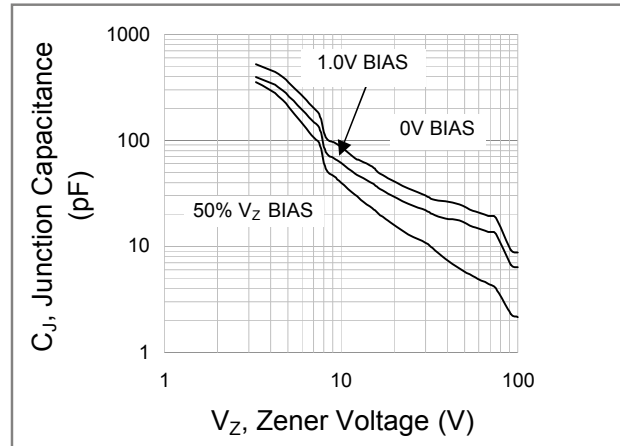


Fig.2 Typical Junction Capacitance

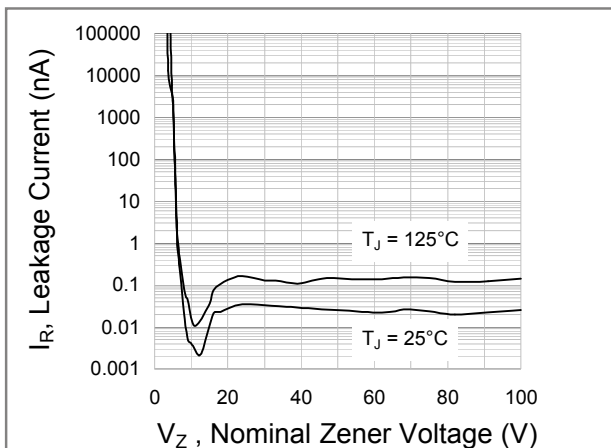


Fig.3 Typical Leakage Characteristics

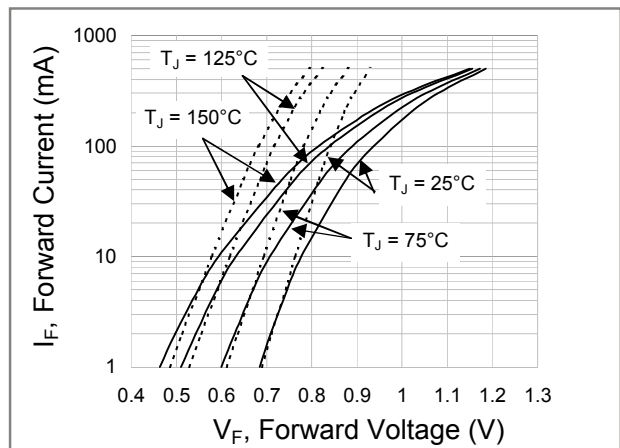


Fig.4 Typical Forward Characteristics

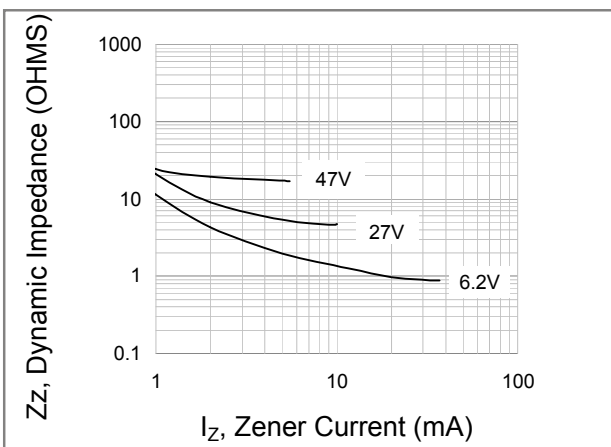


Fig.5 Typical Effect Of Zener Current On Zener Impedance

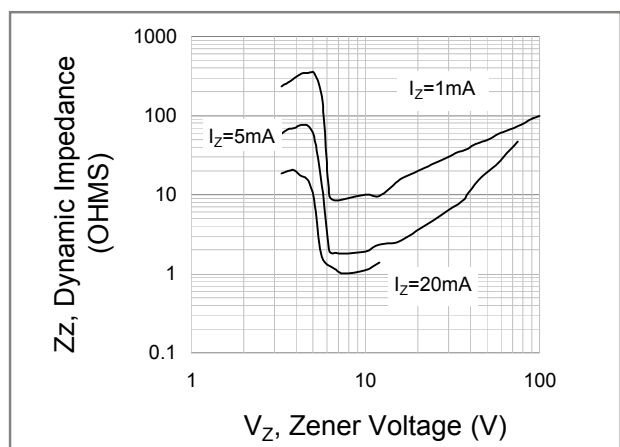


Fig.6 Typical Effect Of Zener Voltage On Zener Impedance

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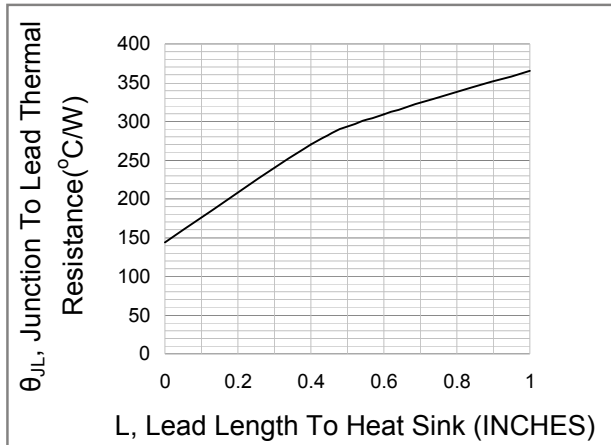


Fig.7 Thermal Resistance Versus Lead Length

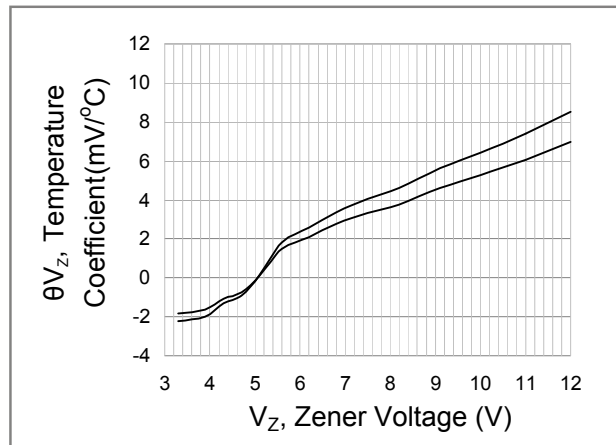


Fig.8 Temperature Coefficient (+25°C To +150°C Temperature Range ; 90% Of The Units Are In The Ranges Indicated)

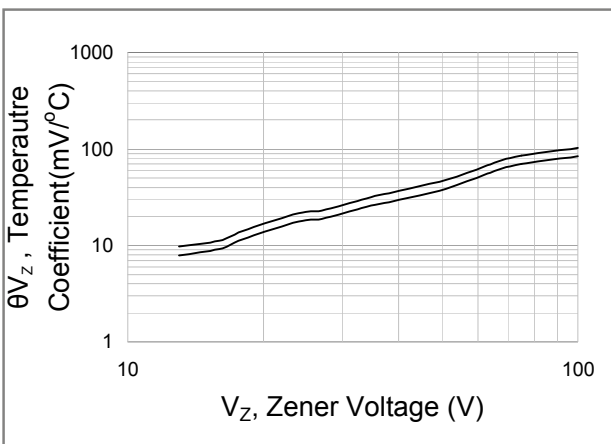


Fig.9 Temperature Coefficient (+25°C To +150°C Temperature Range ; 90% Of The Units Are In The Ranges Indicated)