

1N4728CG ~ 1N4764CG

V_Z : 3.3 to 100V

P_D : 1.0 Watt

FEATURES :

- Silicon planar power zener diodes.
- For use in stabilizing and clipping circuits with high power rating.
- Standard zener voltage tolerance is $\pm 2\%$
- Other tolerances are available upon request.
- Pb / RoHS Free

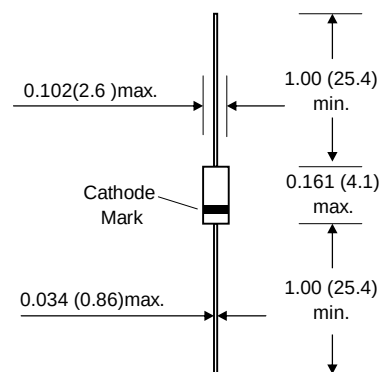
MECHANICAL DATA :

Case: DO-41 Glass Case

Weight: approx. 0.35g

ZENER DIODES

DO-41 Glass (DO-204AL)



Dimensions in inches and (millimeters)

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	P_D	1.0 ⁽¹⁾	W
Thermal Resistance Junction to Ambient Air	$R_{\theta JA}$	100 ⁽¹⁾	K / W
Junction temperature	T_J	175	°C
Storage temperature range	T_S	-55 to + 175	°C

Note:

(1) 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 No.	Nominal Zener Voltage ⁽³⁾		Maximum Zener Impedance ⁽¹⁾			Maximum Reverse Leakage Current		Maximum Regulator Current	Maximum Surge Current
	$V_Z @ I_{ZT}$	I_{ZT}	$Z_{ZT} @ I_{ZT}$	$Z_{ZK} @ I_{ZK}$	I_{ZK}	$I_R @ V_R$		$I_{ZM}^{(2)}$	I_{RM}
	(V)	(mA)	(Ω)	(Ω)	(mA)	(μA)	(V)	(mA)	(mA)
1N4728CG	3.3	76.0	10	400	1.0	100	1.0	276	1380
1N4729CG	3.6	69.0	10	400	1.0	100	1.0	252	1260
1N4730CG	3.9	64.0	9.0	400	1.0	50	1.0	234	1190
1N4731CG	4.3	58.0	9.0	400	1.0	10	1.0	217	1070
1N4732CG	4.7	53.0	8.0	500	1.0	10	1.0	193	970
1N4733CG	5.1	49.0	7.0	550	1.0	10	1.0	178	890
1N4734CG	5.6	45.0	5.0	600	1.0	10	2.0	162	810
1N4735CG	6.2	41.0	2.0	700	1.0	10	3.0	146	730
1N4736CG	6.8	37.0	3.5	700	1.0	10	4.0	133	660
1N4737CG	7.5	34.0	4.0	700	0.5	10	5.0	121	605
1N4738CG	8.2	31.0	4.5	700	0.5	10	6.0	110	550
1N4739CG	9.1	28.0	5.0	700	0.5	10	7.0	100	500
1N4740CG	10	25.0	7.0	700	0.25	10	7.6	91	454
1N4741CG	11	23.0	8.0	700	0.25	5.0	8.4	83	414
1N4742CG	12	21.0	9.0	700	0.25	5.0	9.1	76	380
1N4743CG	13	19.0	10	700	0.25	5.0	9.9	69	344
1N4744CG	15	17.0	14	700	0.25	5.0	11.4	61	305
1N4745CG	16	15.5	16	700	0.25	5.0	12.2	57	285
1N4746CG	18	14.0	20	750	0.25	5.0	13.7	50	250
1N4747CG	20	12.5	22	750	0.25	5.0	15.2	45	225
1N4748CG	22	11.5	23	750	0.25	5.0	16.7	41	205
1N4749CG	24	10.5	25	750	0.25	5.0	18.2	38	190
1N4750CG	27	9.5	35	750	0.25	5.0	20.6	34	170
1N4751CG	30	8.5	40	1000	0.25	5.0	22.8	30	150
1N4752CG	33	7.5	45	1000	0.25	5.0	25.1	27	135
1N4753CG	36	7.0	50	1000	0.25	5.0	27.4	25	125
1N4754CG	39	6.5	60	1000	0.25	5.0	29.7	23	115
1N4755CG	43	6.0	70	1500	0.25	5.0	32.7	22	110
1N4756CG	47	5.5	80	1500	0.25	5.0	35.8	19	95
1N4757CG	51	5.0	95	1500	0.25	5.0	38.8	18	90
1N4758CG	56	4.5	110	2000	0.25	5.0	42.6	16	80
1N4759CG	62	4.0	125	2000	0.25	5.0	47.1	14	70
1N4760CG	68	3.7	150	2000	0.25	5.0	51.7	13	65
1N4761CG	75	3.3	175	2000	0.25	5.0	56.0	12	60
1N4762CG	82	3.0	200	3000	0.25	5.0	62.2	11	55
1N4763CG	91	2.8	250	3000	0.25	5.0	69.2	10	50
1N4764CG	100	2.5	350	3000	0.25	5.0	76.0	9.0	45

Notes:

- (1) The Zener impedance is derived from the 1kHz AC voltage which results when an AC current having an RMS value equal to 10% of the Zener current (I_{ZT} or I_{ZK}) is superimposed on I_{ZT} or I_{ZK} . 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 electrodes at a distance of 10mm from case are kept at ambient temperature
- (3) Measured under thermal equilibrium and DC test conditions.
- (4) Suffix "C" for ± 2% tolerance. Add suffix "A" for ± 5% tolerance. Other Zener voltages and tolerances are available upon request.