Certificate Number: Q10561

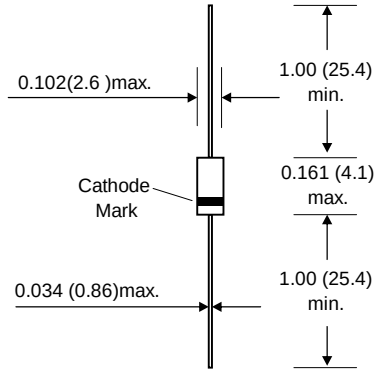
Certificate Number: E17276

1N4728G ~ 1N4764G

ZENER DIODES

V_Z : 3.3 to 100V
P_D : 1.0 Watt

DO-41 Glass
(DO-204AL)



Dimensions in inches and (millimeters)

FEATURES :

- Silicon planar power zener diodes.
- For use in stabilizing and clipping circuits with high power rating.
- Standard zener voltage tolerance is ± 10%
- Other tolerances are available upon request.
- Pb / RoHS Free

MECHANICAL DATA :

Case: DO-41 Glass Case
Weight: approx. 0.35g

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)
1N4728G	3.3	76.0	10	400	1.0	100	1.0	276	1380
1N4729G	3.6	69.0	10	400	1.0	100	1.0	252	1260
1N4730G	3.9	64.0	9.0	400	1.0	50	1.0	234	1190
1N4731G	4.3	58.0	9.0	400	1.0	10	1.0	217	1070
1N4732G	4.7	53.0	8.0	500	1.0	10	1.0	193	970
1N4733G	5.1	49.0	7.0	550	1.0	10	1.0	178	890
1N4734G	5.6	45.0	5.0	600	1.0	10	2.0	162	810
1N4735G	6.2	41.0	2.0	700	1.0	10	3.0	146	730
1N4736G	6.8	37.0	3.5	700	1.0	10	4.0	133	660
1N4737G	7.5	34.0	4.0	700	0.5	10	5.0	121	605
1N4738G	8.2	31.0	4.5	700	0.5	10	6.0	110	550
1N4739G	9.1	28.0	5.0	700	0.5	10	7.0	100	500
1N4740G	10	25.0	7.0	700	0.25	10	7.6	91	454
1N4741G	11	23.0	8.0	700	0.25	5.0	8.4	83	414
1N4742G	12	21.0	9.0	700	0.25	5.0	9.1	76	380
1N4743G	13	19.0	10	700	0.25	5.0	9.9	69	344
1N4744G	15	17.0	14	700	0.25	5.0	11.4	61	305
1N4745G	16	15.5	16	700	0.25	5.0	12.2	57	285
1N4746G	18	14.0	20	750	0.25	5.0	13.7	50	250
1N4747G	20	12.5	22	750	0.25	5.0	15.2	45	225
1N4748G	22	11.5	23	750	0.25	5.0	16.7	41	205
1N4749G	24	10.5	25	750	0.25	5.0	18.2	38	190
1N4750G	27	9.5	35	750	0.25	5.0	20.6	34	170
1N4751G	30	8.5	40	1000	0.25	5.0	22.8	30	150
1N4752G	33	7.5	45	1000	0.25	5.0	25.1	27	135
1N4753G	36	7.0	50	1000	0.25	5.0	27.4	25	125
1N4754G	39	6.5	60	1000	0.25	5.0	29.7	23	115
1N4755G	43	6.0	70	1500	0.25	5.0	32.7	22	110
1N4756G	47	5.5	80	1500	0.25	5.0	35.8	19	95
1N4757G	51	5.0	95	1500	0.25	5.0	38.8	18	90
1N4758G	56	4.5	110	2000	0.25	5.0	42.6	16	80
1N4759G	62	4.0	125	2000	0.25	5.0	47.1	14	70
1N4760G	68	3.7	150	2000	0.25	5.0	51.7	13	65
1N4761G	75	3.3	175	2000	0.25	5.0	56.0	12	60
1N4762G	82	3.0	200	3000	0.25	5.0	62.2	11	55
1N4763G	91	2.8	250	3000	0.25	5.0	69.2	10	50
1N4764G	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) Standard Zener voltage tolerance is ± 10% tolerance. Other Zener voltages and tolerances are available upon request.