



1N4728G-1N4758G

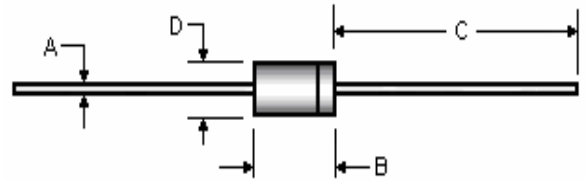
1W DO-41 Zener Voltage Regulators

DO-41



Features

- ✧ Zener Voltage Range 3.3. to 56Volts.
- ✧ DO-41 Package (JEDEC)
- ✧ Through-Hole Device Type Mounting
- ✧ Hermetically Sealed Glass
- ✧ Compression Bonded Construction
- ✧ All External Surface Are Corrosion Resistant And Terminals Are Readily Solderable
- ✧ Solder Hot Dip Tin(Sn) Lead Finish
- ✧ RoHS Compliant



Dimension	Millimeters		Inches	
	Min	Max	Min	Max
A	0.72	0.86	0.028	0.034
B	4.07	5.2	0.16	0.205
C	25.4	---	1	---
D	2.04	2.71	0.08	0.107

Mechanical Data

- ✧ Lead: Pure tin plated , lead free, solderable per MIL-STD-202, Method 208 guaranteed
- ✧ Polarity : Color band denotes cathode
- ✧ High temperature soldering guaranteed: 260oC//10 seconds
- ✧ Weight : 0.270~0.290 grams
- ✧ Marking code : 1N47XXG for ± 5% Vz
1N47XXC for ± 2% Vz



Cathode Anode

ELECTRICAL SYMBOL

Maximum Ratings and Electrical Characteristics

Rating at 25 ambient temperature unless otherwise specified.
Single phase, half wave, 60 Hz, resistive or inductive load.
For capacitive load, derate current by 20%

Type Number	Symbol	Value	Units
Power Dissipation	P_D	1	W
Thermal Resistance Junction to Lead	$R_{j\ell}$	53.5	°C / W
Thermal Resistance Junction to Ambient	R_{ja}	100	°C / W
Operating Temperature Range	T_{OPR}	-65 to +200	°C
Storage Temperature Range	T_{STG}	-65 to +200	°C

Notes: These ratings are limiting values above which the serviceability of the diode may be impaired

Electrical characteristics (TA=25°C unless otherwise note)

Device Type	V _Z @ I _{ZT} (Volts) Nominal	I _{ZT} (mA)	Z _{ZT} @ I _{ZT} (Ohm) Max.	I _{ZK} (mA)	Z _{ZK} @ I _{ZK} (Ohm) Max.	I _R @ V _R (uA) Max.	V _R (Volts)
1N4728G	3.3	76	10	1	400	100	1
1N4729G	3.6	69	10	1	400	100	1
1N4730G	3.9	64	9	1	400	50	1
1N4731G	4.3	58	9	1	400	10	1
1N4732G	4.7	53	8	1	500	10	1
1N4733G	5.1	49	7	1	550	10	1
1N4734G	5.6	45	5	1	600	10	2
1N4735G	6.2	41	2	1	700	10	3
1N4736G	6.8	37	3.5	1	700	10	4
1N4737G	7.5	34	4	0.5	700	10	5
1N4738G	8.2	31	4.5	0.5	700	10	6
1N4739G	9.1	28	5	0.5	700	10	7
1N4740G	10	25	7	0.25	700	10	7.6
1N4741G	11	23	8	0.25	700	5	8.4
1N4742G	12	21	9	0.25	700	5	9.1
1N4743G	13	19	10	0.25	700	5	9.9
1N4744G	15	17	14	0.25	700	5	11.4
1N4745G	16	15.5	16	0.25	700	5	12.2
1N4746G	18	14	20	0.25	700	5	13.7
1N4747G	20	12.5	22	0.25	750	5	15.2
1N4748G	22	11.5	23	0.25	750	5	16.7
1N4749G	24	10.5	25	0.25	750	5	18.2
1N4750G	27	9.5	35	0.25	750	5	20.6
1N4751G	30	8.5	40	0.25	1000	5	22.8
1N4752G	33	7.5	45	0.25	1000	5	25.1
1N4753G	36	7	50	0.25	1000	5	27.4
1N4754G	39	6.5	60	0.25	1000	5	29.7
1N4755G	43	6	70	0.25	1500	5	32.7
1N4756G	47	5.5	80	0.25	1500	5	35.8
1N4757G	51	5	95	0.25	1500	5	38.8
1N4758G	56	4.5	110	0.25	2000	5	42.6

V_F Forward Voltage = 1.2 V Maximum @ I_F = 200 mA for all types

Notes :

- TOLERANCE AND TYPE NUMBER DESIGNATION (VZ)**
The type numbers listed have a standard tolerance on the nominal zener voltage of ± 5%. Device tolerance of 2% is indicated by a "C" instead of an "G"
- SPECIALS AVAILABLE INCLUDE**
Nominal zener voltages between the voltages shown and tighter voltage, for detailed information on price, availability and delivery, contact you nearest TAIWAN SEMICONDUCTOR CO
- ZENER VOLTAGE (VZ) MEASUREMENT**
The zener voltage (VZ) is tested under pulse condition. The measured VZ is guaranteed to be within specification with device junction in thermal equilibrium.
- ZENER IMPEDANCE (ZZ) DERIVATION**
The zener impedance is derived from the 60 cycle AC voltage, which results when an AC current having an RMS value equal to 10% of the DC zener current (I_{ZT} or I_{ZK}) is superimposed on I_{ZT} or I_{ZK}.