Elektronische Bauelemente

1N47xxAG Series

VOLTAGE 3.3 ~ 56 V, 1 W

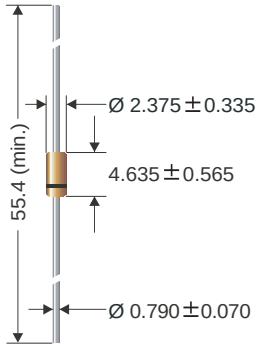
Hermetically Sealed Glass Zener Voltage Regulators

RoHS Compliant Product
A suffix of "-C" specifies halogen & lead-free

FEATURES

- Zener Voltage Range 3.3 to 56 Volts
- Through-Hole Device Type Mounting
- Hermetically Sealed Glass
- Compression Bonded Construction
- All External Surfaces Are Corrosion Resistant And Leads Are Readily Solderable
- Solder Hot Dip Tin (Sn) Lead Finish
- Cathode Indicated By Polarity Band

DO-41G
(glass)



Dimensions in mm

ABSOLUTE MAXIMUM RATINGS (Rating 25°C ambient temperature unless otherwise specified)

Parameter	SYMBOL	VALUES	UNITS
Forward Voltage @ I_F = 200 mA for all types	V_F	1.2	V
Total Device Power Dissipation	P_D	1.0	W
Thermal Resistance Junction to Lead	$R_{\theta JL}$	53.5	℃/W
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	100	℃/W
Max. Junction Operating & Storage Temperature	$T_{OPR(max.)}$,T_J	+200, -65~+200	℃

ELECTRICAL CHARACTERISTICS (Rating 25°C ambient temperature unless otherwise specified)

Type Number	Zener Voltage					Reverse Current	
	V_Z (V)	I_Z (mA)	Z_{ZT} (Ω) @ I_{ZT}	Z_{ZK} (Ω) @ I_{ZK} (mA)		I_R (uA) @ V_R (V)	
	Nominal		Max	Max		Max	
1N4728AG	3.3	76.0	10	400	1.00	100	1.0
1N4729AG	3.6	69.0	10	400	1.00	100	1.0
1N4730AG	3.9	64.0	9	400	1.00	50	1.0
1N4731AG	4.3	58.0	9	400	1.00	10	1.0
1N4732AG	4.7	53.0	8	500	1.00	10	1.0
1N4733AG	5.1	49.0	7	550	1.00	10	1.0
1N4734AG	5.6	45.0	5	600	1.00	10	2.0
1N4735AG	6.2	41.0	2	700	1.00	10	3.0
1N4736AG	6.8	37.0	3.5	700	1.00	10	4.0
1N4737AG	7.5	34.0	4	700	0.50	10	5.0
1N4738AG	8.2	31.0	4.5	700	0.50	10	6.0
1N4739AG	9.1	28.0	5	700	0.50	10	7.0
1N4740AG	10.0	25.0	7	700	0.25	10	7.6
1N4741AG	11.0	23.0	8	700	0.25	5	8.4
1N4742AG	12.0	21.0	9	700	0.25	5	9.1
1N4743AG	13.0	19.0	10	700	0.25	5	9.9
1N4744AG	15.0	17.0	14	700	0.25	5	11.4
1N4745AG	16.0	15.5	16	700	0.25	5	12.2
1N4746AG	18.0	14.0	20	700	0.25	5	13.7
1N4747AG	20.0	12.5	22	750	0.25	5	15.2
1N4748AG	22.0	11.5	23	750	0.25	5	16.7
1N4749AG	24.0	10.5	25	750	0.25	5	18.2
1N4750AG	27.0	9.5	35	750	0.25	5	20.6
1N4751AG	30.0	8.5	40	1000	0.25	5	22.8
1N4752AG	33.0	7.5	45	1000	0.25	5	25.1
1N4753AG	36.0	7.0	50	1000	0.25	5	27.4
1N4754AG	39.0	6.5	60	1000	0.25	5	29.7
1N4755AG	43.0	6.0	70	1500	0.25	5	32.7
1N4756AG	47.0	5.5	80	1500	0.25	5	35.8
1N4757AG	51.0	5.0	95	1500	0.25	5	38.8
1N4758AG	56.0	4.5	110	2000	0.25	5	42.6

Typical Characteristics Curve

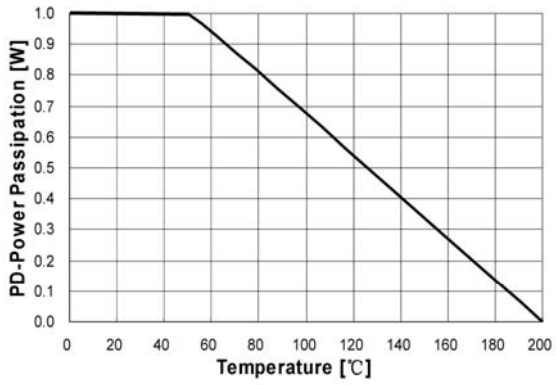


Figure 1. Power Dissipation vs Ambient Temperature
Valid provided leads at a distance of 0.8mm from case are kept at ambient temperature

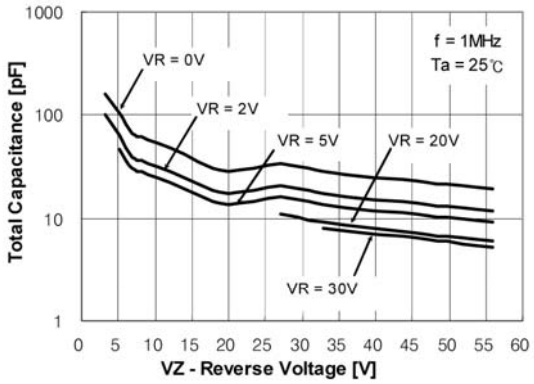


Figure 2. Total Capacitance

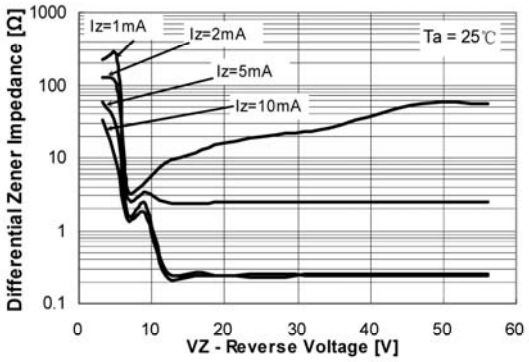


Figure 3. Differential Impedance vs. Zener Voltage

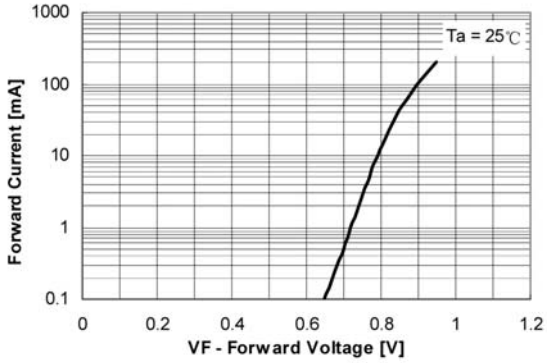


Figure 4. Forward Current vs. Forward Voltage

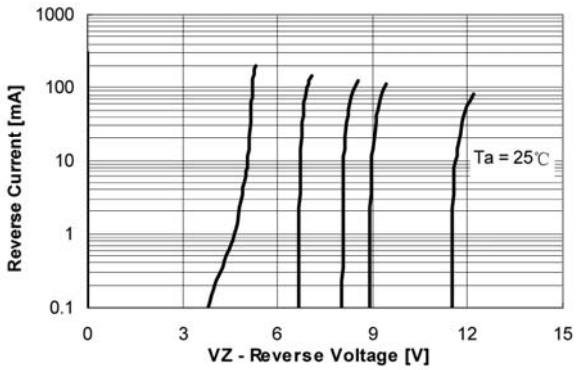


Figure 5. Reverse Current vs. Reverse Voltage

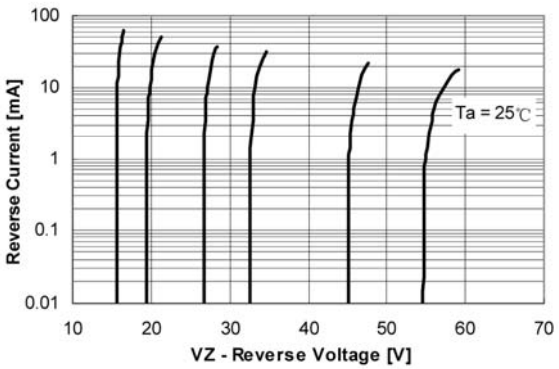


Figure 6. Reverse Current vs. Reverse Voltage

Notes:
1. Tolerance and type number designation (V_Z): The type numbers listed have a standard tolerance on the nominal zener voltage of ± 5%.
2. Specials available include: Nominal zener voltages between the voltages shown and tighter voltage, for detailed information on price, availability and delivery, contact you nearest SeCoS representative.
3. Zener voltage (V_Z) measurement: The zener voltage (V_Z) is tested under pulse condition. The measured V_Z is guaranteed to be within specification with device junction in thermal equilibrium.
4. Zener impedance (Z_Z) 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}.