



CHENMKO ENTERPRISE CO.,LTD

AXIAL LEAD

**SILICON PLANAR POWER ZENER DIODES
VOLTAGE RANGE 3.3V TO 100V**

1N4728AGP

THRU

1N4764AGP

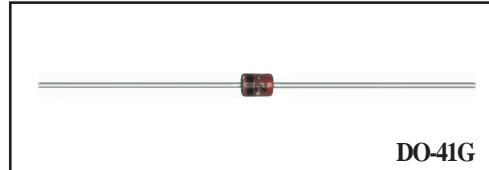
Halogens free devices

FEATURE

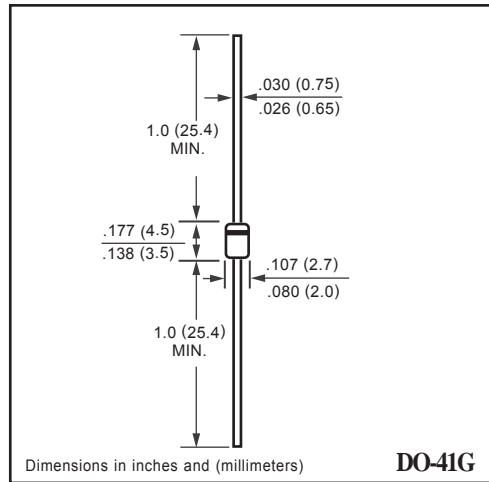
- * High temperature soldering type.
- * ESD rating of class 3(>16 kV) per human body model.
- * Silicon planar zener diodes.
- * Silicon-oxide passivated junction.
- * Low temperature coefficient voltage

MECHANICAL

- * Axial-lead hermetically sealed package.
- * DO-41G Packaging.
- * Cathode indicated by polarity band.
- * Mounting position: Any.



DO-41G



DO-41G

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

MAXIMUM RATINGS (At TA = 25°C unless otherwise noted)

RATINGS	SYMBOL	VALUE	UNITS
Zener Current (see Table "Characteristics")	-	-	-
Max. Steady State Power Dissipation @TL=75°C,Lead Length=3/8"	P _D	1.0	W
Max. Operating Temperature Range	T _J	+150	°C
Storage Temperature Range	T _{STG}	-65 to +200	°C

ELECTRICAL CHARACTERISTICS (At TA = 25°C unless otherwise noted)

CHARACTERISTICS	SYMBOL	MIN.	TYP.	MAX.	UNITS
Thermal Resistance Junction to Ambient	R θJA	-	-	170	°C/W
Max. Instantaneous Forward Voltage at IF= 100mA	VF	-	-	1.20	Volts

- NOTES :
1. The JEDEC type numbers listed have a standard tolerance on the normal zener voltage of ±10%, Suffix A=±5%.
 2. The zener impedance is derived from 1KHz AC voltage, which results when an AC current having an RMS value equal to 10% of DC 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 to eliminate unstable units.
 3. Valid provided that electrodes at distance of 10mm from case are kept ambient temperature.
 4. Measured under thermal equilibrium and DC test conditions.
 5. The rating listed in the electrical characteristics table is maximum peak, non-repetitive, reverse surge current of 1/2 square wave or equivalent sine wave pulse of 1/120 second duration superimposed on the test current, I_{ZT}, per JEDEC registration.

2008-01

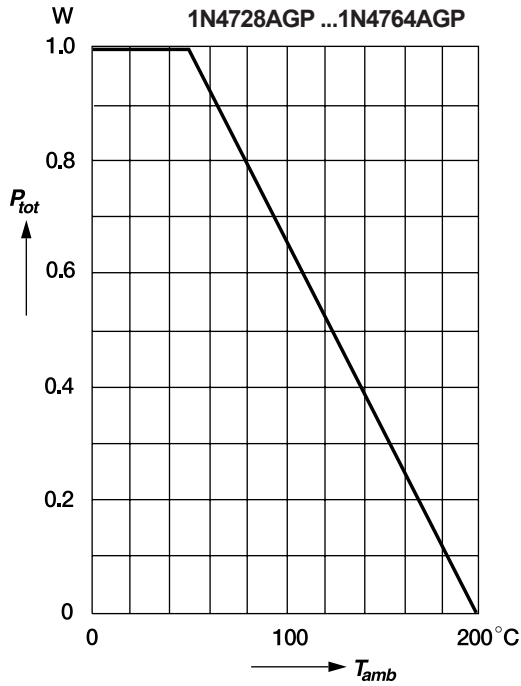
ELECTRICAL CHARACTERISTICS (1N4728AGP THRU 1N4764AGP)

TYPE	Nominal Zener voltage at I_{ZT} V_Z (V)	Test current I_{ZT} (mA)	Maximum Zener impedance			Maximum reverse leakage current		Surge current at $T_A = 25^\circ\text{C}$ I_R (mA)	Maximum regulator current at $T_A = 50^\circ\text{C}$ I_{ZM} (mA)
			Z_{ZT} at I_{ZT} (Ω)	Z_{ZK} (Ω)	at I_{ZK} (mA)	I_R (μA)	at V_R (V)		
1N4728AGP	3.3	76	10	400	1.0	100	1	1380	276
1N4729AGP	3.6	69	10	400	1.0	100	1	1260	252
1N4730AGP	3.9	64	9	400	1.0	50	1	1190	234
1N4731AGP	4.3	58	9	400	1.0	10	1	1070	217
1N4732AGP	4.7	53	8	500	1.0	10	1	970	193
1N4733AGP	5.1	49	7	550	1.0	10	1	890	178
1N4734AGP	5.6	45	5	600	1.0	10	2	810	162
1N4735AGP	6.2	41	2	700	1.0	10	3	730	146
1N4736AGP	6.8	37	3.5	700	1.0	10	4	660	133
1N4737AGP	7.5	34	4.0	700	0.5	10	5	605	121
1N4738AGP	8.2	31	4.5	700	0.5	10	6	550	110
1N4739AGP	9.1	28	5.0	700	0.5	10	7	500	100
1N4740AGP	10	25	7	700	0.25	10	7.6	454	91
1N4741AGP	11	23	8	700	0.25	5	8.4	414	83
1N4742AGP	12	21	9	700	0.25	5	9.1	380	76
1N4743AGP	13	19	10	700	0.25	5	9.9	344	69
1N4744AGP	15	17	14	700	0.25	5	11.4	304	61
1N4745AGP	16	15.5	16	700	0.25	5	12.2	285	57
1N4746AGP	18	14	20	750	0.25	5	13.7	250	50
1N4747AGP	20	12.5	22	750	0.25	5	15.2	225	45
1N4748AGP	22	11.5	23	750	0.25	5	16.7	205	41
1N4749AGP	24	10.5	25	750	0.25	5	18.2	190	38
1N4750AGP	27	9.5	35	750	0.25	5	20.6	170	34
1N4751AGP	30	8.5	40	1000	0.25	5	22.8	150	30
1N4752AGP	33	7.5	45	1000	0.25	5	25.1	135	27
1N4753AGP	36	7.0	50	1000	0.25	5	27.4	125	25
1N4754AGP	39	6.5	60	1000	0.25	5	29.7	115	23
1N4755AGP	43	6.0	70	1500	0.25	5	32.7	110	22
1N4756AGP	47	5.5	80	1500	0.25	5	35.8	95	19
1N4757AGP	51	5.0	95	1500	0.25	5	38.8	90	18
1N4758AGP	56	4.5	110	2000	0.25	5	42.6	80	16
1N4759AGP	62	4.0	125	2000	0.25	5	47.1	70	14
1N4760AGP	68	3.7	150	2000	0.25	5	51.7	65	13
1N4761AGP	75	3.3	175	2000	0.25	5	56.0	60	12
1N4762AGP	82	3.0	200	3000	0.25	5	62.2	55	11
1N4763AGP	91	2.8	250	3000	0.25	5	69.2	50	10
1N4764AGP	100	2.5	350	3000	0.25	5	76.0	45	9

RATING CHARACTERISTIC CURVE (1N4728AGP THRU 1N4764AGP)

Admissible power dissipation versus ambient temperature

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



Pulse thermal resistance versus pulse duration

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

