



CHENMKO ENTERPRISE CO.,LTD

SURFACE MOUNT ZENER

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

CHAZ4728SGP

THRU

CHAZ4764SGP

Halogens free devices

FEATURE

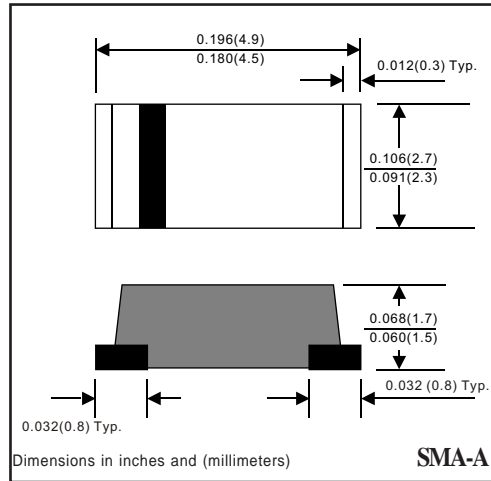
- * High temperature soldering type.
- * ESD rating of class 3(>16 kV) per human body model.
- * Silicon planar zener diodes.
- * For surface mounted applications.
- * Low Zener impedance.
- * Low regulation factor

MECHANICAL

- * SMA Packaging.
- * Cathode indicated by polarity band.
- * Mounting position: Any.



SMA-A



CIRCUIT



MAXIMUM RATINGS (At $T_A = 25^\circ\text{C}$ unless otherwise noted)

RATINGS	SYMBOL	VALUE	UNITS
Zener Current (see Table "Characteristics")	-	-	-
Max. Steady State Power Dissipation @ $T_A=25^\circ\text{C}$	P_D	1000	mW
Max. Operating Temperature Range	T_J	+150	$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-65 to +150	$^\circ\text{C}$

ELECTRICAL CHARACTERISTICS (At $T_A = 25^\circ\text{C}$ unless otherwise noted)

CHARACTERISTICS	SYMBOL	MIN.	TYP.	MAX.	UNITS
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	-	-	390	$^\circ\text{C/W}$
Max. Instantaneous Forward Voltage at $I_F = 10\text{mA}$	V_F	-	-	1.0	Volts

- NOTES :
1. The JEDEC type numbers listed have a standard tolerance on the normal zener voltage of $\pm 10\%$, Suffix B= $\pm 5\%$, Suffix S= $\pm 2\%$.
 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.

2004-9

ELECTRICAL CHARACTERISTICS (CHAZ4728SGP THRU CHAZ4764SGP)

TYPE	Zener voltage V _Z (V) @ I _{ZT}			Test current	Maximum Zener impedance			Maximum reverse leakage current		Maximum surge current
	Min	Nom	Max		Z _{ZT} at I _{ZT} (Ω)	Z _{ZK} (Ω)	at I _{ZK} (mA)	I _R (μA)	at V _R (V)	
	Volts	Volts	Volts	I _{ZT} (mA)						I _{RM} (mApk)
CHAZ4728SGP	3.234	3.3	3.366	76	10	400	1.0	100	1	1380
CHAZ4729SGP	3.528	3.6	3.762	69	10	400	1.0	100	1	1260
CHAZ4730SGP	3.822	3.9	3.987	64	9	400	1.0	50	1	1190
CHAZ4731SGP	4.214	4.3	4.386	58	9	400	1.0	10	1	1070
CHAZ4732SGP	4.606	4.7	4.794	53	8	500	1.0	10	1	970
CHAZ4733SGP	4.998	5.1	5.202	49	7	550	1.0	10	1	890
CHAZ4734SGP	5.488	5.6	5.712	45	5	600	1.0	10	2	810
CHAZ4735SGP	6.070	6.2	6.324	41	2	700	1.0	10	3	730
CHAZ4736SGP	6.664	6.8	6.936	37	3.5	700	1.0	10	4	660
CHAZ4737SGP	7.350	7.5	7.650	34	4	700	0.5	10	5	605
CHAZ4738SGP	8.036	8.2	8.364	31	4.5	700	0.5	10	6	550
CHAZ4739SGP	8.918	9.1	9.282	28	5	700	0.5	10	7	500
CHAZ4740SGP	9.800	10	10.20	25	7	700	0.25	10	7.6	454
CHAZ4741SGP	10.78	11	11.22	23	8	700	0.25	5	8.4	414
CHAZ4742SGP	11.76	12	12.24	21	9	700	0.25	5	9.1	380
CHAZ4743SGP	12.74	13	13.26	19	10	700	0.25	5	9.9	344
CHAZ4744SGP	14.70	15	15.30	17	14	700	0.25	5	11.4	305
CHAZ4745SGP	15.68	16	16.32	15.5	16	700	0.25	5	12.2	285
CHAZ4746SGP	17.64	18	18.36	14	20	750	0.25	5	13.7	250
CHAZ4747SGP	19.60	20	20.40	12.5	22	750	0.25	5	15.2	225
CHAZ4748SGP	21.56	22	22.44	11.5	23	750	0.25	5	16.7	205
CHAZ4749SGP	23.52	24	24.48	10.5	25	750	0.25	5	18.2	190
CHAZ4750SGP	26.46	27	27.54	9.5	35	750	0.25	5	20.6	170
CHAZ4751SGP	29.40	30	30.60	8.5	40	1000	0.25	5	22.8	150
CHAZ4752SGP	32.34	33	33.66	7.5	45	1000	0.25	5	25.1	135
CHAZ4753SGP	35.28	36	36.72	7.0	50	1000	0.25	5	27.4	125
CHAZ4754SGP	38.22	39	39.78	6.5	60	1000	0.25	5	29.7	115
CHAZ4755SGP	42.14	43	43.86	6.0	70	1500	0.25	5	32.7	110
CHAZ4756SGP	46.06	47	47.94	5.5	80	1500	0.25	5	35.8	95
CHAZ4757SGP	49.98	51	52.02	5.0	95	1500	0.25	5	38.8	90
CHAZ4758SGP	54.88	56	57.12	4.5	110	2000	0.25	5	42.6	80
CHAZ4759SGP	60.76	62	63.24	4.0	125	2000	0.25	5	47.1	70
CHAZ4760SGP	66.64	68	69.36	3.7	150	2000	0.25	5	51.7	65
CHAZ4761SGP	73.50	75	76.50	3.3	175	2000	0.25	5	56	60
CHAZ4762SGP	80.36	82	83.64	3.0	200	3000	0.25	5	62.2	55
CHAZ4763SGP	89.18	91	92.82	2.8	250	3000	0.25	5	69.2	50
CHAZ4764SGP	98.00	100	102.00	2.5	350	3000	0.25	5	76	45

RATING CHARACTERISTIC CURVES (CHAZ4728SGP THRU CHAZ4764SGP)

FIG. 1 - TYPICAL TEMPERATURE COEFFICIENTS)

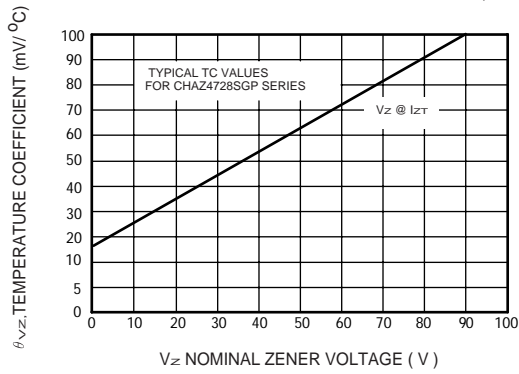


FIG. 2 - TYPICAL LEAKAGE CURRENT

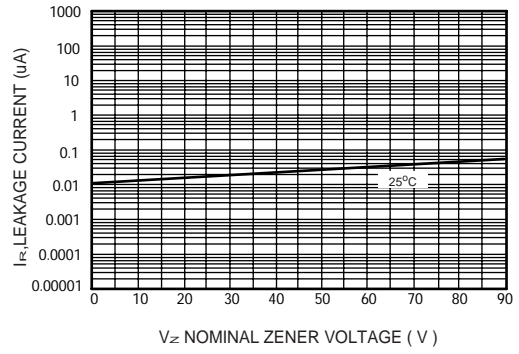


FIG. 3 - ZENER VOLTAGE VERSUS ZENER CURRENT

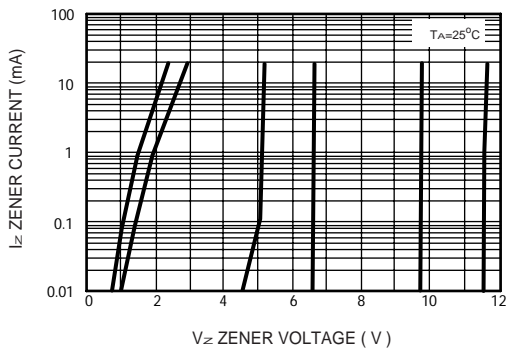


FIG. 4 - ZENER VOLTAGE VERSUS ZENER CURRENT

