



CHENMKO ENTERPRISE CO.,LTD

SURFACE MOUNT ZENER

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

CHAZ4728BGP

THRU

CHAZ4764BGP

Halogens free devices

FEATURE

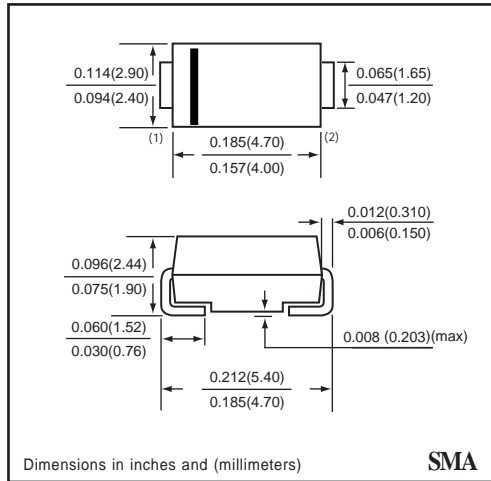
- * High temperature soldering type.
- * ESD rating of class 3(>16 kV) per human body model.
- * Silicon planar zener diodes.
- * For surface mounted applications.
- * Low Zener impedance.
- * Low regulation factor

MECHANICAL

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



SMA



SMA

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= $+2\%$.
 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 (CHAZ4728BGP THRU CHAZ4764BGP)

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)
CHAZ4728BGP	3.135	3.3	3.465	76	10	400	1.0	100	1	1380
CHAZ4729BGP	3.420	3.6	3.780	69	10	400	1.0	100	1	1260
CHAZ4730BGP	3.705	3.9	4.095	64	9	400	1.0	50	1	1190
CHAZ4731BGP	4.085	4.3	4.515	58	9	400	1.0	10	1	1070
CHAZ4732BGP	4.465	4.7	4.935	53	8	500	1.0	10	1	970
CHAZ4733BGP	4.845	5.1	5.355	49	7	550	1.0	10	1	890
CHAZ4734BGP	5.320	5.6	5.880	45	5	600	1.0	10	2	810
CHAZ4735BGP	5.890	6.2	6.510	41	2	700	1.0	10	3	730
CHAZ4736BGP	6.460	6.8	7.140	37	3.5	700	1.0	10	4	660
CHAZ4737BGP	7.125	7.5	7.875	34	4	700	0.5	10	5	605
CHAZ4738BGP	7.790	8.2	8.610	31	4.5	700	0.5	10	6	550
CHAZ4739BGP	8.645	9.1	9.555	28	5	700	0.5	10	7	500
CHAZ4740BGP	9.500	10	10.50	25	7	700	0.25	10	7.6	454
CHAZ4741BGP	10.45	11	11.55	23	8	700	0.25	5	8.4	414
CHAZ4742BGP	11.40	12	12.60	21	9	700	0.25	5	9.1	380
CHAZ4743BGP	12.35	13	13.65	19	10	700	0.25	5	9.9	344
CHAZ4744BGP	14.25	15	15.75	17	14	700	0.25	5	11.4	305
CHAZ4745BGP	15.20	16	16.80	15.5	16	700	0.25	5	12.2	285
CHAZ4746BGP	17.10	18	18.90	14	20	750	0.25	5	13.7	250
CHAZ4747BGP	19.00	20	21.00	12.5	22	750	0.25	5	15.2	225
CHAZ4748BGP	20.90	22	23.10	11.5	23	750	0.25	5	16.7	205
CHAZ4749BGP	22.80	24	25.20	10.5	25	750	0.25	5	18.2	190
CHAZ4750BGP	25.65	27	28.35	9.5	35	750	0.25	5	20.6	170
CHAZ4751BGP	28.50	30	31.50	8.5	40	1000	0.25	5	22.8	150
CHAZ4752BGP	31.35	33	34.65	7.5	45	1000	0.25	5	25.1	135
CHAZ4753BGP	34.20	36	37.80	7.0	50	1000	0.25	5	27.4	125
CHAZ4754BGP	37.05	39	40.95	6.5	60	1000	0.25	5	29.7	115
CHAZ4755BGP	40.85	43	45.15	6.0	70	1500	0.25	5	32.7	110
CHAZ4756BGP	44.65	47	49.35	5.5	80	1500	0.25	5	35.8	95
CHAZ4757BGP	48.45	51	53.35	5.0	95	1500	0.25	5	38.8	90
CHAZ4758BGP	53.20	56	58.80	4.5	110	2000	0.25	5	42.6	80
CHAZ4759BGP	58.90	62	65.10	4.0	125	2000	0.25	5	47.1	70
CHAZ4760BGP	64.60	68	71.40	3.7	150	2000	0.25	5	51.7	65
CHAZ4761BGP	71.25	75	78.75	3.3	175	2000	0.25	5	56	60
CHAZ4762BGP	77.90	82	86.10	3.0	200	3000	0.25	5	62.2	55
CHAZ4763BGP	86.45	91	95.55	2.8	250	3000	0.25	5	69.2	50
CHAZ4764BGP	95.00	100	105.00	2.5	350	3000	0.25	5	76	45

RATING CHARACTERISTIC CURVES (CHAZ4728BGP THRU CHAZ4764BGP)

FIG. 1 - TYPICAL TEMPERATURE COEFFICIENTS)

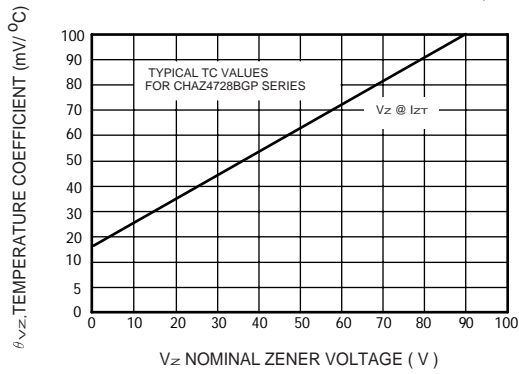


FIG. 2 - TYPICAL LEAKAGE CURRENT

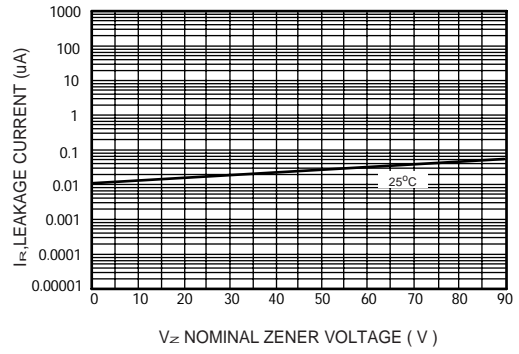


FIG. 3 - ZENER VOLTAGE VERSUS ZENER CURRENT

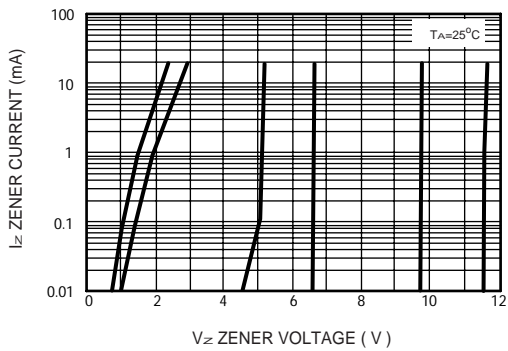


FIG. 4 - ZENER VOLTAGE VERSUS ZENER CURRENT

