

SMD THERMISTOR

- GSN SERIES -

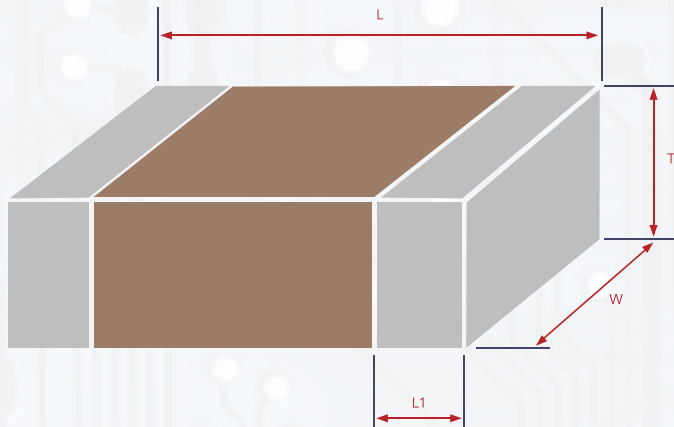
FEATURES

- RoHS / Halogen-Free (HF) compliant
- Highly Reliable Structure
- Operating Temperature Range -40°C ~ +125°C
- Agency Recognition: UL / TUV

APPLICATIONS

- IT Equipment
- Mobile Devices
- Battery Packs
- Office Automation Equipment

DIMENSIONS



TYPE (mm)	L (mm)	W (mm)	T (mm)	L1 (mm)
GSN02 (0201)	0.60 ± 0.05	0.30 ± 0.05	0.30 ± 0.05	0.15 ± 0.05
GSN04 (0402)	1.00 ± 0.15	0.50 ± 0.15	0.50 ± 0.15	0.25 ± 0.15
GSN10 (0603)	1.60 ± 0.15	0.80 ± 0.15	0.80 ± 0.15	0.30 ± 0.20
GSN21 (0805)	2.00 ± 0.20	1.25 ± 0.20	0.85 ± 0.20	0.50 ± 0.30

PART NUMBER

GSN	0603	103	F	344	F	B
PRODUCT TYPE GSN	SIZE 02 - 0201 04 - 0402 10 - 0603 21 - 0805	ZERO POWER RESISTANCE @25°C 502 = 5KΩ 103 = 10KΩ 104 = 100KΩ	TOLERANCE OF R25 D: ± 0.5% E: ± 0.7% F: ± 1% G: ± 2% H: ± 3% J: ± 5% K: ± 10%	B VALUE 344 = 3435K 405 = 4050K	TOLERANCE OF B VALUE D: ± 0.5% E: ± 0.7% F: ± 1% G: ± 2% H: ± 3% J: ± 5%	DEFINITION OF B VALUE A: 25/50 B: 25/85 C: 25/100

SAFETY CERTIFICATION

STANDARD NO.	UL / CUL	TUV
	UL1434	EN 60539-1: 2016 EN 60539-2: 2004 +A1
FILE NO.	E171531	R 50267437


ELECTRICAL CHARACTERISTICS

PART NUMBER	ZERO POWER RESISTANCE AT 25 ° C	TOL. OF R25	B 25/50 VALUE	TOL OF B VALUE	DISSIPATION FACTOR	THERMAL TIME CONSTANT	MAX POWER RATING AT 25°C
	R 25 (Ω)	±(%)	(k)	(± %)	_(mW / °C)	T (sec.)	(mW)
GSN02103(X)338(Y)A	10,000	10,5,3,2,1	3380	5,3,2,1	Approx. 1.0	Approx. 3.0	100
GSN02473(X)405(Y)A	47,000	10,5,3,2,1	4050	5,3,2,1	Approx. 1.0	Approx. 3.0	100
GSN02104(X)425(Y)A	100,000	10,5,3,2,1	4250	5,3,2,1	Approx. 1.0	Approx. 3.0	100
GSN02474(X)395(Y)A	470,000	10,5,3,2,1	3950	5,3,2,1	Approx. 1.0	Approx. 3.0	100
GSN04103(X)337(Y)A	10,000	10,5,3,2,1	3370	5,3,2,1	Approx. 1.7	Approx. 3.0	170
GSN04103(X)338(Y)A	10,000	10,5,3,2,1	3380	5,3,2,1	Approx. 1.7	Approx. 3.0	170
GSN04103(X)390(Y)A	10,000	10,5,3,2,1	3900	5,3,2,1	Approx. 1.7	Approx. 3.0	170
GSN04153(X)390(Y)A	15,000	10,5,3,2,1	3900	5,3,2,1	Approx. 1.7	Approx. 3.0	170
GSN04333(X)390(Y)A	33,000	10,5,3,2,1	3900	5,3,2,1	Approx. 1.7	Approx. 3.0	170
GSN04473(X)395(Y)A	47,000	10,5,3,2,1	3950	5,3,2,1	Approx. 1.7	Approx. 3.0	170
GSN04473(X)405(Y)A	47,000	10,5,3,2,1	4050	5,3,2,1	Approx. 1.7	Approx. 3.0	170
GSN04104(X)395(Y)A	100,000	10,5,3,2,1	3950	5,3,2,1	Approx. 1.7	Approx. 3.0	170
GSN04104(X)405(Y)A	100,000	10,5,3,2,1	4050	5,3,2,1	Approx. 1.7	Approx. 3.0	170
GSN04104(X)410(Y)A	100,000	10,5,3,2,1	4100	5,3,2,1	Approx. 1.7	Approx. 3.0	170
GSN04104(X)423(Y)A	100,000	10,5,3,2,1	4230	5,3,2,1	Approx. 1.7	Approx. 3.0	170
GSN04104(X)425(Y)A	100,000	10,5,3,2,1	4250	5,3,2,1	Approx. 1.7	Approx. 3.0	170
GSN04204(X)395(Y)A	200,000	10,5,3,2,1	3950	5,3,2,1	Approx. 1.7	Approx. 3.0	170
GSN10103(X)337(Y)A	10,000	10,5,3,2,1	3370	5,3,2,1	Approx. 2.1	Approx. 3.1	210
GSN10103(X)338(Y)A	10,000	10,5,3,2,1	3380	5,3,2,1	Approx. 2.1	Approx. 3.1	210
GSN10103(X)395(Y)A	10,000	10,5,3,2,1	3950	5,3,2,1	Approx. 2.1	Approx. 3.1	210
GSN10153(X)395(Y)A	15,000	10,5,3,2,1	3950	5,3,2,1	Approx. 2.1	Approx. 3.1	210
GSN10154(X)450(Y)A	150,000	10,5,3,2,1	4500	5,3,2,1	Approx. 2.1	Approx. 3.1	210
GSN10333(X)405(Y)A	33,000	10,5,3,2,1	4050	5,3,2,1	Approx. 2.1	Approx. 3.1	210
GSN10473(X)390(Y)A	47,000	10,5,3,2,1	3900	5,3,2,1	Approx. 2.1	Approx. 3.1	210
GSN10473(X)395(Y)A	47,000	10,5,3,2,1	3950	5,3,2,1	Approx. 2.1	Approx. 3.1	210
GSN10473(X)405(Y)A	47,000	10,5,3,2,1	4050	5,3,2,1	Approx. 2.1	Approx. 3.1	210
GSN10474(X)450(Y)A	470,000	10,5,3,2,1	4500	5,3,2,1	Approx. 2.1	Approx. 3.1	210
GSN10503(X)390(Y)A	50,000	10,5,3,2,1	3900	5,3,2,1	Approx. 2.1	Approx. 3.1	210
GSN10503(X)395(Y)A	50,000	10,5,3,2,1	3950	5,3,2,1	Approx. 2.1	Approx. 3.1	210
GSN10503(X)405(Y)A	50,000	10,5,3,2,1	4050	5,3,2,1	Approx. 2.1	Approx. 3.1	210
GSN10683(X)390(Y)A	68,000	10,5,3,2,1	3900	5,3,2,1	Approx. 2.1	Approx. 3.1	210
GSN10683(X)395(Y)A	68,000	10,5,3,2,1	3950	5,3,2,1	Approx. 2.1	Approx. 3.1	210
GSN10683(X)405(Y)A	68,000	10,5,3,2,1	4050	5,3,2,1	Approx. 2.1	Approx. 3.1	210
GSN10684(X)450(Y)A	680,000	10,5,3,2,1	4500	5,3,2,1	Approx. 2.1	Approx. 3.1	210
GSN10104(X)395(Y)A	100,000	10,5,3,2,1	3950	5,3,2,1	Approx. 2.1	Approx. 3.1	210
GSN10104(X)405(Y)A	100,000	10,5,3,2,1	4050	5,3,2,1	Approx. 2.1	Approx. 3.1	210
GSN10104(X)410(Y)A	100,000	10,5,3,2,1	4100	5,3,2,1	Approx. 2.1	Approx. 3.1	210
GSN10104(X)420(Y)A	100,000	10,5,3,2,1	4200	5,3,2,1	Approx. 2.1	Approx. 3.1	210
GSN10104(X)425(Y)A	100,000	10,5,3,2,1	4250	5,3,2,1	Approx. 2.1	Approx. 3.1	210
GSN10104(X)436(Y)A	100,000	10,5,3,2,1	4360	5,3,2,1	Approx. 2.1	Approx. 3.1	210
GSN10104(X)440(Y)A	100,000	10,5,3,2,1	4400	5,3,2,1	Approx. 2.1	Approx. 3.1	210
GSN10154(X)395(Y)A	150,000	10,5,3,2,1	3950	5,3,2,1	Approx. 2.4	Approx. 7.5	240
GSN10204(X)395(Y)A	200,000	10,5,3,2,1	3950	5,3,2,1	Approx. 2.4	Approx. 7.5	240
GSN21103(X)338(Y)A	10,000	10,5,3,2,1	3380	5,3,2,1	Approx. 2.4	Approx. 7.5	240
GSN21103(X)361(Y)A	10,000	10,5,3,2,1	3610	5,3,2,1	Approx. 2.4	Approx. 7.5	240
GSN21103(X)390(Y)A	10,000	10,5,3,2,1	3900	5,3,2,1	Approx. 2.4	Approx. 7.5	240
GSN21103(X)395(Y)A	10,000	10,5,3,2,1	3950	5,3,2,1	Approx. 2.4	Approx. 7.5	240
GSN21473(X)390(Y)A	47,000	10,5,3,2,1	3900	5,3,2,1	Approx. 2.4	Approx. 7.5	240
GSN21473(X)395(Y)A	47,000	10,5,3,2,1	3950	5,3,2,1	Approx. 2.4	Approx. 7.5	240
GSN21503(X)395(Y)A	50,000	10,5,3,2,1	3950	5,3,2,1	Approx. 2.4	Approx. 7.5	240
GSN21683(X)395(Y)A	68,000	10,5,3,2,1	3950	5,3,2,1	Approx. 2.4	Approx. 7.5	240
GSN21683(X)405(Y)A	68,000	10,5,3,2,1	4050	5,3,2,1	Approx. 2.4	Approx. 7.5	240

(X): R TOLERANCE | (Y) B VALUE TOLERANCE


Cal-Chip
 Electronics Inc.



ELECTRICAL CHARACTERISTICS

PART NUMBER	ZERO POWER RESISTANCE AT 25 ° C	TOL. OF R25	B 25/50 VALUE	TOL OF B VALUE	DISSIPATION FACTOR	THERMAL TIME CONSTANT	MAX POWER RATING AT 25°C
	R 25 (Ω)	±(%)	(k)	(± %)	– (mW / °C)	T (sec.)	(mW)
GSN21104(X)395(Y)A	100,000	10,5,3,2,1	3950	5,3,2,1	Approx. 2.4	Approx. 7.5	240
GSN21104(X)420(Y)A	100,000	10,5,3,2,1	4200	5,3,2,1	Approx. 2.4	Approx. 7.5	240
GSN21104(X)425(Y)A	100,000	10,5,3,2,1	4250	5,3,2,1	Approx. 2.4	Approx. 7.5	240
GSN21204(X)395(Y)A	200,000	10,5,3,2,1	3950	5,3,2,1	Approx. 2.4	Approx. 7.5	240

PART NUMBER	ZERO POWER RESISTANCE AT 25 ° C	TOL. OF R25	B 25/85 VALUE	TOL OF B VALUE	DISSIPATION FACTOR	THERMAL TIME CONSTANT	MAX POWER RATING AT 25°C
	R 25 (Ω)	±(%)	(k)	(± %)	– (mW / °C)	T (sec.)	(mW)
GSN02103(X)344(Y)B	10,000	10,5,3,2,1	3435	5,3,2,1	Approx. 1.0	Approx. 3.0	100
GSN02474(X)405(Y)B	470,000	10,5,3,2,1	4050	5,3,2,1	Approx. 1.0	Approx. 3.0	100
GSN04103(X)344(Y)B	10,000	10,5,3,2,1	3435	5,3,2,1	Approx. 1.7	Approx. 3.0	170
GSN04103(X)395(Y)B	10,000	10,5,3,2,1	3950	5,3,2,1	Approx. 1.7	Approx. 3.0	170
GSN04153(X)395(Y)B	15,000	10,5,3,2,1	3950	5,3,2,1	Approx. 1.7	Approx. 3.0	170
GSN04333(X)410(Y)B	33,000	10,5,3,2,1	4100	5,3,2,1	Approx. 1.7	Approx. 3.0	170
GSN04473(X)405(Y)B	47,000	10,5,3,2,1	3950	5,3,2,1	Approx. 1.7	Approx. 3.0	170
GSN04473(X)410(Y)B	47,000	10,5,3,2,1	4050	5,3,2,1	Approx. 1.7	Approx. 3.0	170
GSN04104(X)398(Y)B	100,000	10,5,3,2,1	3980	5,3,2,1	Approx. 1.7	Approx. 3.0	170
GSN04104(X)405(Y)B	100,000	10,5,3,2,1	4050	5,3,2,1	Approx. 1.7	Approx. 3.0	170
GSN04104(X)410(Y)B	100,000	10,5,3,2,1	4050	5,3,2,1	Approx. 1.7	Approx. 3.0	170
GSN04104(X)419(Y)B	100,000	10,5,3,2,1	4190	5,3,2,1	Approx. 1.7	Approx. 3.0	170
GSN04104(X)420(Y)B	100,000	10,5,3,2,1	4200	5,3,2,1	Approx. 1.7	Approx. 3.0	170
GSN04104(X)431(Y)B	100,000	10,5,3,2,1	4310	5,3,2,1	Approx. 1.7	Approx. 3.0	170
GSN04204(X)405(Y)B	200,000	10,5,3,2,1	4050	5,3,2,1	Approx. 1.7	Approx. 3.0	170
GSN10103(X)344(Y)B	10,000	10,5,3,2,1	3435	5,3,2,1	Approx. 1.7	Approx. 3.0	210
GSN10103(X)361(Y)B	10,000	10,5,3,2,1	3610	5,3,2,1	Approx. 1.7	Approx. 3.0	210
GSN10103(X)397(Y)B	10,000	10,5,3,2,1	3970	5,3,2,1	Approx. 2.1	Approx. 3.1	210
GSN10103(X)398(Y)B	10,000	10,5,3,2,1	3980	5,3,2,1	Approx. 2.1	Approx. 3.1	210
GSN10153(X)397(Y)B	15,000	10,5,3,2,1	3970	5,3,2,1	Approx. 2.1	Approx. 3.1	210
GSN10333(X)410(Y)B	33,000	10,5,3,2,1	4100	5,3,2,1	Approx. 2.1	Approx. 3.1	210
GSN10473(X)395(Y)B	47,000	10,5,3,2,1	3950	5,3,2,1	Approx. 2.1	Approx. 3.1	210
GSN10473(X)398(Y)B	47,000	10,5,3,2,1	3980	5,3,2,1	Approx. 2.1	Approx. 3.1	210
GSN10473(X)405(Y)B	47,000	10,5,3,2,1	4050	5,3,2,1	Approx. 2.1	Approx. 3.1	210
GSN10503(X)395(Y)B	50,000	10,5,3,2,1	3950	5,3,2,1	Approx. 2.1	Approx. 3.1	210
GSN10682(X)344(Y)B	6,800	10,5,3,2,1	3435	5,3,2,1	Approx. 2.1	Approx. 3.1	210
GSN10683(X)405(Y)B	68,000	10,5,3,2,1	4050	5,3,2,1	Approx. 2.1	Approx. 3.1	210
GSN10683(X)410(Y)B	68,000	10,5,3,2,1	4100	5,3,2,1	Approx. 2.1	Approx. 3.1	210
GSN10104(X)395(Y)B	100,000	10,5,3,2,1	3950	5,3,2,1	Approx. 2.1	Approx. 3.1	210
GSN10104(X)398(Y)B	100,000	10,5,3,2,1	3980	5,3,2,1	Approx. 2.1	Approx. 3.1	210
GSN10104(X)400(Y)B	100,000	10,5,3,2,1	4000	5,3,2,1	Approx. 2.1	Approx. 3.1	210
GSN10104(X)405(Y)B	100,000	10,5,3,2,1	4050	5,3,2,1	Approx. 2.1	Approx. 3.1	210
GSN10104(X)410(Y)B	100,000	10,5,3,2,1	4100	5,3,2,1	Approx. 2.1	Approx. 3.1	210
GSN10104(X)415(Y)B	100,000	10,5,3,2,1	4150	5,3,2,1	Approx. 2.1	Approx. 3.1	210
GSN10104(X)419(Y)B	100,000	10,5,3,2,1	4190	5,3,2,1	Approx. 2.1	Approx. 3.1	210
GSN10104(X)420(Y)B	100,000	10,5,3,2,1	4200	5,3,2,1	Approx. 2.1	Approx. 3.1	210
GSN10104(X)430(Y)B	100,000	10,5,3,2,1	4300	5,3,2,1	Approx. 2.1	Approx. 3.1	210
GSN10104(X)436(Y)B	100,000	10,5,3,2,1	4360	5,3,2,1	Approx. 2.1	Approx. 3.1	210
GSN10104(X)440(Y)B	100,000	10,5,3,2,1	4400	5,3,2,1	Approx. 2.1	Approx. 3.1	210
GSN10104(X)449(Y)B	100,000	10,5,3,2,1	4485	5,3,2,1	Approx. 2.1	Approx. 3.1	210
GSN10154(X)398(Y)B	150,000	10,5,3,2,1	3980	5,3,2,1	Approx. 2.1	Approx. 3.1	210
GSN10154(X)406(Y)B	150,000	10,5,3,2,1	4060	5,3,2,1	Approx. 2.4	Approx. 7.5	210

