



CN 系列有 0402 (1005)、0603 (1608)、0805 (2012) 三种主要尺寸规格。R25 电阻值误差级别有 1%、3%、5% 及 10%，B 值范围从 2500 (低阻规格) 到 5000 (高阻规格) 且所有规格 B 值的误差级有 1%、2%、3%。CNR 系列片式 NTC 芯片除引出端的四面全部采用厚 10 μ m 的玻璃包封，因此该系列产品不仅具有良好的可焊、耐焊及耐潮湿性且有非常卓越的可靠性及稳定性。

SENSICOM CN series (SMD NTC Thermistors) are available in 0402(1005),0603(1608),0805(2012) size. The R25 values are available in 1%,3%,5% & 10% tolerances. The Beta (calculated between 25°C and 50°C) ranges from 2500 (low resistance values) to 5000 (high resistance values). In all cases the Beta are available in $\pm 1\%$, $\pm 2\%$, $\pm 3\%$ tolerance. All chips are constructed 4-sides surface glass coating and Nickel barrier terminals. Thus, the CN series not only have high reliability and stability but also excellent solderability available.

产品特点

Features

满足 RoHS 要求

Rohs compliant

采用厚 10 μ m 的玻璃包封，具有良好的耐潮湿性及可靠性与稳定性

10 μ m thickness 4-sides glass encapsulation, high reliability and stability available

高可靠的叠层片式陶瓷结构体积小，无引线，适合高密度表面贴装

Highly reliable multilayer and monolithic structure, leadless, ideal for high density SMT installation

具有优良的可焊性及耐热冲击性

Superior heat resistance to reflow or wave soldering and excellent solderability to the unique external electrodes of three metallic layers

分布容量低，可应用于高频领域，响应速度快

Low floating Capacitance (less 3pF), can be use (using TCXO) in the high Frequency region, fast response

优良的耗散系数

Excellent heat dissipation constant

可获得低阻值高 B 值

Low resistance and high B-value available

优良的温度系数，工作温度范围：-40°C ~ +125°C

Excellent Temperature Coefficient, wide ranges of operating temperature (-40°C to 125°C)

产品应用

Product Applications

液晶显示器温度补偿电路	Temperature compensating circuit of LCD
IC 和半导体器件过热保护	IC and Semiconductor protection
可充电电池及充电器的温度探测	Temperature sensing in rechargeable batteries and chargers
打印头温补	Printer temperature compensation circuit
有线通信程控交换机	Telecom exchanger
DC/AC 转换器和 HIC 的过热保护	DC/AC transformer and HIC over heat protecting
需温度补偿的各种电路	Temperature compensation in a variety of other circuits

产品规格型号表示方法

Part Number Identification

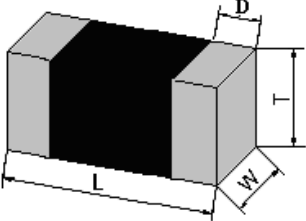
CN
0603
R103
F
B₁
3435
F
T

①
②
③
④
⑤
⑥
⑦
⑧

①	产品系列：CN 系列指片式负温度系数热敏电阻	Production Series:CN Series SMD NTC Thermistor
②	规格尺寸(L×W×T) 0402 = 1.0×0.5×0.5 0603 = 1.6×0.8×0.6 0805 = 2.0×1.2×0.6	Dimension (L×W×T) (mm)0402 = 1.0×0.5×0.5 0603 = 1.6×0.8×0.6 0805 = 2.0×1.2×0.6
③	产品阻值 (25°C电阻值) : R221 = 22×101Ω R103 = 10×103 Ω R473 = 47×103 Ω。	Production Resistance (Resistance @25°C) R221 = 22×101Ω R103 = 10×103 Ω R473 = 47×103 Ω。
④	产品阻值误差：F = ±1%、G = ±2%、H = ±3%、J = ±5%、K = ±10%。	Production Resistance error: F = ±1%、G = 2%、H = ±3%、J = ±5%、K = ±10%
⑤	B 值种类：B1 = B25/50、B2 = B25/85、B3 = 其它 B 值	B-value sort: B1 = B25/50、B2 = B25/85、B3 = other B-value
⑥	产品 B 值：3435 表示 B 值为 3435K	Production B-value:3435 indicates B-value is 3435K
⑦	B 值误差：F = ±1%、G = ±2%、H = ±3%、J = ±5%	B-value error:F = ±1%、G = ±2%、H = ±3%、J = ±5%
⑧	包装方式：B = 散装、T = 盘装	Packaging mode:B= Bulk、T= Tape& Reel

产品尺寸

Dimension

	Code	L	W	T	D
	0402	1.0±0.15 (0.040±0.006)	0.5±0.15 (0.020±0.006)	0.5±0.15 (0.020±0.006)	0.25±0.10 (0.010±0.004)
	0603	1.6±0.2 (0.063±0.008)	0.8±0.2 (0.031±0.008)	0.6±0.2 (0.024±0.008)	0.3±0.2 (0.01±0.008)
	0805	2.0±0.2 (0.079±0.008)	1.2±0.2 (0.047±0.008)	0.6±0.2 (0.024±0.008)	0.5±0.3 (0.020±0.012)

0402 (1005) 系列 (0402 (1005) SERIE)

规格型号 Part No	25°C电阻值(KΩ) Resistance at 25°C(KΩ)	B 值 25/50°C(K) B-value 25/50°C(K)
CN0402R101□B12700□T	0.1	2700
CN0402R221□B12750□T	0.22	2750
CN0402R331□B12800□T	0.33	2800
CN0402R471□B12850□T	0.47	2850
CN0402R681□B12900□T	0.68	2900
CN0402R102□B13000□T	1.0	3000
CN0402R222□B13100□T	2.2	3100
CN0402R222□B13900□T	2.2	3900
CN0402R332□B13200□T	3.3	3200
CN0402R472□B13250□T	4.7	3250
CN0402R682□B13350□T	6.8	3350
CN0402R103□B13435□T	10	3435
CN0402R103□B13900□T	10	3900
CN0402R153□B13500□T	15	3500
CN0402R223□B13600□T	22	3600
CN0402R333□B13800□T	33	3800
CN0402R473□B13900□T	47	3900
CN0402R473□B14050□T	47	4050
CN0402R683□B13950□T	68	3950

CN0402R104□B ₁ 4100□T	100	4100
CN0402R104□B ₁ 4360□T	100	4360
CN0402R224□B ₁ 4200□T	220	4200
CN0402R334□B ₁ 4300□T	330	4300
CN0402R474□B ₁ 4500□T	470	4500
CN0402R564□B ₁ 4500□T	560	4500
CN0402R105□B ₁ 4500□T	1000	4500

耗散系数: >1.0 mW/°C

Dissipation factor :>1.0 mW/°C

额定功率: 100mW

Rated Electric Power:100 mW

热时间常数: ≤ 3sec

Thermal Time Constant: ≤ 3sec

□: 阻值与 B 值误差

□: Resistance and B-value Tolerance

使用温度范围: -40 ~ +125°C

Operating Temperature Range : -40~+125°C

0603 (1608) 系列 (0603 (1608) SERIE)

规格型号 Part No	25°C电阻值(KΩ) Resistance at 25°C(KΩ)	B 值 25/50°C(K) B-Constant 25/50°C(K)
CN0603R101□B ₁ 2700□T	0.1	2700
CN0603R221□B ₁ 2750□T	0.22	2750
CN0603R331□B ₁ 2800□T	0.33	2800
CN0603R471□B ₁ 2850□T	0.47	2850
CN0603R681□B ₁ 2900□T	0.68	2900
CN0603R102□B ₁ 3000□T	1.0	3000
CN0603R222□B ₁ 3100□T	2.2	3100
CN0603R222□B ₁ 3900□T	2.2	3900
CN0603R332□B ₁ 3200□T	3.3	3200
CN0603R472□B ₁ 3250□T	4.7	3250
CN0603R682□B ₁ 3350□T	6.8	3350
CN0603R103□B ₁ 3435□T	10	3435
CN0603R103□B ₁ 3900□T	10	3900
CN0603R153□B ₁ 3500□T	15	3500
CN0603R223□B ₁ 3600□T	22	3600
CN0603R333□B ₁ 3800□T	33	3800
CN0603R473□B ₁ 3900□T	47	3900
CN0603R473□B ₁ 4050□T	47	4050

CN0603R683□B13950□T	68	3950
CN0603R104□B14100□T	100	4100
CN0603R104□B14360□T	100	4360
CN0603R224□B14200□T	220	4200
CN0603R334□B14300□T	330	4300
CN0603R474□B14500□T	470	4500
CN0603R564□B14500□T	560	4500
CN0603R105□B14500□T	1000	4500

耗散系数: >2.0 mW/°C

Dissipation factor :>2.0 mW/°C

额定功率: 200mW

Rated Electric Power:200 mW

热时间常数: ≤ 3sec

Thermal Time Constant: ≤ 3sec

□: 阻值与 B 值误差

□: Resistance and B-value Tolerance

使用温度范围: -40 ~ +125°C

Operating Temperature Range : -40~+125°C

0805 (2012) 系列 (0805 (2012) SERIES)

规格型号 Part No	25°C电阻值(KΩ) Resistance at 25°C(KΩ)	B 值 25/50°C(K) B-Constant 25/50°C(K)
CN0805R101□B12700□T	0.1	2700
CN0805R221□B12750□T	0.22	2750
CN0805R331□B12800□T	0.33	2800
CN0805R471□B12850□T	0.47	2850
CN0805R681□B12900□T	0.68	2900
CN0805R102□B13000□T	1.0	3000
CN0805R222□B13100□T	2.2	3100
CN0805R222□B13900□T	2.2	3900
CN0805R332□B13200□T	3.3	3200
CN0805R472□B13250□T	4.7	3250
CN0805R682□B13350□T	6.8	3350
CN0805R103□B13435□T	10	3435
CN0805R103□B13900□T	10	3900
CN0805R153□B13500□T	15	3500
CN0805R223□B13600□T	22	3600
CN0805R333□B13800□T	33	3800
CN0805R473□B13900□T	47	3900
CN0805R473□B14050□T	47	4050

CN0805R683□B13950□T	68	3950
CN0805R104□B14100□T	100	4100
CN0805R104□B14360□T	100	4360
CN0805R224□B14200□T	220	4200
CN0805R334□B14300□T	330	4300
CN0805R474□B14500□T	470	4500
CN0805R564□B14500□T	560	4500
CN0805R105□B14500□T	1000	4500

耗散系数: >3.0 mW/°C

Dissipation factor :>3.0 mW/°C

额定功率: 300mW

Rated Electric Power:300 mW

热时间常数: ≤ 5sec

Thermal Time Constant: ≤ 5sec

□: 阻值与 B 值误差

□: Resistance and B-value Tolerance

使用温度范围: -40 ~ +125°C

Operating Temperature Range : -40~+125°C

ATTENTION

To improve reliability, function, design or otherwise constantly, or to satisfy customer requirements. some standards or methods of product test may be different. consequently, the product details described in this introduction are subject to change without notice, please review the latest product specification for product specifications before ordering.