

# Chip NTC Thermistor – SDNT Series

Operating Temp. : -55°C~+125°C



## FEATURES

- SMD type suitable for high density mounting
- Series of B constant for various applications
- Excellent solderability

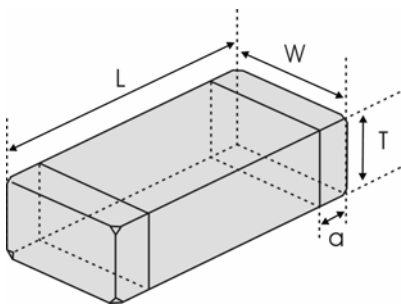
## APPLICATIONS

- Telecommunication equipments such as cellular phone, automobile phone, cordless phone, etc
- Office automation such as printer, facsimile, word processor, etc.
- Consumer electronics such as VCR, DVD, CD players, etc.

## PRODUCT IDENTIFICATION

<u>SDNT</u> ①	<u>1005</u> ②	<u>X</u> ③	<u>103</u> ④	<u>F</u> ⑤	<u>3380</u> ⑥	<u>F</u> ⑦	<u>I</u> ⑧	<u>F</u> ⑨																																																												
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## SHAPE AND DIMENSIONS



Unit: mm [inch]

Type	L	W	T	a
SDNT1005 [0402]	1.0±0.15 [.039±.006]	0.5±0.15 [.020±.006]	0.5±0.15 [.020±.006]	0.25±0.1 [.010±.004]
SDNT1608 [0603]	1.6±0.15 [.063±.006]	0.8±0.15 [.031±.006]	0.8±0.15 [.031±.006]	0.3±0.2 [.012±.008]
SDNT2012 [0805]	2.0±0.2 [.079±.008]	1.25±0.2 [.049±.008]	0.85±0.2 [.033±.008]	0.5±0.3 [.020±.012]

## SPECIFICATIONS

### SDNT1005 TYPE

Part Number	Resistance at 25°C	B constant (25—50°C)	Max. Permissible Operating Current (25°C)	Thermal Time Constant	Dissipation Factor	Rated Electric Power
Units	kΩ	K	mA	sec	mW/°C	mW
Symbol	R25	B25/50	I <sub>max</sub>	t	C	P
SDNT1005X220□3380◎TF	0.022	3380	6.7	<3sec	1.0	100
SDNT1005X400□3380◎TF	0.040	3380	5.0			
SDNT1005X101□3380◎TF	0.10	3380	3.1			
SDNT1005X151□3380◎TF	0.15	3380	2.5			
SDNT1005X221□3450◎TF	0.22	3450	2.1			
SDNT1005X331□3450◎TF	0.33	3450	1.7			
SDNT1005X471□3450◎TF	0.47	3450	1.4			
SDNT1005X681□3450◎TF	0.68	3450	1.2			
SDNT1005X102□3450◎TF	1.0	3450	1.0			
SDNT1005X152□3950◎TF	1.5	3950	0.81			
SDNT1005X222□3950◎TF	2.2	3950	0.67			
SDNT1005X332□3950◎TF	3.3	3950	0.55			
SDNT1005X472□3950◎TF	4.7	3950	0.46			
SDNT1005X682□3950◎TF	6.8	3950	0.38			
SDNT1005X103□3380◎TF	10	3380	0.31			
SDNT1005X153□3450◎TF	15	3450	0.25			
SDNT1005X223□3450◎TF	22	3450	0.21			
SDNT1005X333□3500◎TF	33	3500	0.14			
SDNT1005X473□4100◎TF	47	4100	0.12			
SDNT1005X503□4100◎TF	50	4100	0.12			
SDNT1005X683□4150◎TF	68	4150	0.11			
SDNT1005X104□4150◎TF	100	4150	0.10			
SDNT1005X154□4150◎TF	150	4150	0.08			
SDNT1005X224□4250◎TF	220	4250	0.06			
SDNT1005X334□4300◎TF	330	4300	0.05			
SDNT1005X474□4350◎TF	470	4350	0.04			
SDNT1005X684□4400◎TF	680	4400	0.03			

### SDNT1608 TYPE

Part Number	Resistance at 25°C	B constant (25—50°C)	Max. Permissible Operating Current (25°C)	Thermal Time Constant	Dissipation Factor	Rated Electric Power
Units	kΩ	K	mA	sec	mW/°C	mW
Symbol	R25	B25/50	I <sub>max</sub>	t	C	P
SDNT1608X101□3380◎TF	0.10	3380	3.1	<5sec	1.0	100
SDNT1608X151□3380◎TF	0.15	3380	2.5			
SDNT1608X221□3450◎TF	0.22	3450	2.1			
SDNT1608X331□3450◎TF	0.33	3450	1.7			
SDNT1608X471□3450◎TF	0.47	3450	1.4			
SDNT1608X681□3450◎TF	0.68	3450	1.2			
SDNT1608X102□3450◎TF	1.0	3450	1.0			
SDNT1608X152□3450◎TF	1.5	3450	0.81			
SDNT1608X222□3950◎TF	2.2	3950	0.67			
SDNT1608X302□3950◎TF	3.0	3950	0.55			

## SPECIFICATIONS

### SDNT1608 TYPE

Part Number	Resistance at 25°C	B constant (25–50°C)	Max. Permissive Operating Current (25°C)	Thermal Time Constant	Dissipation Factor	Rated Electric Power
Units	kΩ	K	mA	sec	mW/°C	Mw
Symbol	R25	B25/50	I <sub>max</sub>	t	C	P
SDNT1608X332□3950◎TF	3.3	3950	0.55	<5sec	1.0	100
SDNT1608X472□3950◎TF	4.7	3950	0.46			
SDNT1608X502□3950◎TF	5.0	3950	0.44			
SDNT1608X682□3950◎TF	6.8	3950	0.38			
SDNT1608X103□3450◎TF	10	3450	0.31			
SDNT1608X103□3950◎TF	10	3950	0.33			
SDNT1608X153□3950◎TF	15	3950	0.25			
SDNT1608X223□4050◎TF	22	4050	0.21			
SDNT1608X333□4050◎TF	33	4050	0.17			
SDNT1608X473□4150◎TF	47	4150	0.14			
SDNT1608X503□4150◎TF	50	4150	0.13			
SDNT1608X683□4150◎TF	68	4150	0.12			
SDNT1608X104□4250◎TF	100	4250	0.10			
SDNT1608X154□4300◎TF	150	4300	0.08			
SDNT1608X224□4350◎TF	220	4350	0.06			
SDNT1608X334□4400◎TF	330	4400	0.05			
SDNT1608X474□4500◎TF	470	4500	0.04			
SDNT1608X684□4500◎TF	680	4500	0.03			

### SDNT2012 TYPE

Part Number	Resistance at 25°C	B constant (25–50°C)	Max. Permissive Operating Current (25°C)	Thermal Time Constant	Dissipation Factor	Rated Electric Power
Units	kΩ	K	mA	sec	mW/°C	mW
Symbol	R25	B25/50	I <sub>max</sub>	t	C	P
SDNT2012X101□3380◎TF	0.10	3380	4.0	<5sec	2.0	200
SDNT2012X151□3380◎TF	0.15	3380	3.5			
SDNT2012X221□3450◎TF	0.22	3450	3.0			
SDNT2012X331□3450◎TF	0.33	3450	2.5			
SDNT2012X471□3450◎TF	0.47	3450	2.0			
SDNT2012X681□3450◎TF	0.68	3450	1.7			
SDNT2012X102□3450◎TF	1.0	3450	1.4			
SDNT2012X152□3950◎TF	1.5	3950	1.2			
SDNT2012X202□3950◎TF	2.0	3950	1.0			
SDNT2012X222□3950◎TF	2.2	3950	0.90			
SDNT2012X332□3950◎TF	3.3	3950	0.72			
SDNT2012X472□3950◎TF	4.7	3950	0.65			
SDNT2012X502□3950◎TF	5.0	3950	0.60			
SDNT2012X682□3950◎TF	6.8	3950	0.50			
SDNT2012X103□3450◎TF	10	3450	0.40			
SDNT2012X103□3950◎TF	10	3950	0.44			
SDNT2012X153□3500◎TF	15	3500	0.32			
SDNT2012X223□4050◎TF	22	4050	0.31			
SDNT2012X333□4050◎TF	33	4050	0.24			

# SPECIFICATIONS

## SDNT2012 TYPE

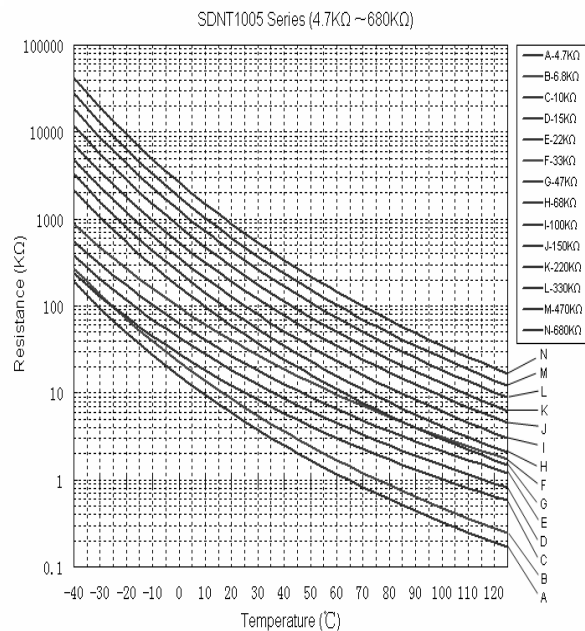
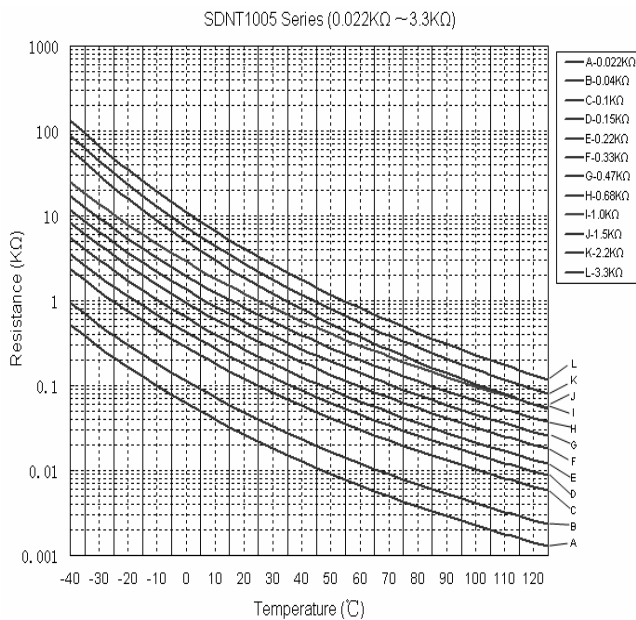
Part Number	Resistance at 25°C	B constant (25—50°C)	Max. Max.Permissible Operating Current (25°C)	Thermal Time Constant	Dissipation Factor	Rated Electric Power
Units	kΩ	K	mA	sec	mW/°C	mW
Symbol	R25	B25/50	I <sub>max</sub>	t	C	P
SDNT2012X473□4150◎TF	47	4150	0.20	<5sec	2.0	200
SDNT2012X503□4150◎TF	50	4150	0.18			
SDNT2012X683□4150◎TF	68	4150	0.16			
SDNT2012X104□4250◎TF	100	4250	0.14			
SDNT2012X154□4300◎TF	150	4300	0.11			
SDNT2012X224□4350◎TF	220	4350	0.08			
SDNT2012X334□4400◎TF	330	4400	0.06			
SDNT2012X474□4500◎TF	470	4500	0.05			
SDNT2012X684□4500◎TF	680	4500	0.04			

※ □: Please specify the resistance tolerance code (F=±1%, H=±3%, J=±5%, K=±10%).

※ ◎: Please specify the B value tolerance code (F=±1%, H=±3%).

And products with other electrical characteristics can be provided upon customer's request. Please contact your local sales.

## TYPICAL ELECTRICAL CHARACTERISTICS



# TYPICAL ELECTRICAL CHARACTERISTICS

