Chip Temp. Sensing NTC Thermistor - SDNT Series

Operating Temp. : -55℃~+125℃



FEATURES

- SMD type suitable for high density mounting
- Series of B constant for various applications
- **Excellent solder ability**

APPLICATIONS

- Telecommunication equipments such as cellular phone, automobile phone, etc.
- Office automation such as printer, facsimile, word processor, etc.
- Battery, CPU temperature protection.

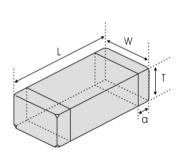
PRODUCT IDENTIFICATI	/ 1 N	
PRINKLI II/PRIIPRALI		

PRODUC	T IDENTIFICA	NOITA						
SDNT ①	<u>1005</u>	<u>X</u>	<u>103</u> ④	<u>F</u> (5)	<u>3380</u>	<u>F</u>	<u>T</u>	<u>F</u>
1			2		_	3		
	Туре		External Din	nensions (L×V	V) (mm)	Int	ernal Code	
			0603 [0201]	0.6×	0.3		X	
SDNT	Chip NTC Therm	istor	1005 [0402]	1.0×	0.5		С	
			1608 [0603]	1.6×	8.0			
			2012 [0805]	2.0x ²	1.25			
4			5			6		
Zero-	power Resistance		Tolerance of Resistance		nce	B Constant (25-50°C)		
Example	Nominal Value	е	F	±1'	%	Example	Nominal V	/alue
472	4.7kΩ		Н	±3°	%	3380	3380k	(
103	10kΩ		J	±5'	%	4250	4250k	(
7			K	±10)%	9		
Tolera	Tolerance of B Constant		8			Hazar	dous Substar	nce
F	±1%			Packing		Free Products		

SHAPE AND DIMENSIONS

±3%

Unit: mm [inch]



Type	L	W	T	а
SDNT0603	0.6±0.05	0.3±0.05	0.3±0.05	0.15±0.05
[0201]	[.024±.002]	[.012±.002]	[.012±.002]	[.006±.002]
SDNT1005	1.0±0.15	0.5±0.15	0.5±0.15	0.25±0.1
[0402]	[.039±.006]	[.020±.006]	[.020±.006]	[.010±.004]
SDNT1608	1.6±0.15	0.8±0.15	0.8±0.15	0.3±0.2
[0603]	[.063±.006]	[.031±.006]	[.031±.006]	[.012±.008]
SDNT2012	2.0±0.2	1.25±0.2	0.85±0.2	0.5±0.3
[0805]	[.079±.008]	[.049±.008]	[.033±.008]	[.020±.012]

Tape & Reel

SPECIFICATIONS

SDNT0603 TYPE

Part Number	Resistance at 25°C	B Constant (25-50°C)	Operating	Thermal Time Constant	Dissipation Factor	Rated Electric Power
Units	kΩ	K	mA	sec	mW/℃	mW
Symbol	R25	B25/50	Imax	t	С	Р
SDNT0603C103□3380©TF	10	3380	0.31			
SDNT0603C223□3380©TF	22	3380	0.21			
SDNT0603C473□4050©TF	47	4050	0.14	<3 sec.	1.0	100
SDNT0603C683□4250©TF	68	4250	0.12			
SDNT0603C104□4250©TF	100	4250	0.10			

SDNT1005 TYPE

Part Number	Resistance at 25℃	B Constant (25-50°C)	Max. Permissive Operating Current (25℃)	Thermal Time Constant	Dissipation Factor	Rated Electric Power
Units	kΩ	K	mA	sec	mW/℃	mW
Symbol	R25	B25/50	Imax	t	С	Р
SDNT1005X682□3950©TF	6.8	3950	0.38			
SDNT1005X103□3380©TF	10	3380	0.31			
SDNT1005X103□3950©TF	10	3950	0.33			
SDNT1005X103□4050©TF	10	4050	0.33			
SDNT1005X153□3450©TF	15	3450	0.25			
SDNT1005X223□3950©TF	22	3950	0.23			
SDNT1005X303□3950©TF	30	3950	0.15			
SDNT1005X333□3950©TF	33	3950	0.15	<3 sec.	1.0	100
SDNT1005X473□4050©TF	47	4050	0.12	<3 Sec.	1.0	100
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	0.1			
SDNT1005X104□4250©TF	100	4250	0.1			
SDNT1005X154□4150©TF	150	4150	0.08			
SDNT1005X224□4250©TF	220	4250	0.06			

SDNT1608 TYPE

Part Number	Resistance at 25°C	B Constant (25-50°C)	Max. Permissive Operating Current (25℃)	Thermal Time Constant	Dissipation Factor	Rated Electric Power
Units	kΩ	K	mA	sec	mW/℃	mW
Symbol	R25	B25/50	Imax	t	С	Р
SDNT1608X222□3450©TF	2.2	3450	0.67			
SDNT1608X472□3950©TF	4.7	3950	0.46			
SDNT1608X502□3950©TF	5	3950	0.44			
SDNT1608X103□3380©TF	10	3380	0.31			
SDNT1608X103□3450©TF	10	3450	0.31	<5 sec.	1.0	100
SDNT1608X103□3950©TF	10	3950	0.33			
SDNT1608X153□3950©TF	15	3950	0.25			
SDNT1608X223□3950©TF	22	3950	0.21			
SDNT1608X223□4050©TF	22	4050	0.21			

SPECIFICATIONS

SDNT1608 TYPE

Part Number	Resistance at 25℃	B Constant (25-50°C)	Max. Permissive Operating Current (25℃)	Thermal Time Constant	Dissipation Factor	Rated Electric Power
Units	kΩ	K	mA	sec	mW/℃	mW
Symbol	R25	B25/50	Imax	t	С	Р
SDNT1608X333 □ 4050 © TF	33	4050	0.17			
SDNT1608X473□4050©TF	47	4050	0.14			
SDNT1608X473□4150©TF	47	4150	0.14			
SDNT1608X503□4150©TF	50	4150	0.13	-		
SDNT1608X683□4150©TF	68	4150	0.12	<5 sec.	1.0	100
SDNT1608X104□3950©TF	100	3950	0.1	~0 360.	1.0	100
SDNT1608X104□4250©TF	100	4250	0.1			
SDNT1608X124□4250⊚TF	120	4250	0.1			
SDNT1608X154□4250©TF	150	4250	0.08			
SDNT1608X224□4300©TF	220	4300	0.06			

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/℃	mW
Symbol	R25	B25/50	Imax	t	С	Р
SDNT2012X472□3950©TF	4.7	3950	0.65			
SDNT2012X502□3950©TF	5	3950	0.6			
SDNT2012X103□3450©TF	10	3450	0.4			
SDNT2012X103□3950©TF	10	3950	0.44			
SDNT2012X223□4050©TF	22	4050	0.31			
SDNT2012X333□4050©TF	33	4050	0.24			
SDNT2012X473□4050©TF	47	4050	0.2	<5 sec.	2.0	200
SDNT2012X473□4150©TF	47	4150	0.2			
SDNT2012X503□4150©TF	50	4150	0.18			
SDNT2012X104□3950©TF	100	3950	0.14			
SDNT2012X104□4250©TF	100	4250	0.14			
SDNT2012X154□4250©TF	150	4250	0.11			
SDNT2012X224□4300©TF	220	4300	0.08			

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

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

[%]: Please specify the B value tolerance code (F= \pm 1%, H= \pm 3%).

TYPICAL ELECTRICAL CHARACTERISTICS

