Data Sheet

Customer:	
Product:	**SMD NTC Thermistor**
Sizes.:	**0402/0603/0805/1206**
Issued Date:	**02-Jan-24**
Edition:	**REV.A2**

RoHS Compliant

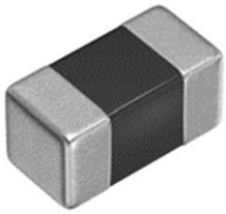
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02-Jan-24	02-Jan-24	02-Jan-24	02-Jan-24	
Kris Chen	*Ben Chang*	*Ben Chang*		

SMD NTC Thermistor



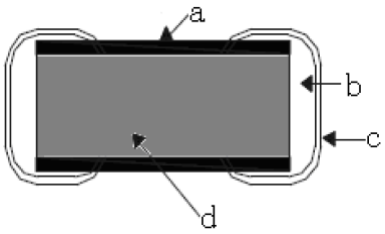
■Features

- Minature size, suitable for SMT
- Porcelain body and glass glaze
- RoHS compliant
- Execellent in solderability and heat resistance, ideal for wave or re-flow soldering

■Applications

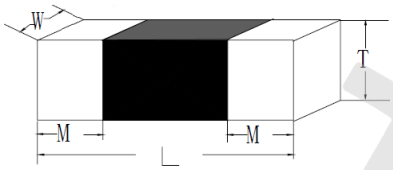
- Temperature Sensing in rechargeable batteries and CPU
- Temperature compensation in IC、LCD、Crystal oscillator and so one
- Temperature compensation or temperature sensing for various types of circuits

■Construction



a	Glass Layer	c	Ni/Sn Plating
b	Ag Layer	d	NTC

■Dimensions



Unit: mm

Type	Size (Inch)	L	W	T	M
NTG02	0402	1.00±0.15	0.50±0.10	0.50±0.10	0.25±0.10
NTG03	0603	1.60±0.15	0.75±0.15	0.75±0.15	0.30±0.15
NTG05	0805	2.00±0.20	1.25±0.20	0.75±0.20	0.50±0.20
NTG06	1206	3.20±0.20	1.60±0.20	0.75±0.20	0.50±0.20

■Part Numbering

NTG	03	T	102	F	320	F	A
Product Type	Dimensions	Packaging Code	Resistance (25℃)	Resistance Tolerance	B-Constant	B-Constant Tolerance	B-Constant Temperature
	02: 0402 03: 0603 05: 0805 06: 1206	T: Taping Reel	102: 1KΩ 103: 10KΩ 104: 100KΩ	F: 1% G: 2% H: 3% J: 5% K: 10%	320: 3200K 395: 3950K 405: 4050K	F: ±1% G: ±2% H: ±3%	A: 25/50℃ B: 25/85℃

■Electrical Characteristics

0402 Type(□:Tolerance) / (25/50℃)

Part No.	Resistance (25℃)	Resistance Tolerance	B-Constant (25/50℃)	B-Constant Tolerance
NTG02T103□390□A	10KΩ	±1, 2, 3, 5, 10%	3900K	±1, 2, 3%
NTG02T473□395□A	47KΩ	±1, 2, 3, 5, 10%	3950K	±1, 2, 3%
NTG02T503□395□A	50KΩ	±1, 2, 3, 5, 10%	3950K	±1, 2, 3%
NTG02T683□395□A	68KΩ	±1, 2, 3, 5, 10%	3950K	±1, 2, 3%
NTG02T104□390□A	100KΩ	±1, 2, 3, 5, 10%	3900K	±1, 2, 3%
NTG02T154□410□A	150KΩ	±1, 2, 3, 5, 10%	4100K	±1, 2, 3%
NTG02T224□395□A	220KΩ	±1, 2, 3, 5, 10%	3950K	±1, 2, 3%
NTG02T334□405□A	330KΩ	±1, 2, 3, 5, 10%	4050K	±1, 2, 3%
NTG02T474□405□A	470KΩ	±1, 2, 3, 5, 10%	4050K	±1, 2, 3%
NTG02T684□420□A	680KΩ	±1, 2, 3, 5, 10%	4200K	±1, 2, 3%

0603 Type(□:Tolerance) / (25/50℃)

Part No.	Resistance (25℃)	Resistance Tolerance	B-Constant (25/50℃)	B-Constant Tolerance
NTG03T102□320□A	1KΩ	±1, 2, 3, 5, 10%	3200K	±1, 2, 3%
NTG03T202□340□A	2KΩ	±1, 2, 3, 5, 10%	3400K	±1, 2, 3%
NTG03T222□345□A	2.2KΩ	±1, 2, 3, 5, 10%	3450K	±1, 2, 3%
NTG03T332□338□A	3.3KΩ	±1, 2, 3, 5, 10%	3380K	±1, 2, 3%
NTG03T472□345□A	4.7KΩ	±1, 2, 3, 5, 10%	3450K	±3%
NTG03T472□395□A	4.7KΩ	±1, 2, 3, 5, 10%	3950K	±1, 2, 3%
NTG03T502□345□A	5.0KΩ	±1, 2, 3, 5, 10%	3450K	±3%
NTG03T502□395□A	5.0KΩ	±1, 2, 3, 5, 10%	3950K	±1, 2, 3%
NTG03T682□395□A	6.8KΩ	±1, 2, 3, 5, 10%	3950K	±1, 2, 3%
NTG03T103□350□A	10KΩ	±1, 2, 3, 5, 10%	3500K	±1, 2, 3%
NTG03T103□360□A	10KΩ	±1, 2, 3, 5, 10%	3600K	±1, 2, 3%
NTG03T153□395□A	15KΩ	±1, 2, 3, 5, 10%	3950K	±1, 2, 3%
NTG03T223□330□A	22KΩ	±1, 2, 3, 5, 10%	3300K	±1, 2, 3%
NTG03T303□395□A	30KΩ	±1, 2, 3, 5, 10%	3950K	±1, 2, 3%
NTG03T333□395□A	33KΩ	±1, 2, 3, 5, 10%	3950K	±1, 2, 3%
NTG03T473□395□A	47KΩ	±1, 2, 3, 5, 10%	3950K	±1, 2, 3%
NTG03T503□395□A	50KΩ	±1, 2, 3, 5, 10%	3950K	±1, 2, 3%
NTG03T683□395□A	68KΩ	±1, 2, 3, 5, 10%	3950K	±1, 2, 3%
NTG03T104□395□A	100KΩ	±1, 2, 3, 5, 10%	3950K	±1, 2, 3%
NTG03T154□395□A	150KΩ	±1, 2, 3, 5, 10%	3950K	±1, 2, 3%
NTG03T204□405□A	200KΩ	±1, 2, 3, 5, 10%	4050K	±1, 2, 3%
NTG03T224□405□A	220KΩ	±1, 2, 3, 5, 10%	4050K	±1, 2, 3%
NTG03T334□405□A	330KΩ	±1, 2, 3, 5, 10%	4050K	±1, 2, 3%
NTG03T474□420□A	470KΩ	±1, 2, 3, 5, 10%	4200K	±1, 2, 3%
NTG03T564□420□A	560KΩ	±1, 2, 3, 5, 10%	4200K	±1, 2, 3%
NTG03T684□420□A	680KΩ	±1, 2, 3, 5, 10%	4200K	±1, 2, 3%

■Electrical Characteristics

0805 Type(□:Tolerance) / (25/50℃)

Part No.	Resistance (25℃)	Resistance Tolerance	B-Constant (25/50℃)	B-Constant Tolerance
NTG05T801□320□A	0.8KΩ	±1, 2, 3, 5, 10%	3200K	±1, 2, 3%
NTG05T102□320□A	1.0KΩ	±1, 2, 3, 5, 10%	3200K	±1, 2, 3%
NTG05T202□340□A	2.0KΩ	±1, 2, 3, 5, 10%	3400K	±1, 2, 3%
NTG05T222□345□A	2.2KΩ	±1, 2, 3, 5, 10%	3450K	±1, 2, 3%
NTG05T332□340□A	3.3KΩ	±1, 2, 3, 5, 10%	3400K	±1, 2, 3%
NTG05T472□345□A	4.7KΩ	±1, 2, 3, 5, 10%	3450K	±3%
NTG05T472□395□A	4.7KΩ	±1, 2, 3, 5, 10%	3950K	±1, 2, 3%
NTG05T502□345□A	5.0KΩ	±1, 2, 3, 5, 10%	3450K	±3%
NTG05T502□395□A	5.0KΩ	±1, 2, 3, 5, 10%	3950K	±1, 2, 3%
NTG05T682□395□A	6.8KΩ	±1, 2, 3, 5, 10%	3950K	±1, 2, 3%
NTG05T103□350□A	10KΩ	±1, 2, 3, 5, 10%	3500K	±1, 2, 3%
NTG05T103□360□A	10KΩ	±1, 2, 3, 5, 10%	3600K	±1, 2, 3%
NTG05T103□395□A	10KΩ	±1, 2, 3, 5, 10%	3950K	±1, 2, 3%
NTG05T123□350□A	12KΩ	±1, 2, 3, 5, 10%	3500K	±1, 2, 3%
NTG05T223□395□A	22KΩ	±1, 2, 3, 5, 10%	3950K	±1, 2, 3%
NTG05T303□395□A	30KΩ	±1, 2, 3, 5, 10%	3950K	±1, 2, 3%
NTG05T333□395□A	33KΩ	±1, 2, 3, 5, 10%	3950K	±1, 2, 3%
NTG05T473□395□A	47KΩ	±1, 2, 3, 5, 10%	3950K	±1, 2, 3%
NTG05T503□395□A	50KΩ	±1, 2, 3, 5, 10%	3950K	±1, 2, 3%
NTG05T683□395□A	68KΩ	±1, 2, 3, 5, 10%	3950K	±1, 2, 3%
NTG05T104□395□A	100KΩ	±1, 2, 3, 5, 10%	3950K	±1, 2, 3%
NTG05T124□395□A	120KΩ	±1, 2, 3, 5, 10%	3950K	±1, 2, 3%
NTG05T154□395□A	150KΩ	±1, 2, 3, 5, 10%	3950K	±1, 2, 3%
NTG05T204□405□A	200KΩ	±1, 2, 3, 5, 10%	4050K	±1, 2, 3%
NTG05T224□405□A	220KΩ	±1, 2, 3, 5, 10%	4050K	±1, 2, 3%
NTG05T304□415□A	300KΩ	±1, 2, 3, 5, 10%	4150K	±1, 2, 3%
NTG05T334□415□A	330KΩ	±1, 2, 3, 5, 10%	4150K	±1, 2, 3%
NTG05T474□415□A	470KΩ	±1, 2, 3, 5, 10%	4150K	±1, 2, 3%
NTG05T564□415□A	560KΩ	±1, 2, 3, 5, 10%	4150K	±1, 2, 3%
NTG05T684□420□A	680KΩ	±1, 2, 3, 5, 10%	4200K	±1, 2, 3%

■Electrical Characteristics

1206 Type(□:Tolerance) / (25/50℃)

Part No.	Resistance (25℃)	Resistance Tolerance	B- Constant (25/50℃)	B-Constant Tolerance
NTG06T472□345□A	4.7KΩ	±1, 2, 3, 5, 10%	3450K	±3%
NTG06T472□390□A	4.7KΩ	±1, 2, 3, 5, 10%	3900K	±1, 2, 3%
NTG06T502□345□A	5.0KΩ	±1, 2, 3, 5, 10%	3450K	±3%
NTG06T502□390□A	5.0KΩ	±1, 2, 3, 5, 10%	3900K	±1, 2, 3%
NTG06T682□390□A	6.8KΩ	±1, 2, 3, 5, 10%	3900K	±1, 2, 3%
NTG06T103□360□A	10KΩ	±1, 2, 3, 5, 10%	3600K	±1, 2, 3%
NTG06T103□395□A	10KΩ	±1, 2, 3, 5, 10%	3950K	±1, 2, 3%
NTG06T223□395□A	22KΩ	±1, 2, 3, 5, 10%	3950K	±1, 2, 3%
NTG06T333□395□A	33KΩ	±1, 2, 3, 5, 10%	3950K	±1, 2, 3%
NTG06T473□395□A	47KΩ	±1, 2, 3, 5, 10%	3950K	±1, 2, 3%
NTG06T503□395□A	50KΩ	±1, 2, 3, 5, 10%	3950K	±1, 2, 3%
NTG06T683□395□A	68KΩ	±1, 2, 3, 5, 10%	3950K	±1, 2, 3%
NTG06T104□395□A	100KΩ	±1, 2, 3, 5, 10%	3950K	±1, 2, 3%
NTG06T154□395□A	150KΩ	±1, 2, 3, 5, 10%	3950K	±1, 2, 3%
NTG06T224□405□A	220KΩ	±1, 2, 3, 5, 10%	4050K	±1, 2, 3%
NTG06T334□405□A	330KΩ	±1, 2, 3, 5, 10%	4050K	±1, 2, 3%
NTG06T474□420□A	470KΩ	±1, 2, 3, 5, 10%	4200K	±1, 2, 3%
NTG06T564□420□A	560KΩ	±1, 2, 3, 5, 10%	4200K	±1, 2, 3%
NTG06T684□420□A	680KΩ	±1, 2, 3, 5, 10%	4200K	±1, 2, 3%

0402 Type(□:Tolerance) / (25/85℃)

Part No.	Resistance (25℃)	Resistance Tolerance	B-Constant (25/85℃)	B-Constant Tolerance
NTG02T103□393□B	10KΩ	±1, 2, 3, 5, 10%	3930K	±1, 2, 3%
NTG02T473□398□B	47KΩ	±1, 2, 3, 5, 10%	3980K	±1, 2, 3%
NTG02T503□398□B	50KΩ	±1, 2, 3, 5, 10%	3980K	±1, 2, 3%
NTG02T683□398□B	68KΩ	±1, 2, 3, 5, 10%	3980K	±1, 2, 3%
NTG02T104□393□B	100KΩ	±1, 2, 3, 5, 10%	3930K	±1, 2, 3%
NTG02T154□413□B	150KΩ	±1, 2, 3, 5, 10%	4130K	±1, 2, 3%
NTG02T224□398□B	220KΩ	±1, 2, 3, 5, 10%	3980K	±1, 2, 3%
NTG02T334□408□B	330KΩ	±1, 2, 3, 5, 10%	4080K	±1, 2, 3%
NTG02T474□408□B	470KΩ	±1, 2, 3, 5, 10%	4080K	±1, 2, 3%
NTG02T684□423□B	680KΩ	±1, 2, 3, 5, 10%	4230K	±1, 2, 3%

■Electrical Characteristics

0603 Type(□:Tolerance) / (25/85℃)

Part No.	Resistance (25℃)	Resistance Tolerance	B-Constant (25/85℃)	B-Constant Tolerance
NTG03T102□323□B	1KΩ	±1, 2, 3, 5, 10%	3230K	±1, 2, 3%
NTG03T202□343□B	2KΩ	±1, 2, 3, 5, 10%	3430K	±1, 2, 3%
NTG03T222□348□B	2.2KΩ	±1, 2, 3, 5, 10%	3480K	±1, 2, 3%
NTG03T332□341□B	3.3KΩ	±1, 2, 3, 5, 10%	3410K	±1, 2, 3%
NTG03T472□348□B	4.7KΩ	±1, 2, 3, 5, 10%	3480K	±3%
NTG03T472□398□B	4.7KΩ	±1, 2, 3, 5, 10%	3980K	±1, 2, 3%
NTG03T502□348□B	5.0KΩ	±1, 2, 3, 5, 10%	3480K	±3%
NTG03T502□398□B	5.0KΩ	±1, 2, 3, 5, 10%	3980K	±1, 2, 3%
NTG03T682□398□B	6.8KΩ	±1, 2, 3, 5, 10%	3980K	±1, 2, 3%
NTG03T103□353□B	10KΩ	±1, 2, 3, 5, 10%	3530K	±1, 2, 3%
NTG03T103□363□B	10KΩ	±1, 2, 3, 5, 10%	3630K	±1, 2, 3%
NTG03T223□333□B	22KΩ	±1, 2, 3, 5, 10%	3330K	±1, 2, 3%
NTG03T303□398□B	30KΩ	±1, 2, 3, 5, 10%	3980K	±1, 2, 3%
NTG03T333□398□B	33KΩ	±1, 2, 3, 5, 10%	3980K	±1, 2, 3%
NTG03T473□398□B	47KΩ	±1, 2, 3, 5, 10%	3980K	±1, 2, 3%
NTG03T503□398□B	50KΩ	±1, 2, 3, 5, 10%	3980K	±1, 2, 3%
NTG03T683□398□B	68KΩ	±1, 2, 3, 5, 10%	3980K	±1, 2, 3%
NTG03T104□398□B	100KΩ	±1, 2, 3, 5, 10%	3980K	±1, 2, 3%
NTG03T154□398□B	150KΩ	±1, 2, 3, 5, 10%	3980K	±1, 2, 3%
NTG03T204□408□B	200KΩ	±1, 2, 3, 5, 10%	4080K	±1, 2, 3%
NTG03T224□408□B	220KΩ	±1, 2, 3, 5, 10%	4080K	±1, 2, 3%
NTG03T334□408□B	330KΩ	±1, 2, 3, 5, 10%	4080K	±1, 2, 3%
NTG03T474□423□B	470KΩ	±1, 2, 3, 5, 10%	4230K	±1, 2, 3%
NTG03T564□423□B	560KΩ	±1, 2, 3, 5, 10%	4230K	±1, 2, 3%
NTG03T684□423□B	680KΩ	±1, 2, 3, 5, 10%	4230K	±1, 2, 3%

■Electrical Characteristics

0805 Type(□:Tolerance) / (25/85℃)

Part No.	Resistance (25℃)	Resistance Tolerance	B-Constant (25/85℃)	B-Constant Tolerance
NTG05T801□323□B	0.8KΩ	±1, 2, 3, 5, 10%	3230K	±1, 2, 3%
NTG05T102□323□B	1.0KΩ	±1, 2, 3, 5, 10%	3230K	±1, 2, 3%
NTG05T202□343□B	2.0KΩ	±1, 2, 3, 5, 10%	3430K	±1, 2, 3%
NTG05T222□348□B	2.2KΩ	±1, 2, 3, 5, 10%	3480K	±1, 2, 3%
NTG05T332□348□B	3.3KΩ	±1, 2, 3, 5, 10%	3480K	±1, 2, 3%
NTG05T472□348□B	4.7KΩ	±1, 2, 3, 5, 10%	3480K	±3%
NTG05T472□398□B	4.7KΩ	±1, 2, 3, 5, 10%	3980K	±1, 2, 3%
NTG05T502□348□B	5.0KΩ	±1, 2, 3, 5, 10%	3480K	±3%
NTG05T502□398□B	5.0KΩ	±1, 2, 3, 5, 10%	3980K	±1, 2, 3%
NTG05T682□398□B	6.8KΩ	±1, 2, 3, 5, 10%	3980K	±1, 2, 3%
NTG05T103□353□B	10KΩ	±1, 2, 3, 5, 10%	3530K	±1, 2, 3%
NTG05T103□363□B	10KΩ	±1, 2, 3, 5, 10%	3630K	±1, 2, 3%
NTG05T103□398□B	10KΩ	±1, 2, 3, 5, 10%	3980K	±1, 2, 3%
NTG05T123□353□B	12KΩ	±1, 2, 3, 5, 10%	3530K	±1, 2, 3%
NTG05T223□398□B	22KΩ	±1, 2, 3, 5, 10%	3980K	±1, 2, 3%
NTG05T303□398□B	30KΩ	±1, 2, 3, 5, 10%	3980K	±1, 2, 3%
NTG05T333□398□B	33KΩ	±1, 2, 3, 5, 10%	3980K	±1, 2, 3%
NTG05T473□398□B	47KΩ	±1, 2, 3, 5, 10%	3980K	±1, 2, 3%
NTG05T503□398□B	50KΩ	±1, 2, 3, 5, 10%	3980K	±1, 2, 3%
NTG05T683□395□B	68KΩ	±1, 2, 3, 5, 10%	3950K	±1, 2, 3%
NTG05T104□398□B	100KΩ	±1, 2, 3, 5, 10%	3980K	±1, 2, 3%
NTG05T124□398□B	120KΩ	±1, 2, 3, 5, 10%	3980K	±1, 2, 3%
NTG05T154□398□B	150KΩ	±1, 2, 3, 5, 10%	3980K	±1, 2, 3%
NTG05T204□408□B	200KΩ	±1, 2, 3, 5, 10%	4080K	±1, 2, 3%
NTG05T224□408□B	220KΩ	±1, 2, 3, 5, 10%	4080K	±1, 2, 3%
NTG05T304□418□B	300KΩ	±1, 2, 3, 5, 10%	4180K	±1, 2, 3%
NTG05T334□418□B	330KΩ	±1, 2, 3, 5, 10%	4180K	±1, 2, 3%
NTG05T474□418□B	470KΩ	±1, 2, 3, 5, 10%	4180K	±1, 2, 3%
NTG05T564□418□B	560KΩ	±1, 2, 3, 5, 10%	4180K	±1, 2, 3%
NTG05T684□423□B	680KΩ	±1, 2, 3, 5, 10%	4230K	±1, 2, 3%

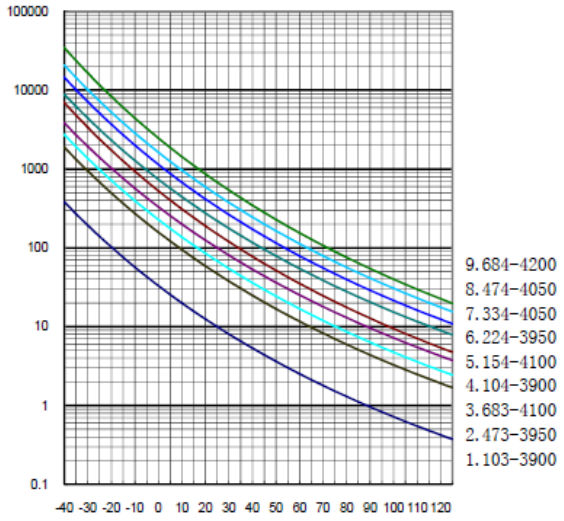
■Electrical Characteristics

1206 Type(□:Tolerance) / (25/85℃)

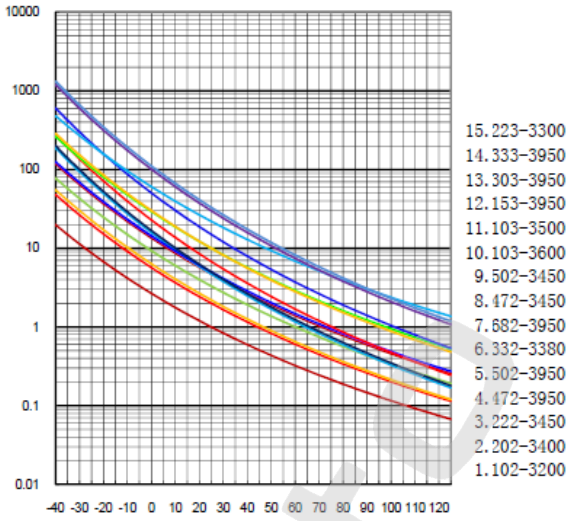
Part No.	Resistance (25℃)	Resistance Tolerance	B- Constant (25/85℃)	B-Constant Tolerance
NTG06T472□349□B	4.7KΩ	±1, 2, 3, 5, 10%	3490K	±3%
NTG06T472□393□B	4.7KΩ	±1, 2, 3, 5, 10%	3930K	±1, 2, 3%
NTG06T502□348□B	5.0KΩ	±1, 2, 3, 5, 10%	3480K	±3%
NTG06T502□393□B	5.0KΩ	±1, 2, 3, 5, 10%	3930K	±1, 2, 3%
NTG06T682□393□B	6.8KΩ	±1, 2, 3, 5, 10%	3930K	±1, 2, 3%
NTG06T103□363□B	10KΩ	±1, 2, 3, 5, 10%	3630K	±1, 2, 3%
NTG06T103□398□B	10KΩ	±1, 2, 3, 5, 10%	3980K	±1, 2, 3%
NTG06T223□398□B	22KΩ	±1, 2, 3, 5, 10%	3980K	±1, 2, 3%
NTG06T333□398□B	33KΩ	±1, 2, 3, 5, 10%	3980K	±1, 2, 3%
NTG06T473□398□B	47KΩ	±1, 2, 3, 5, 10%	3980K	±1, 2, 3%
NTG06T503□398□B	50KΩ	±1, 2, 3, 5, 10%	3980K	±1, 2, 3%
NTG06T683□398□B	68KΩ	±1, 2, 3, 5, 10%	3980K	±1, 2, 3%
NTG06T104□398□B	100KΩ	±1, 2, 3, 5, 10%	3980K	±1, 2, 3%
NTG06T154□398□B	150KΩ	±1, 2, 3, 5, 10%	3980K	±1, 2, 3%
NTG06T224□408□B	220KΩ	±1, 2, 3, 5, 10%	4080K	±1, 2, 3%
NTG06T334□408□B	330KΩ	±1, 2, 3, 5, 10%	4080K	±1, 2, 3%
NTG06T474□423□B	470KΩ	±1, 2, 3, 5, 10%	4230K	±1, 2, 3%
NTG06T564□423□B	560KΩ	±1, 2, 3, 5, 10%	4230K	±1, 2, 3%
NTG06T684□423□B	680KΩ	±1, 2, 3, 5, 10%	4230K	±1, 2, 3%

■Resistance-Temperature Characteristics

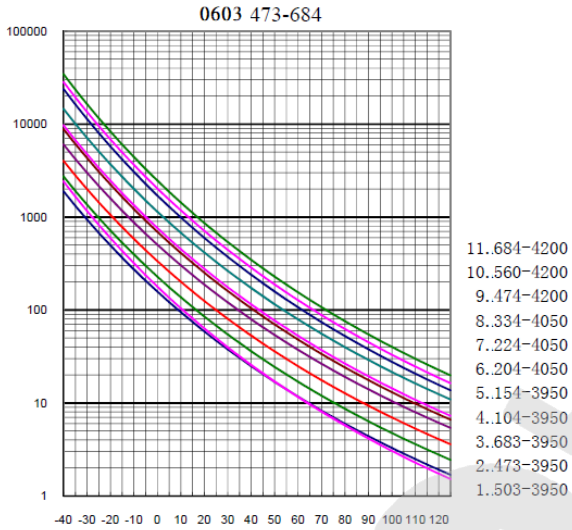
0402 103-684



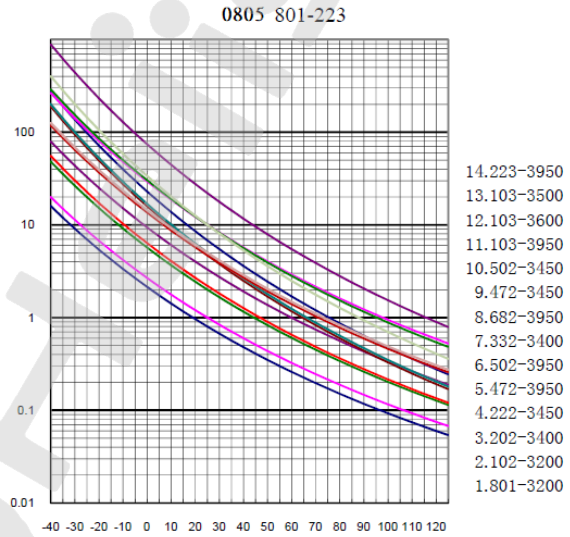
0603 102-333



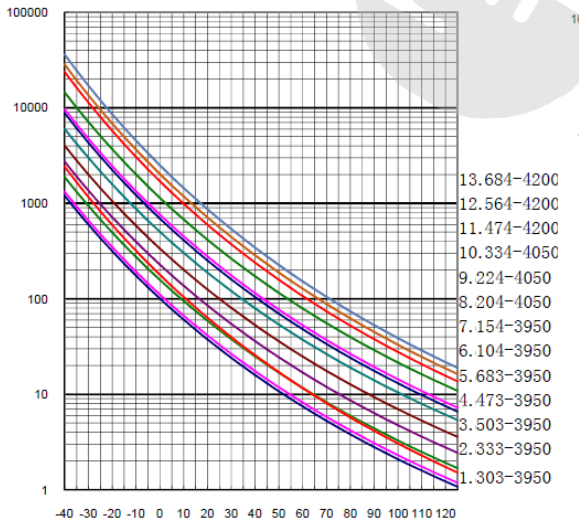
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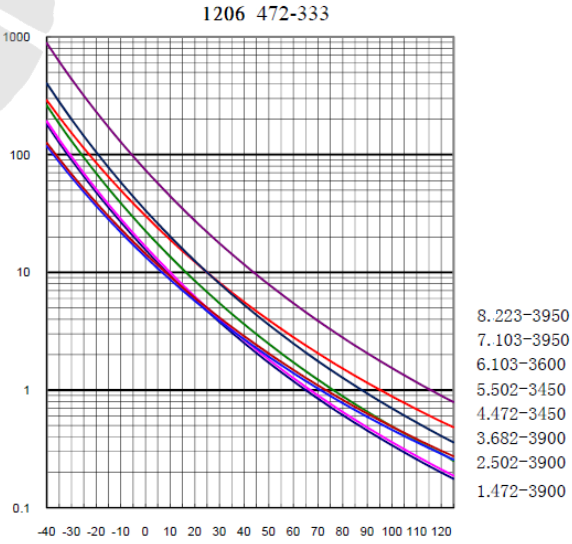
0805 801-223

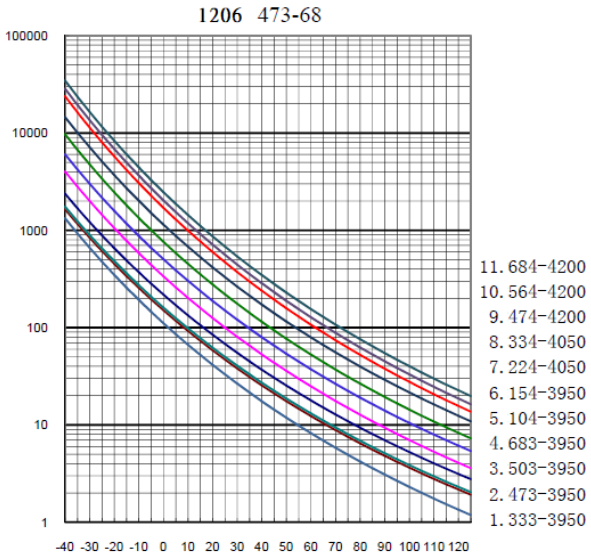


0805 303-684

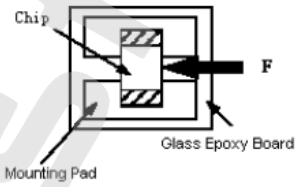
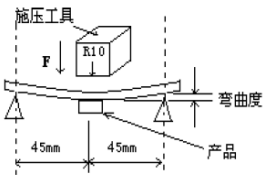


1206 472-333




1206 473-68
100000
10000
1000
100
10
1
-40 -30 -20 -10 0 10 20 30 40 50 60 70 80 90 100 110 120
11. 684-4200
10. 564-4200
9. 474-4200
8. 334-4050
7. 224-4050
6. 154-3950
5. 104-3950
4. 683-3950
3. 503-3950
2. 473-3950
1. 333-3950

■Environmental Characteristics

<table>
<tr><th>Item</th><th>Performances</th><th>Conditions</th></tr>
<tr><td>Solderability Test</td><td>At least 95% of the electrode on each end of the ceramic chip must be covered with solder</td><td>Preheating Temp: 120~150℃
Preheating Time: 60sec
Solder 96.5%Sn/3.0%Ag/0.5%Cu of the Sn solder
Soldering temperature : 245±5℃
Immersion tin depth: 10mm
Duration : 5 ± 1 sec.
Dip performance to a flux of about: 3~5sec</td></tr>
<tr><td>Resistance to Soldering</td><td>No mechanical damage
R_{25} change shall be less than ±5%
B-constant change shall be less than ±2%</td><td>Preheating Temp: 120~150℃
Preheating Time: 60sec
Solder 96.5%Sn/3.0%Ag/0.5%Cu of the Sn solder
Soldering temperature : 260±5℃
Immersion tin depth: 10mm
Duration of immersion : 10 ± 1 sec
Dip performance to a flux of about: 3~5sec</td></tr>
<tr><td>Adhesion of Electrode</td><td>The termination and body should be no damage</td><td><table><tr><td>Type</td><td>Force(N)</td><td>Time(s)</td></tr><tr><td>0402</td><td>4</td><td>10±1</td></tr><tr><td>0603</td><td>5</td><td>10±1</td></tr><tr><td>0805</td><td>6</td><td>10±1</td></tr><tr><td>1206</td><td>10</td><td>10±1</td></tr></table></td></tr>
<tr><td>Vibration</td><td>No mechanical damage
R_{25} change shall be less than ±5%
B-constant change shall be less than ±2%</td><td>Frequency : 10~55~10Hz
Amplitude : 1.50mm
Applied time : 2 hrs in each X,Y,Z directions</td></tr>
<tr><td>Resistance to Flexure</td><td>No mechanical damage
R_{25} change shall be less than ±5%
B-constant change shall be less than ±2%</td><td><table><tr><td>Type</td><td>Camber(mm)</td><td>Time(s)</td></tr><tr><td>0402/0603</td><td>0.7</td><td>30</td></tr><tr><td>0805/1206</td><td>1.0</td><td>30</td></tr></table>Condition: print circuit board
Pressing speed: 0.5mm/s
</td></tr>
<tr><td>High Temperature Resistance</td><td>No mechanical damage
R_{25} change shall be less than ±5%
B-constant change shall be less than ±2%</td><td>Temp: 125±2℃
Time: 1000+24/-0hrs</td></tr>
<tr><td>Low Temperature Resistance</td><td>No mechanical damage
R_{25} change shall be less than ±5%
B-constant change shall be less than ±2%</td><td>Temp: -40±2℃
Time: 1000+24/-0hrs</td></tr>
<tr><td>Static Humidity</td><td>No mechanical damage
R_{25} change shall be less than ±5%
B-constant change shall be less than ±2%</td><td>Temp: 60±2℃
Humidity: 90~95%RH
Time: 1000+24/-0hrs</td></tr>
<tr><td>Thermal Shock</td><td>No mechanical damage
R_{25} change shall be less than ±5%
B-constant change shall be less than ±2%</td><td>-40℃×30±3min→25℃×5±3min
→125℃×30±3min→25℃×5±3min 32cycles</td></tr>
</table>

■Storage Temperature: -10 ~ 40℃; Humidity 30 ~ 70%RH

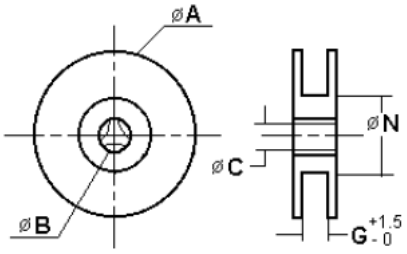
■Operating Temperature: -40 ~ +125℃

■Packaging

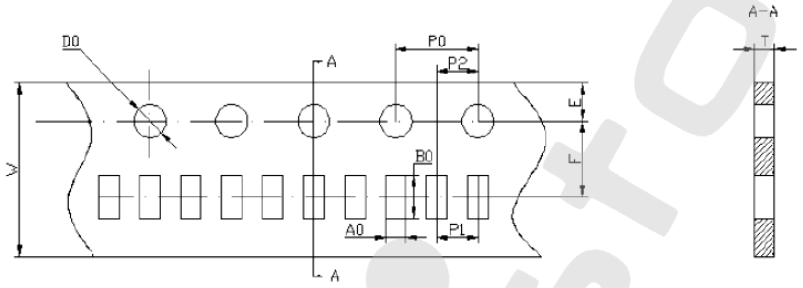
Reel Specifications & Packaging Quantity

Unit: mm

Type	A	B	N	C	G	Packaging
						Quality
NTG02	178.0±2.0	22.0±2.0	57.0±2.0	12.5±1.5	8.0	10K
NTG03	178.0±2.0	22.0±2.0	57.0±2.0	12.5±1.5	8.0	4K
NTG05	178.0±2.0	22.0±2.0	57.0±2.0	12.5±1.5	8.0	4K
NTG06	178.0±2.0	22.0±2.0	57.0±2.0	12.5±1.5	8.0	4K



Paper Tape Specifications



Unit: mm

Type	A0	B0	W	F	E	P1	P2	P0	D0	T
NTG02	0.65±0.1	1.15±0.1	8.0±0.2	3.5±0.1	1.75±0.2	2.0±0.1	2.0±0.1	4.0±0.2	1.55±0.1	0.6±0.1
NTG03	1.1±0.2	1.9±0.2	8.0±0.2	3.5±0.1	1.75±0.2	4.0±0.2	2.0±0.1	4.0±0.2	1.55±0.1	0.95±0.1
NTG05	1.5±0.2	2.3±0.2	8.0±0.2	3.5±0.1	1.75±0.2	4.0±0.2	2.0±0.1	4.0±0.2	1.55±0.1	0.95±0.1
NTG06	1.9±0.2	3.5±0.2	8.0±0.2	3.5±0.1	1.75±0.2	4.0±0.2	2.0±0.1	4.0±0.2	1.55±0.1	0.95±0.1

■Soldering Condition

