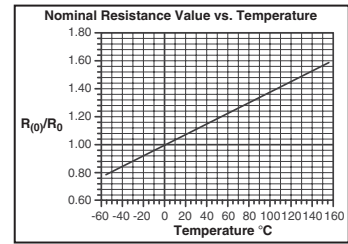


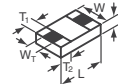


# PTS Series Platinum SMD Flat Chip Temperature Sensors



PTS SMD Flat Chip Temperature Sensors are the perfect choice for temperature control of electronics operating under varying environmental conditions. The highly controlled platinum thin film manufacturing process guarantees an outstanding stability of temperature characteristics which ensures reliable operation even under harsh conditions. Applications: • Automotive electronics • Aviation electronics • Industrial electronics Specifications: • Temperature Coefficient (0°C - 100°C): 3850ppm/K • Temperature Range: -55°C - 155°C • Insulation Resistance: >10MΩ • Tolerance Class: B

Size Code	Dimensions - mm					Mass (mg)
	H	L	W	WT	T1	
0603	0.45 +0.1/-0.05	1.55 ±0.05	0.85 ±0.1	>75% of W	0.3 +0.15/-0.2	1.9
0805	0.45 +0.1/-0.05	2.0 ±0.1	1.25 ±0.15	>75% of W	0.4 +0.1/-0.2	4.6
1206	0.55 ±0.1	3.2 +0.1/-0.2	1.6 ±0.15	>75% of W	0.4 +0.1/-0.2	9.2



Size Code	Resistance Value R0 at 0°C (Ω)	Thermal Response Time† (s)		Measurement Current I meas. (DC) (mA)	Digi-Key Part No.	Cut Tape Price Each			Digi-Key Part No.	Tape and Reel Pricing 1,000	Vishay Part No.
		t0.5	t0.9			1	10	100			
0603	100	≤1.0	≤2.0	0.1 - 0.25	PTS0603100CT-ND	2.65	2.32	1.83	PTS0603100TR-ND	993.01	PTS060301B100RP100
	100	≤1.5	≤3.0	0.1 - 1.0	PTS0805100CT-ND	3.32	2.91	2.29	PTS0805100TR-ND	1245.75	PTS080501B100RP100
0805	500	≤1.5	≤3.0	0.1 - 0.25	PTS0805500CT-ND	3.32	2.91	2.29	PTS0805500TR-ND	1245.75	PTS080501B500RP100
	100	≤2.0	≤5.0	0.1 - 1.0	PTS1206100CT-ND	4.37	3.83	3.01	PTS1206100TR-ND	1640.08	PTS120601B100RP100
1206	500	≤2.0	≤5.0	0.1 - 0.25	PTS1206500CT-ND	4.37	3.83	3.01	—	—	PTS120601B500RP100
	1000	≤2.0	≤5.0	0.1 - 0.25	PTS12061.0KCT-ND	4.37	3.83	3.01	PTS12061.0KTR-ND	1640.08	PTS120601B1K00RP100

† Flowing Air (v = 3.0 m/s)



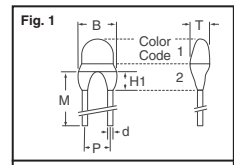
# Leaded NTC Thermistors — Accuracy Line



These thermistors have a negative temperature coefficient. Fig. 1 - The device consists of a chip with two tinned Ni-leads and is color coded. Fig. 2 - The device consists of a chip with two tinned solid copper-plated leads, is gray lacquered and color coded, but not insulated. Applications: Temperature sensing and control.

Fig.	B (max.)	d	Dimensions - mm		L	M	P	T (max.)
			H1 (max.)	H2 (max.)				
1	3.4	0.4	2.0 ±1.0	—	—	40.0 ±1.5	2.54	3.0
2	3.3 ±0.5	0.6 ±0.06	2.0 ±1.0	6.0	24.0 ±1.5	—	2.54	3.0

Fig.	Resistance @ 25°C (Ω)	Tolerance @ 25°C	B Value/B Tolerance @ B25/B85	Color Code				Digi-Key Part No.	Price Each			Vishay Part No.
				1	2	3	4		1	10	50	
1	10k	±1%	3977K ±0.75%	Blue	Blue	—	—	BC2299-ND	1.14	.78	.74	NTCLE203E3103FB0
	100k	±1%	4190K ±1.5%	Brown	Brown	—	—	BC2300-ND	1.20	.82	.78	NTCLE203E3104FB0
	10k	±2%	3977K ±0.75%	Blue	Blue	—	—	BC2298-ND	.68	.47	.44	NTCLE203E3103GB0
2	6.8k	±2%	3977K ±0.75%	Blue	Gray	Red	Red	BC2560-ND	.73	.50	.47	NTCLE100E3682GB0
	2.7k	±3%	3977K ±0.75%	Red	Violet	Red	Orange	BC2312-ND	.54	.37	.35	NTCLE100E3272HB0
	4.7k	±3%	3977K ±0.75%	Yellow	Violet	Red	Orange	BC2313-ND	.43	.30	.28	NTCLE100E3472HB0
	10k	±3%	3977K ±0.75%	Brown	Black	Orange	Orange	BC2311-ND	.43	.30	.28	NTCLE100E3103HB0
	47k	±3%	4090K ±1.5%	Yellow	Violet	Orange	Orange	BC2314-ND	.43	.30	.28	NTCLE100E3473HB0
	2.2k	±5%	3977K ±0.75%	Red	Red	Red	Gold	BC2304-ND	.36	.25	.23	NTCLE100E3222JB0
	3.3k	±5%	3977K ±0.75%	Orange	Orange	Red	Gold	BC2307-ND	.36	.25	.23	NTCLE100E3332JB0
	6.8k	±5%	3977K ±0.75%	Blue	Gray	Red	Gold	BC2310-ND	.36	.25	.23	NTCLE100E3682JB0
	10k	±5%	3977K ±0.75%	Brown	Black	Orange	Gold	BC2301-ND	.36	.25	.23	NTCLE100E3103JB0
	15k	±5%	3740K ±2%	Brown	Green	Orange	Gold	BC2303-ND	.36	.25	.23	NTCLE100E3153JB0
	22k	±5%	3740K ±2%	Red	Red	Orange	Gold	BC2305-ND	.36	.25	.23	NTCLE100E3223JB0
	33k	±5%	4090K ±1.5%	Orange	Orange	Orange	Gold	BC2308-ND	.36	.25	.23	NTCLE100E3333JB0
	47k	±5%	4090K ±1.5%	Yellow	Violet	Orange	Gold	BC2309-ND	.36	.25	.23	NTCLE100E3473JB0
	68	±5%	3390K ±3%	Blue	Gray	Black	Gold	BC2554-ND	.36	.25	.23	NTCLE100E3689JB0
	100k	±5%	4190K ±1.5%	Brown	Black	Yellow	Gold	BC2302-ND	.36	.25	.23	NTCLE100E3104JB0
	220k	±5%	4370K ±2.5%	Red	Red	Yellow	Gold	BC2306-ND	.36	.25	.23	NTCLE100E3224JB0

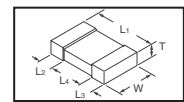


# Surface Mount NTC Chip Thermistors



Surface Mount NTC Chip Thermistors have a negative temperature coefficient. The device has no marking. Terminations: • 0402 and 0603: NiSn • 0805: Ni Applications: • Temperature compensation, sensing and protection in: battery chargers, consumer equipment, and office equipment Features: • High accuracy over wide ranges of operating temperature (-40°C - 150°C) • Suitable for wave or reflow soldering • High sensitivity • Taped on reel

Size Code	Dimensions - mm				
	L1	W	T	L2 and L3 Minimum	L4 Minimum
0402	1.0 ±0.15	0.5 ±0.15	0.5 ±0.15	0.1	0.3
0603	1.6 ±0.15	0.8 ±0.15	0.8 ±0.15	0.2	0.4
0805	2.0 ±0.2	1.25 ±0.15	0.8 ±0.15	0.2	0.55



Size Code	Resistance @ 25°C (kΩ)	Tolerance @ 25°C	B Value/ B Tolerance @ B25/B85	Digi-Key Part No.	Cut Tape Price Each			Tape and Reel†		Vishay Part No.
					1	10	50	Qty.	Pricing	
0402	4.7	±3%	3595K ±3%	BC2326CT-ND	.29	.20	.19	10,000	140.22/M	NTCS0402E3472HMT
	10	±3%	3490K ±3%	BC2328CT-ND	.29	.20	.19	10,000	140.22/M	NTCS0402E3103HLT
	15	±3%	3600K ±3%	BC2330CT-ND	.29	.20	.19	10,000	140.22/M	NTCS0402E3153HHT
	22	±3%	3590K ±3%	BC2332CT-ND	.29	.20	.19	10,000	140.22/M	NTCS0402E3223HMT
	33	±3%	3670K ±3%	BC2334CT-ND	.29	.20	.19	10,000	140.22/M	NTCS0402E3333HMT
	47	±3%	4075K ±3%	BC2336CT-ND	.29	.20	.19	10,000	140.22/M	NTCS0402E3473HXT
	68	±3%	3910K ±3%	BC2338CT-ND	.29	.20	.19	10,000	140.22/M	NTCS0402E3683HHT
	100	±3%	3950K ±3%	BC2340CT-ND	.29	.20	.19	10,000	140.22/M	NTCS0402E3104HXT
	4.7	±5%	3595K ±3%	BC2327CT-ND	.24	.17	.16	10,000	116.85/M	NTCS0402E3472JMT
	10	±5%	3490K ±3%	BC2329CT-ND	.24	.17	.16	10,000	116.85/M	NTCS0402E3103JLT
	15	±5%	3600K ±3%	BC2331CT-ND	.24	.17	.16	—	—	NTCS0402E3153JHT
	22	±5%	3590K ±3%	BC2333CT-ND	.24	.17	.16	10,000	116.85/M	NTCS0402E3223JMT
	33	±5%	3670K ±3%	BC2335CT-ND	.24	.17	.16	10,000	116.85/M	NTCS0402E3333JMT
	47	±5%	4075K ±3%	BC2337CT-ND	.24	.17	.16	10,000	116.85/M	NTCS0402E3473JXT
	68	±5%	3910K ±3%	BC2339CT-ND	.24	.17	.16	10,000	116.85/M	NTCS0402E3683JHT
0603	100	±5%	3950K ±3%	BC2341CT-ND	.24	.17	.16	10,000	116.85/M	NTCS0402E3104JHT
	10	±3%	3610K ±1%	BC2290CT-ND	.40	.27	.26	4,000	199.19/M	NTCS0603E3103HMT
	68	±3%	3985K ±1%	BC1547CT-ND	.44	.30	.28	4,000	217.14/M	NTCS0603E3683JHT
	100	±3%	4100K ±1%	BC2291CT-ND	.40	.27	.26	4,000	199.19/M	NTCS0603E3104HXT
	4.7	±5%	3830K ±1%	BC1538CT-ND	.31	.21	.20	—	—	NTCS0603E3472JHT
0805	10	±5%	3610K ±1%	BC2289CT-ND	.31	.21	.20	4,000	154.30/M	NTCS0603E3103JMT
	15	±5%	3600K ±1%	BC1540CT-ND	.42	.29	.27	4,000	247.44/M	NTCS0603E3153JMT
	100	±5%	4100K ±1%	BC1542CT-ND	.42	.29	.27	—	—	NTCS0603E3104JXT
	22	±1%	3800K ±1%	BC2571CT-ND	.91	.62	.59	4,000	455.32/M	NTCS0805E3223FHT
	100	±1%	4100K ±1%	BC2562CT-ND	.91	.62	.59	4,000	455.32/M	NTCS0805E3104FXT
	15	±2%	3700K ±1%	BC2568CT-ND	.43	.29	.28	4,000	211.81/M	NTCS0805E3153GMT
	33	±2%	3920K ±1%	BC2572CT-ND	.43	.29	.28	8,000	207.58/M	NTCS0805E3333GHT
	2.2	±5%	3600K ±1%	BC2294CT-ND	.29	.20	.19	4,000	143.08/M	NTCS0805E3222JMT
	4.7	±5%	3500K ±1%	BC2296CT-ND	.29	.20	.19	4,000	143.08/M	NTCS0805E3472JMT
	10	±5%	3570K ±3%	BC2292CT-ND	.29	.20	.19	4,000	143.08/M	NTCS0805E3103JMT
	10	±5%	3940K ±1%	BC2561CT-ND	.29	.20	.19	4,000	143.08/M	NTCS0805E3103JHT
	15	±5%	3700K ±1%	BC2293CT-ND	.29	.20	.19	4,000	143.08/M	NTCS0805E3153JMT
22	±5%	3800K ±1%	BC2295CT-ND	.29	.20	.19	4,000	143.08/M	NTCS0805E3223JHT	
47	±5%	3960K ±1%	BC2297CT-ND	.29	.20	.19	4,000	143.08/M	NTCS0805E3473JHT	
330	±5%	3930K ±1%	BC2575CT-ND	.29	.20	.19	4,000	143.08/M	NTCS0805E3334JHT	
470	±5%	4025K ±1%	BC2581CT-ND	.29	.20	.19	4,000	143.08/M	NTCS0805E3474JHT	

• RoHS Compliant † For Tape and Reel part number change CT-ND to TR-ND.

Digi-Reel® Most SMT cutdown parts are available on a Digi-Reel®. For Digi-Reel part number, change 1-ND to 6-ND or CT-ND to DKR-ND. See Digi-Key® Services on page 2 for additional information.

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