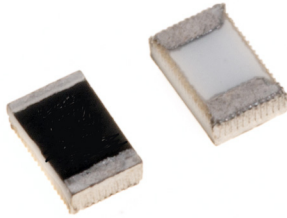


# NTS Series -- PRELIMINARY

Thin Film Platinum Temperature Sensor

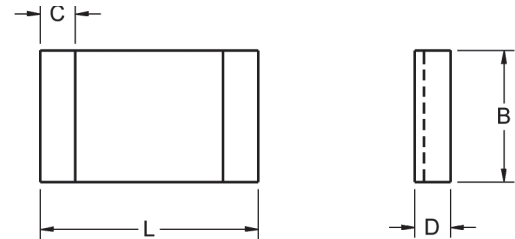


- Sizes: 0805 / 1206
- Standardized nominal values
- Wide temperature range from -50° to +150°C
- Class 0.1%, 0.15% and 0.3% tolerances
- TCR of 3850ppm from 0° to 100 °C
- DIN EN 60751 compliant
- Halogen Free



SPECIFICATIONS						
Type	Resistance Values (Ω @ 0°C)	DIN Class   Tolerance	Dimensions			
			L inches (mm)	B inches(mm)	D inches (mm)	C inches (mm)
NTS0805	100, 500, 1K	AA   0.1% (0° to +150°C)	0.079 ±0.008 (2.00 ± 0.2)	0.051 ±0.008 (1.30 ± 0.2)	0.019 ±0.008 (0.50 ± 0.2)	0.015 ±0.008 (0.40 ± 0.2)
NTS1206		A   0.15% (-30° to +150°C) B   0.3% (-50° to +150°C)	0.122±0.008 (3.10 ± 0.2)	0.059±0.008 (1.50 ± 0.2)	0.031±0.008 (0.80 ± 0.2)	0.025±0.008 (0.63 ± 0.2)

Resistance Value (Ω @ 0°C)	Recommended Measurement Current	Maximum Current
100	1.0 mAmps	7.0 mAmp
500	0.7 mAmp	3.0 mAmp
1K	0.1 mAmp	1.0 mAmp



Type	Self Heating Coefficient $\Delta t = i^2 * R * E$		Response Time (Seconds)			
	in Water (v=0.2m/s)	in Air (v=2m/s)	in Water (v=0.4m/s)		in Air (v=1m/s)	
NTS0805	0.02 K/mW	0.15 K/mW	0.1 (t <sub>0.5</sub> )	0.3 (t <sub>0.9</sub> )	2.6 (t <sub>0.5</sub> )	7.9 (t <sub>0.9</sub> )
NTS1206	0.02 K/mW	0.20 K/mW	0.1 (t <sub>0.5</sub> )	0.3 (t <sub>0.9</sub> )	3.3 (t <sub>0.5</sub> )	9.5 (t <sub>0.9</sub> )

Insulation Resistance	>10 MΩ at room temperature
Stability	< 500ppm / year
Terminations	Electroplated tin wrap-around contacts with diffusion barrier
Processing	Solderability per DIN IEC 68 part 2 Reflow: ≤ 240°C / 8s Flood: ≤ 260°C / 10s
Storage	MSL-1
Operating Conditions	NTS series temperature sensors may not be used in unprotected moist environments or in aggressive atmospheres. User should verify suitability on a case by case basis.

## Ordering Information

Part Description: Part Type - Resistance - DIN Class

Example: NTS1206 500 OHM AA

Bulk packaging is standard, card tape per EN 60286-3 is available in multiples of 5,000 pieces

Card tape packaging allows for a minimum 12 month storage in normal environmental conditions