

## FC – Product Series

Temperature Range:  $-60^{\circ}\text{C} \dots +200^{\circ}\text{C}$

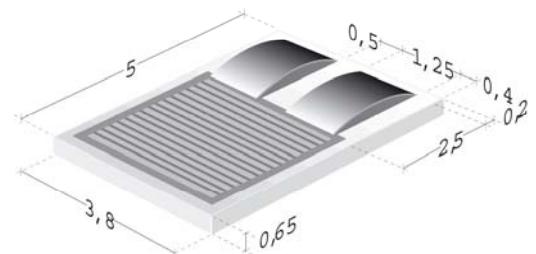
Nickel temperature sensor elements in FC (Flip Chip) construction  
Soldering junction (reflow solderable)

### Technical Data

<b>Specification:</b>	DIN 43760
<b>Temperature range:</b>	$-60^{\circ}\text{C}$ to $+200^{\circ}\text{C}$
<b>Temperature Coefficient:</b>	TCR = 6180 ppm/K (ND series)
<b>Classes:</b>	Class A $-60^{\circ}\text{C}$ to $+200^{\circ}\text{C}$ Class B $-60^{\circ}\text{C}$ to $+200^{\circ}\text{C}$
<b>Contact connection:</b>	Pads: 1FC = Contacts tin-coated (96.5Sn 3 Ag 0.5Cu), LMP lead-free, (reflow soldering) 2FC = Contacts tin-coated (5Sn 93.5Pb 1.5Ag), HMP, (reflow soldering) 3FC = Au-Pads (bonding pads) The soldering process might lead to changed resistance values, therefore the original DIN class cannot be guaranteed.
<b>Solderability:</b>	$235^{\circ}\text{C} \leq 8\text{s}$ (DIN IEC 68 T2-20, Ta Meth. 1) → 1FC, 2FC
<b>Resistance to soldering heat:</b>	$260^{\circ}\text{C}$ 10s (DIN IEC 68 T2-20, Ta Meth. 1A) → 1FC, 2FC
<b>Long-term stability:</b>	Max. Drift = 0.1% after 1000h at $200^{\circ}\text{C}$
<b>Note:</b>	Other chip sizes and TCR on request

### FC 538

<b>Chip Dimensions, L x W:</b>	5.0 x 3.8 mm
<b>Nominal Resistance at <math>0^{\circ}\text{C}</math> (ohm) :</b>	1000
<b>Measuring Current:</b>	1000Ω: 0.3 mA (max. 2 mA)



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# Nickel Temperature Sensors

**FC – Product Series**

**Temperature Range: –60°C...+200°C**

**Order Example:**

<b>N</b>	<b>D</b>	<b>1K0.</b>	<b>0603.</b>	<b>2FC.</b>	<b>B</b>
1	2	3	4	5	6



1. *Material Identification = Nickel temperature sensor*
2. *Characteristic Curve = 6180 ppm/K*
3. *Resistance Value in ohm = 1000Ω / 0°C*
4. *Chip Dimension = 1.5 x 0.75 mm*
5. *Contact Connection = Tin-coated contacts, soldering depot, HMP*
6. *Tolerance Class = DIN 43760 Class B*



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