

### Surface-Mount 0805, PTC Thermistor for Over-Temperature Protection



#### KEY BENEFITS

- Well defined temperature-protection levels
- Very fast reaction time
- Accurate resistance for ease of circuit design
- Excellent long-term performance
- Small case size
- Lead (Pb)-free terminations

#### APPLICATIONS

- Industrial electronics
- Power supplies
- Electronic data processing
- Motor protection
- Lighting ballasts
- DC/DC converters

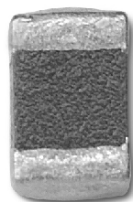
#### RESOURCES

- Datasheet: PTCSS12 Series - <http://www.vishay.com/doc?29005>
- For technical questions contact [nlr@vishay.com](mailto:nlr@vishay.com)

Resistors - Very Fast Reaction Time



### Surface-Mount 0805, PTC Thermistor for Over-Temperature Protection



#### FEATURES

- Well-defined protection temperature levels
- Very fast reaction time
- Accurate resistance for ease of circuit design
- Excellent long term behavior
- Small size and rugged
- UL approved according standard UL1434 (file: E148885)
- PTC thermistor with lead (Pb)-free terminations
- Compliant to RoHS directive 2011/65/EU and in accordance to WEEE 2002/96/EC



**RoHS**  
COMPLIANT

#### QUICK REFERENCE DATA

PARAMETER	VALUE	UNIT
Resistance at 25 °C	470 ± 50 %	Ω
Maximum resistance at - 40 °C	2500	Ω
Maximum resistance at (T <sub>n</sub> - 5) °C	4700	Ω
Minimum resistance at (T <sub>n</sub> + 5) °C	4700	Ω
Minimum resistance at (T <sub>n</sub> + 15) °C	15 000	Ω
Maximum voltage	25	V
Dissipation factor	± 3.5	mW/K
Temperature range	- 40 to (T <sub>n</sub> + 15)	°C
Weight	± 0.015	g
Climatic category	40/125/56	

#### APPLICATIONS

Over-temperature protection and control in:

- Industrial electronics
- Power supplies
- Electronic data processing
- Motor protection
- Electronic ballasts
- DC-to-DC converters

#### DESCRIPTION

These directly heated thermistors have a positive temperature coefficient and are primarily intended for sensing.

#### NOMINAL WORKING TEMPERATURES AND ORDERING INFORMATION

CODE NUMBERS 2381 675....	T <sub>n</sub> (°C)	R <sub>max.</sub> at T <sub>n</sub> - 5 °C (Ω)	R <sub>min.</sub> at T <sub>n</sub> + 5 °C (Ω)	R <sub>min.</sub> at T <sub>n</sub> + 15 °C (Ω)
20707	70	4700	4700	15 000
20807	80	4700	4700	15 000
20907	90	4700	4700	15 000
21007	100	4700	4700	15 000
21107	110	4700	4700	15 000
21207	120	4700	4700	15 000
21307	130	4700	4700	15 000
21407	140	4700	4700	15 000

#### Note

- Other sizes are available on request

Revision 09-Apr-09

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