



SMD PTC THERMISTORS

2381 675 2xxx7



PTC Temperature Sensor SMD 0805 2381 675 2xxx7

Surface-Mount PTC Thermistors for Temperature Protection

KEY BENEFITS

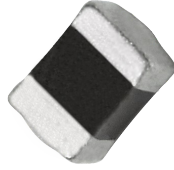
- Well defined temperature-protection levels
- Very fast reaction time
- Accurate resistance for ease of circuit design
- Excellent long-term performance
- Small case size
- Lead (Pb)-free terminations

APPLICATIONS

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

Datasheet is available on our web site at www.vishay.com
for 2381 675 2xxx7 - <http://www.vishay.com/doc?29005>

PTC Thermistors, for High 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
- PTC thermistor with lead (Pb)-free terminations
- Component in accordance to RoHS 2002/95/EC and WEEE 2002/96/EC

APPLICATIONS

- 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.

QUICK REFERENCE DATA		
PARAMETER	VALUE	UNIT
Maximum resistance at 25 °C	705	Ω
Minimum resistance at (T _n + 5) °C	4700	Ω
Maximum (DC) voltage	25	V
Temperature range	- 20 to (T _n + 15)	°C
Weight:	≈ 0.015	g
Climatic category	25/125/56	

NOMINAL WORKING TEMPERATURES AND ORDERING INFORMATION

CODE NUMBERS 2381 675...	T _n (°C)	R _{max} at T _n - 5 °C Ω	R _{min} at T _n + 5 °C Ω	R _{min} at T _n + 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

Document Number: 29005
Revision: 31-Aug-06

For technical questions, contact: nleurope@vishay.com

www.vishay.com
1

NOTICE Specifications of the products displayed herein are subject to change without notice. Vishay Intertechnology, Inc., or anyone on its behalf, assumes no responsibility or liability for any errors or inaccuracies. Information contained herein is intended to provide a product description only. No license, express or implied, by estoppel or otherwise, to any intellectual property rights is granted by this document. Except as provided in Vishay's terms and conditions of sale for such products, Vishay assumes no liability whatsoever and disclaims any express or implied warranty, relating to sale and/or use of Vishay products including liability or warranties relating to fitness for a particular purpose, merchantability, or infringement of any patent, copyright, or other intellectual property right. The products shown herein are not designed for use in medical, life-saving, or life-sustaining applications. Customers using or selling these products for use in such applications do so at their own risk and agree to fully indemnify Vishay for any damages resulting from such improper use or sale.

For technical questions, contact nleurope@vishay.com

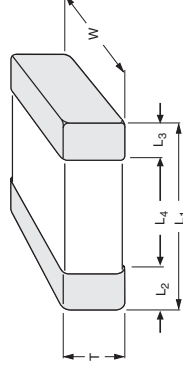
ELECTRICAL CHARACTERISTICS	
PARAMETER	VALUES
Maximum resistance at 25 °C	705 Ω
Maximum resistance at (T _n - 5) °C	4700 Ω
Minimum resistance at (T _n + 15) °C	15 000 Ω
Minimum resistance at (T _n + 5) °C	4700 Ω
Maximum voltage	25 V (AC or DC)

CATALOG NUMBERS AND PACKAGING

12NC	SAP	SPQ
2381 675 20707	PTCSS12T071DTE	4000
2381 675 20807	PTCSS12T081DTE	4000
2381 675 20907	PTCSS12T091DTE	4000
2381 675 21007	PTCSS12T101DTE	4000
2381 675 21107	PTCSS12T111DTE	4000
2381 675 21207	PTCSS12T121DTE	4000
2381 675 21307	PTCSS12T131DTE	4000
2381 675 21407	PTCSS12T141DTE	4000

COMPONENT OUTLINE

Dimensions in millimeters



L ₁	W	T	L ₂ and L ₃ MIN.
2.00 ± 0.2	1.25 ± 0.2	0.90 ± 0.15	0.4 ± 0.25

Revision 31-Aug-06