SMD 0805, PTC Thermistors 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
- Material categorization: for definitions of compliance please see www.vishay.com/doc?99912

RoHS COMPLIANT

QUICK REFERENCE DATA

PARAMETER	VALUE	UNIT
Resistance at 25 °C	235 to 705	Ω
Nominal working temperature (T_n)	70 to 140	°C
Maximum voltage	25	V
Dissipation factor	~ 3.5	mW/K
Operating temperature range (1)	-40 to 155	°C
Weight	~ 0.015	g

Note

(1) Max operating temperature range is T_n + 15 °C, indicated value is for T_n = 140 °C.

NOMINAL WORKING TEMPERATURE AND ORDERING INFORMATION

SAP ORDERING NUMBER	NOMINAL WORKING TEMPERATURE
TAPE AND REEL	T_n (°C)
PTCSS12T071DTE	70
PTCSS12T081DTE	80
PTCSS12T091DTE	90
PTCSS12T101DTE	100
PTCSS12T111DTE	110
PTCSS12T121DTE	120
PTCSS12T131DTE	130
PTCSS12T141DTE	140

APPLICATIONS

Over-temperature protection and control in:

- Industrial electronics
- SMPS
- Electronic data processing
- Motor protection
- LED-drivers and control
- Power inverters

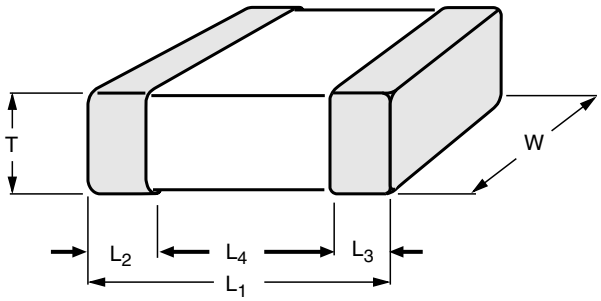
DESCRIPTION

These PTC sensing thermistors consist of a medium resistivity doped barium titanate ceramic beam, glass coated and have tin plated nickel barrier over silver electrodes compatible with wave or reflow soldering technology.

PACKAGING

PTC thermistors are available in paper tape on reel with an SPQ of 4000 pieces.

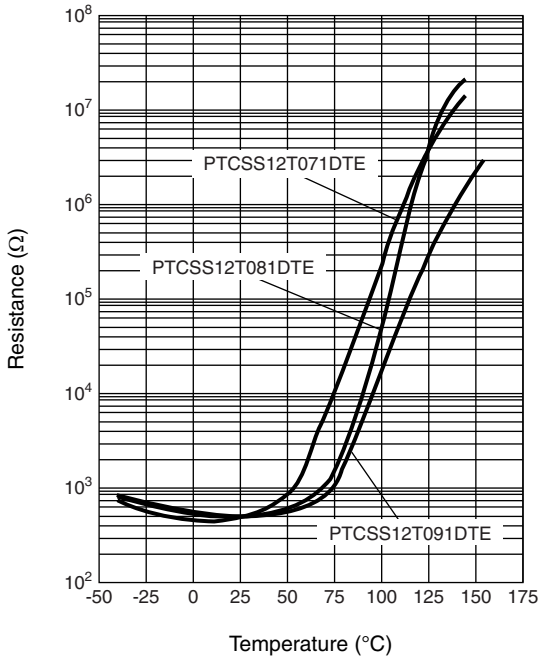
COMPONENT OUTLINE DIMENSIONS (in mm)

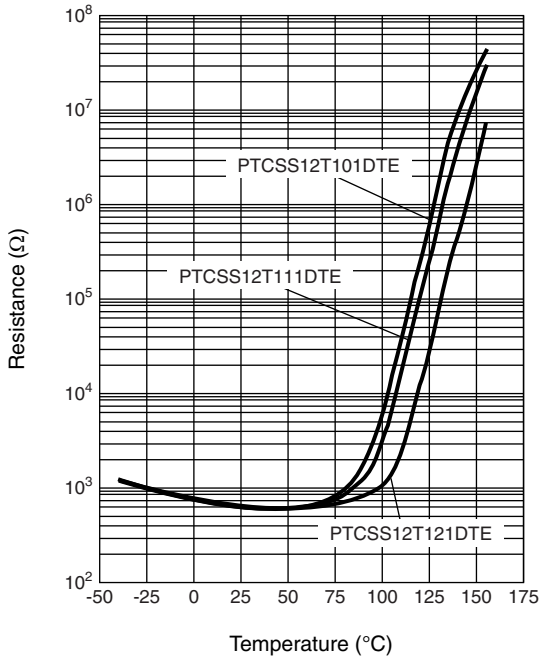


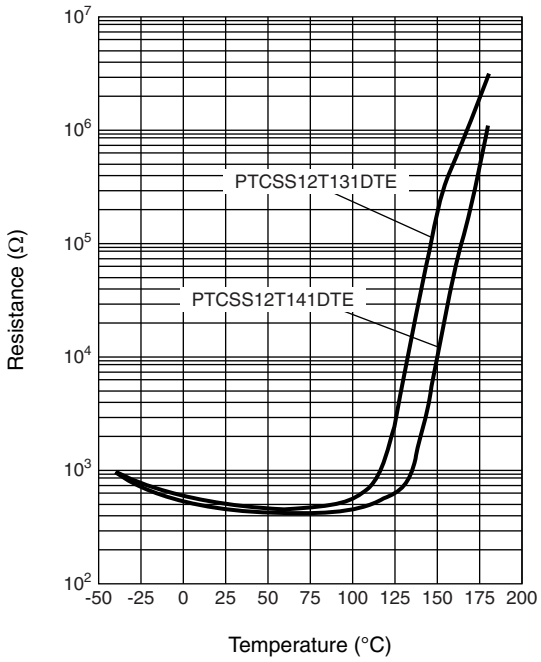
L_1	W	T	L_2 and L_3 MIN.
2.00 ± 0.2	1.25 ± 0.2	0.90 ± 0.15	0.4 ± 0.25

ELECTRICAL CHARACTERISTICS	
PARAMETER	**VALUES**
Resistance at 25 °C	470 Ω ± 50 %
Maximum resistance at -40 °C	2500 Ω
Maximum resistance at (T_n - 5) °C	4700 Ω
Minimum resistance at (T_n + 5) °C	4700 Ω
Minimum resistance at (T_n + 15) °C	15 000 Ω
Maximum voltage	25 V (AC or DC)

TYPICAL RESISTANCE/TEMPERATURE CHARACTERISTIC







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Mouser Electronics

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