



ESL ELECTROSCIENCE

CERAMIC TAPES &
THICK-FILM MATERIALS

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CERMET THERMISTOR SYSTEM

PTC-2600 SERIES

The PTC-2600 Series of thermistor pastes are designed for making positive temperature coefficient thermistor films. The materials are designed for applications for which thermistors are required to be intimately bonded to the substrate. The materials are useful in applications where temperature compensation of hybrid circuits and fast response sensors is required. When used as temperature sensors, a linear response is obtained from ambient to temperatures in excess of 300°C. The PTC-2600 Series may be used to replace discrete thermistor components with the advantage of reduced size and lower cost.

PASTE DATA

RHEOLOGY:	Thixotropic, screen printable paste
VISCOSITY: (Brookfield RVT, 10 rpm, ABZ spindle, 25.5°C±0.5°C)	200±30 Pa·s
SHELF LIFE: (20°C)	6 months

PROCESSING

SCREEN MESH/EMULSION:	200/18.0 µm
LEVELING TIME: (20°C)	5-10 minutes
DRYING AT 125°C:	10-15 minutes
FIRING TEMPERATURE: (in air)	850°C
TIME AT PEAK TEMPERATURE:	10 minutes
RATE OF ASCENT/DESCENT:	50°C-60°C/minute
SUBSTRATE FOR CALIBRATION:	96% alumina
RECOMMENDED TERMINATION:	9912-A (Ag)
THINNER:	ESL 401

ESL Europe (KOP) PTC-2600 9711-C

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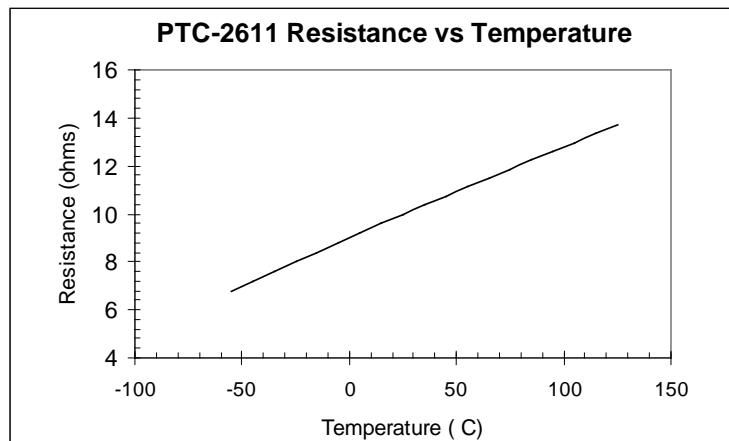
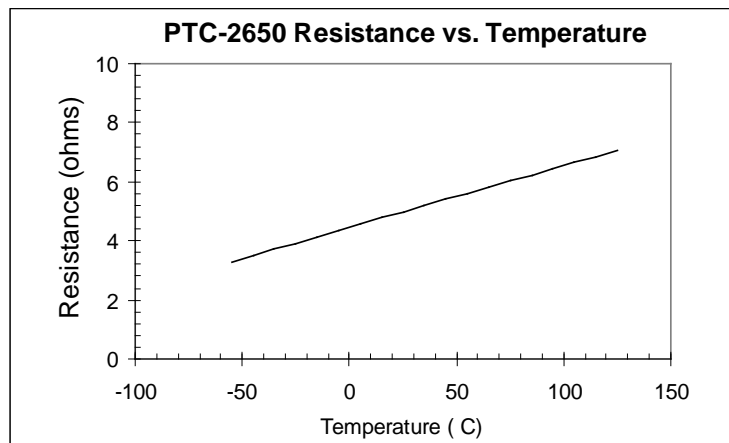
See Caution and Disclaimer on other side.

TYPICAL PROPERTIES

DRIED PRINT THICKNESS: (on 96% alumina)

$22.5 \pm 2.5 \mu\text{m}$

	<u>RESISTIVITY</u>	<u>HOT TCR, ppm/°C</u> (+25°C to +125°C)	<u>COLD TCR, ppm/°C</u> (-55°C to +25°C)
PTC-2650	5 $\Omega/\text{sq.} \pm 10\%$	+4000 ± 500	+4000 ± 500
PTC-2611	10 $\Omega/\text{sq.} \pm 10\%$	+4100 ± 500	+4100 ± 500



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CAUTION: Proper industrial safety precautions should be exercised in using these products. Use with adequate ventilation. Avoid prolonged contact with skin or inhalation of any vapours emitted during use or heating of these compositions. The use of safety eye goggles, gloves or hand protection creams is recommended. Wash hands or skin thoroughly with soap and water after using these products. Do not eat or smoke in areas where these materials are used. Refer to appropriate MSDS sheet.

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