Heraeus

Technical Data Sheet

THICK FILM MATERIALS

Product Type: Resistors Product Name: LTR4600 Series



Flexible Polymer Resistor System

Description

The LTR4600 series is a screen printable polymer resistor system designed for printing and curing on both untreated and treated flexible plastic films. The LTR4600 series provides stable resistance values when cured at low temperatures. The LTR4600 series is compatible with Heraeus low temperature dielectrics and conductors.

Key Benefits

- REACH¹ and ROHS² compliant
- Stable resistance values
- Compatible with a variety of substrates
- Compatible with Heraeus low temperature conductor and dielectric systems

Typical Properties

LTR4600 Series ^a	LTR4611	LTR4612	LTR4615	LTR4621	LTR4631
Resistivity ^b (Ωsq/mil)	10	20	50	100	1k
Viscosity (kcps)	60-130	60-130	60-130	60-130	60-130

*Processing conditions

a) Cured at peak temperature of 120°C for 10 minutes

b) Resistor size 1 square pattern printed with 280 mesh screen to cured film thickness of 8-10 μ m on PET film.

Recommended Processing Guidelines

Printing Conditions:

250 - 325 stainless steel mesh or nylon screen, 0.3-0.5 mil mil emulsion thickness

Termination Conductor:

LTC3602

Curing: 120°C for 10 minutes

Thickness Information (μm): Cured film: 8-10 μm

Adhesion: Cross Hatch Tape Test Method

 $PET \ge 4B$ cross hatch

Recommended Substrates:

Treated and untreated polyester

Thinner: CL84-11053

Cleaning:

Clean uncured resin with Acetone or similar solvent.

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Warranty:

Material guaranteed to meet specifications for 6 months from date of shipment.

Handling & Precautions:

Use in a well-ventilated area. Avoid contact with skin. Wash with soap and water.

Storage:

Store in a dry location at 5 – 25 °C.

DO NOT REFRIGERATE.

Allow paste to come to room temperature prior to opening. Spatulate well before using, as settling may occur during storage.

Legend:

¹⁾ RoHS compliant according to the <u>latest</u> ** Directives (European Union) of Restriction of Hazardous Substances ("RoHS") and its subsequent amendments (including the exceptions related to Pb)

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