

LTCC Materials

CT 701



Low Temperature Cofireable Heratape (DPIS*)

* Development Product Information Sheet

Description:

Heraeus low temperature cofireable tape called HERATAPE® CT 701 is designed to offer an alternative to producing complex multilayer circuits using gold or silver conductors.

Heratape CT 701 is available on reel:

Length: 50 – 150 m
 Width: 320 mm (12.6 inch)
 Thickness: 50µm, 130 µm, 200 µm, 300 µm
 (2.0mil, 5.1 mil, 8 mil, 12 mil).

(Other tape thickness on inquiry)

Compatibility:

Cofireable

	Gold System	Silver System
Inner Layer	TC 7102	TC 7303
Via Fill	TC 7101	TC 7301
		TC 7304
Large Area Ground Planes	TC 7103	TC 7303

Postfireable

Ag-Pd	TC 7404
Ag	C 1075 SD
Ag-Pt	C 1076 SD
Au	C 5756
Resistor	R 8900 T
Overglaze	TO 7003

(Postfireable pastes see also separate overview)

Lamination Conditions:

Stack each printed and dried layer in a confined lamination die, with the dull side up. In order to assist homogeneity, rotate 90 °.

Cofiring Process:

Pressure: 24 – 27 N / mm²
 (3500 psi - 3900 psi)
 Temperature: 60 – 80 °C
 Time: 5 – 10 minutes

Firing Conditions:

Burnout and firing in a programmable box oven with controlled air flow.

Heating rate: 2 – 4 K/min.
 Dwell time at peak temperature: 20 – 30 min.
 Peak temperature: 850 °C – 865 °C
 Cooling rate: approx. 3 – 6 K/min

Burnout and firing in a belt furnace:

Firing cycle including Burnout: 6 – 8 hrs
 Dwell time at peak temperature: 20 – 30 min
 Peak temperature: 850 – 865 °C

Setter for Laminated parts: Al₂O₃ 96%

Unfired Properties

Sheet Density, unfired:

(Typical Data)

1.83 g/cm³

® HERATAPE = reg. Trademark

