

Conductors

LPA 88 – 11 S

Platinum Conductor Paste for High Temperatures

Description:

LPA 88 – 11 S is a fritted platinum conductor paste. Continuous operation at high temperatures (up to 1000 °C) is possible.

Processing:

1. Spatulate well prior to processing. When stored in a fridge the paste should have acquired room temperature before being opened to avoid condensation.
2. Print through a 200 – 325 mesh screen.
3. Level at room temperature for 5 – 10 minutes.
4. Dry at 150°C for 10 minutes.
5. Fire in air at a temperature of at least 950°C (peak) for 10 minutes. 1100°C or more is preferred, adhesion increases with temperature. Heating and cooling rates are determined by substrate material used (a recommended ramp rate for Al₂O₃ is 20 – 40 K / min.)

Thinner:

HVS 100

Properties (Paste):

Form:	Thixotropic paste
Printing Speed:	≤ 100 mm / s
Viscosity :	20 – 40 Pas (25 °C, D = 100 s ⁻¹)
Shelf Life:	12 months, with correct storage at 2 to 23 °C, in a cool, dry, dark place and with the container tightly shut.

Properties (Fired)*:

Resistivity **:	≤ 100 mOhms / □ (FFT: 8 µm)
HTCR ***: (Hot Temperature Coefficient of Resistance of 25°C – 125°C)	+ 3500 ppm / K

Compatibility:

Dielectrics:	IP 211 series
Substrate:	Al ₂ O ₃

* Typical properties based on laboratory test methods. For optimum results all materials should be fired in a profiled furnace supplied with dried, hydrocarbon-free and other contaminant-free air (PP-1).

** Measured after printing with a 200 mesh steel screen; screen thickness and emulsion thickness combined was c. 100 µm, and the resultant printed track was 500 µm wide.

*** Typical value, measured on a meander track of 600 squares

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The descriptions and engineering data shown here have been compiled by Heraeus using commonly-accepted procedures, in conjunction with modern testing equipment, and have been compiled as according to the latest factual knowledge in our possession. The information was up-to date on the date this document was printed (latest versions can always be supplied upon request). Although the data is considered accurate, we cannot guarantee accuracy, the results obtained from its use, or any patent infringement resulting from its use (unless this is contractually and explicitly agreed in writing, in advance). The data is supplied on the condition that the user shall conduct tests to determine materials suitability for a particular application.

Europe [TH]
W. C. Heraeus GmbH
Thick Film Materials Division
Heraeusstr. 12 – 14
63450 Hanau
Germany
Tel: +49 (6181) 35 – 5466
E-Mail: th-info@heraeus.com
Internet: www.heraeus-th.com

North America
Heraeus Incorporated
Thick Film Materials Division
24 Union Hill Road
W. Conshohocken, PA 19428
USA
Tel: +1 (610) 825 – 6050
E-Mail: techservice.hcd@heraeus.com
Internet: www.thickfilm.net

Asia [TH]
Heraeus Materials Technology Shanghai Ltd.
No. 1 Guang Zhong Road
Zhuanquiao Town, Minhang District
201108 Shanghai
People's Republic of China
Tel: +86 (21) 6442 6838
E-Mail: th.hmts@heraeus.com
Internet: www.heraeus-th.com