

Technical Data Sheet

Printed Electronic Materials

PA-1510 series



JNC Corporation has a 15 year history in the development and commercialization of Printed Electronic Materials. JNC's Printed Electronic Materials are inkjet printable polymeric materials used as electrical insulators, structural and masking materials. These materials offer improved performance and processability in various electronic, display, semiconductor, MEMS, biotech and energy applications.

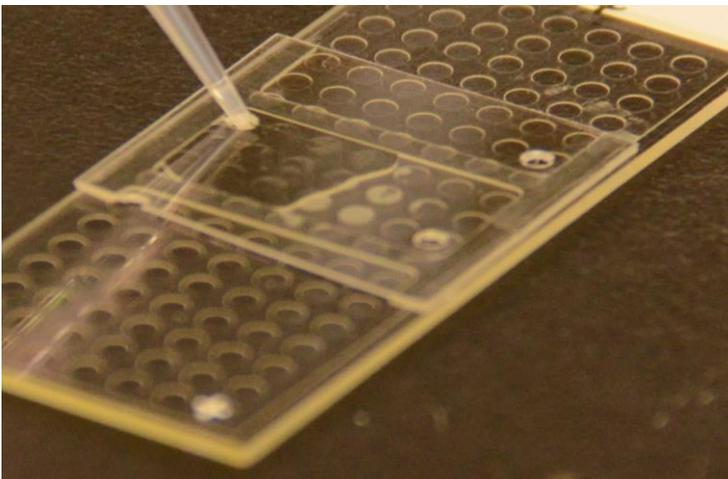
JNC's Printed Electronic Materials product line includes a series of thermal-cure polyimide (PI) and UV-cure polyacrylate (PA) materials suitable for a wide variety of inkjet printheads.

More specific applications include:

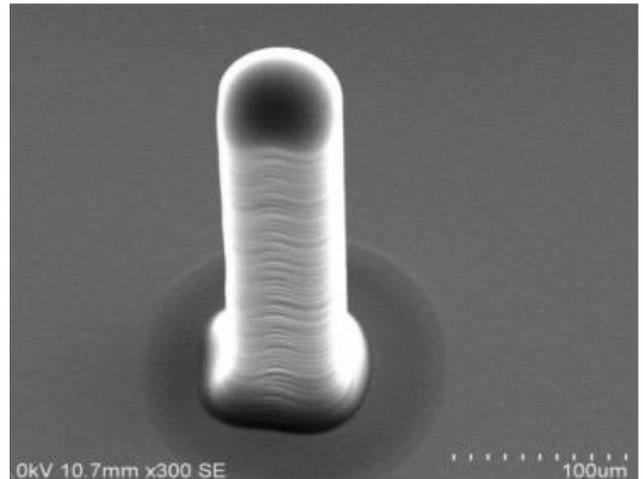
- Power, logic and analog ICs
- Wafer-level and embedded substrate packaging
- Temporary bonding agents
- CMOS imaging sensors
- Dry etch and CVD masks

JNC's PI- and PA- inkjet printable materials are unique in the industry in that they offer:

- High-speed UV-cure or higher heat resistant thermal-cure
- Reliable jetting and fine feature printing
- High substrate adhesion
- Mechanical and dimensional stability over a wide temperature range
- Long-term electrical insulation reliability



Inkjet printed UV-cure polyacrylate array in next-generation biotech product



3.5:1 aspect ratio inkjet printed UV-cure polyacrylate (PA-1510 series)

Product Table

Characteristics	PA-1510-003 ⁽¹⁾	PA-1510-005 ⁽¹⁾
Solids content [wt.%]	100	100
Viscosity [mPa*s] @ 25°C	5.4	4.4
Surface tension [mN/m] @ 23°C	37	37
Printing methods	Inkjet	Inkjet
For UV curing	1,000 mJ/cm ² @ 365 nm	1,000 mJ/cm ² @ 365 nm
Tg [°C]	124	135
Solubility ⁽²⁾ (Solubility time)	Completely Dissolved (2 hours)	Completely Dissolved (5 min.)

(1) Development Stage Product: Samples, data, shipments, etc. may be limited.

(2) Stripper: 2.38% TMAH solution (25°C).

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