

- ▶ Extensive portfolio of Laser Direct Structuring (LDS) compounds
- ▶ Fast and consistent Two-Shot Platable solutions
- ▶ Precise control of catalyst and additives for maximum efficiency

KEY BENEFITS

LDS Compounds

- Licensed and approved formulas for low and high temperature solders.
- Amorphous & semi-crystalline polymer formulation
- Ensure accurate circuitry

Two-Shot Molding Compounds

- Precise control of catalyst for efficient, cost effective solutions
- Faster and improved adhesion to substrates enable higher yields
- Homogeneous melt phase provides stable, consistent processing

The ability to put circuitry or antennas directly onto a molded part opens a world of opportunity for device manufacturers. RTP Company is a leader in providing wide ranging material options to enable three-dimensional molded interconnect devices (3D MID's).

One technology for producing 3D MID is laser direct structuring. Laser direct structuring utilizes specialized additive packages and laser technology to produce clear crisp metal patterns on the surface of molded parts.

Two-shot plating, a process of producing parts made by combining a catalyzed compound and a non-catalyzed compound, is another way to produce robust 3D MIDs. RTP Company Engineers are able to work with plating engineers to produce compounds that will meet their plating requirements, while also meeting all of the other application requirements.

With either process, working with RTP Company Engineers, specialty platers can create metal patterns in a variety metal finishes, including nickel and gold. One key benefit of working with RTP Company is the ability to tailor the plating characteristics, plating time and adhesion.

These properties can be balanced along with aesthetic and economic factors in compounds that can also include other RTP Company technologies including flame retardants and thermally conductive additives. These complex formulations can serve a variety of important functions allowing for significant consolidation and in many devices save precious internal space.



RTP Company Corporate Headquarters • 580 East Front Street • Winona, Minnesota 55987 USA
 website: www.rtpcompany.com • email: rtp@rtpcompany.com • Wiman Corporation • +1 320-259-2554

TELEPHONE:

U.S.A. +1 507-454-6900	SOUTH AMERICA +55 11 4193-8772	MEXICO +52 81 8134-0403	EUROPE +33 380-253-000	SINGAPORE +65 6863-6580	CHINA +86 512-6283-8383
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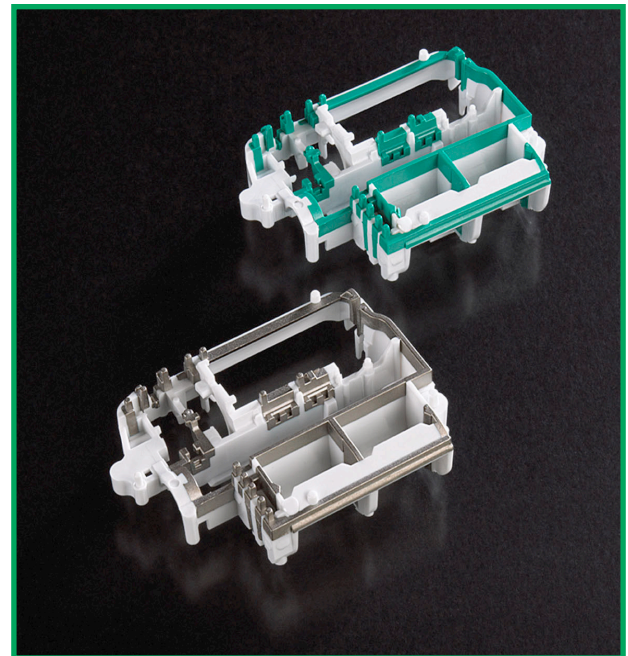


LDS Compounds

Product	Resin	Description	Color	HDT @ 66 psi, ° F	Notched impact ft lb/in
RTP 699 X 113386 B	ABS	LDS Platable	Black	205	2.0
RTP 2599 X 113384 A	PC/ABS	LDS Platable	Black	210	11
RTP 2599 X 130952 B	PC/ABS	LDS Platable	White	210	6.0
RTP 1099 X 127271 C	PBT	LDS Platable- Mineral	Black	280	0.8
RTP 399 X 113385 B	PC	LDS Platable	Black	285	6.1
RTP 2199 X 127272 E	PEI	LDS Platable- Reinforced	Black	400	1.7
RTP 2199 X 127272 A	PEI	LDS Platable- Reinforced	Black	410	0.8
RTP 299 X 113399 H	PA 6/6	LDS Platable- Reinforced	Black	480	1.0
RTP 3499-3 X 113393 A	LCP	LDS Platable- Reinforced	Gray	530	3.9
RTP 4099 X 117369 D	PPA	LDS Platable- Reinforced	Black	535	1.0

Two-Shot Molding Compounds

The photo to the right illustrates RTP Company’s two-shot plating technology in the internal chassis of the OmniPod® Insulin Management System manufactured by Insulet Corporation. By selectively providing a highly conductive plating layer to the surface of the chassis, the chassis is able to function as part of the circuitry. The chassis at the top of the photo shows the non-platable portion in white and the platable overmolded portion in green. The chassis at the bottom of the photo shows the part after plating, first with a base layer of copper and then a layer of nickel. The resulting part is an excellent example of how the integration of a two-shot molded interconnects can effectively provide electrical infrastructure for a component.



No doubt, two-shot plating has unique challenges not found in other types of processing. Engineers at RTP Company have years of expertise in finding the best solution for specialty platers, offering guidance and tailored solutions that position your application for success.

RTP Company: Your Global Compounder Of Custom Engineered Thermoplastics

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