LOCTITE.

THIN, PRINTABLE 5G ANTENNA TECHNOLOGY

Simple Processing, Environmentally-friendly, High-performance Connectivity





Henkel's PDS antenna technology enables design flexibility to replace incumbent antenna solutions for smaller space

Miniaturization and design flexibility continue to be primary drivers for mobile device innovation. Central to achieving these objectives is the ability to reduce the size, accommodate different shapes and locations of antenna structures while still maintaining the performance required for high bandwidth 5G applications. Henkel's printing direct structure (PDS) antenna technology frees mobile device manufacturers from conventional, non-sustainable techniques, allowing exceptional design latitude alongside robust antenna performance. Made possible through high-conductivity LOCTITE® printable inks, Henkel's solution provides market-leading capability for remarkably thin, yet powerful, 5G connectivity.







HENKEL LOCTITE® PDS BENEFITS

Robust antenna performance

- > Exceptional conductivity, resistance lower than other commercialized inks
- > Wide frequency band coverage
- > Highly reliable, drop resistant and impervious to contaminants

Unlimited design freedom

- › Adheres to curved surfaces, multiple organic and inorganic substrates
- > Antenna layout/design can be easily modified
- > Ultra-thin at 5 10 μm enables outside surface printing for outstanding signal performance

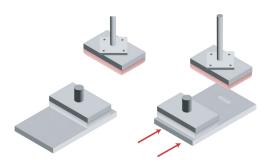
Sustainable

- > Eliminates chemical-intensive, electroplating processes
- > Reduces material waste
- > Reworkable

Easy integration

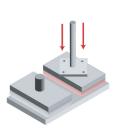
- > Low-cost equipment investment
- > Simple printing
- > Fast, efficient curing

FAST PAD PRINTING PROCESS TO FORM A CONDUCTIVE STEREO CIRCUIT

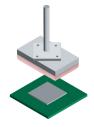


Place the printable ink cup in the home position

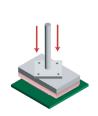
Move the ink cup back from the etched plate



Move the pad downward & press it against the printing plate



Lift the pad with ink laver & move it toward the workpiece



Press the pad down on the workpiece to transfer the ink laver

Lift the pad

With Henkel's PDS material technology, the future of connectivity is thin and powerful.

Scan the OR code to watch a video to learn more about Henkel's solution on PDS antenna.

For more information, visit us at henkel-adhesives.com/electronics and get in touch with our PDS expert.



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