

Printing Capabilities with **ELECTRICALLY CONDUCTIVE INKS**

Along with our diverse converting techniques and our ability to silk screen print, Marian can also print on various types of films with conductive inks. **This allows us to supply the printed layers in our customer's products like their thin and flexible membrane switches, RFID antennas, printed conductors, sensor electrodes, and medical electrodes.**

We aid customers in their custom designs of these elements by supplying material recommendations, samples, and prototype parts. We also offer confidential advice to customers regarding their design in an effort to create the proper balance of function and value.

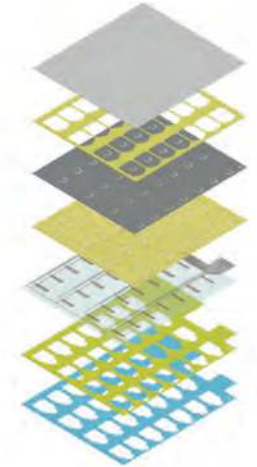
Printing Capabilities with **CONDUCTIVE INKS**

ELECTRICALLY CONDUCTIVE INKS

Recommend films (but not limited to):

- Polycarbonate
- Heat Stabilized PET
- Polyimide (Kapton)

Minimum film thickness we recommend for these components is .005" (0.13mm)



The chart below lists some of the conductive inks available with Marian. While not an exhaustive list, it gives an idea of some of the variety and possibilities.

INK	MMX-PE827	MMX-PE828	MMX-1201	MMX-2001	MMX-1016	MMX-2042	MMX-1001
BASE CONDUCTOR	Silver	Silver	Non-Silver Conductor	Carbon	Silver	Carbon	Silver
COLOR	Silver	Silver	Silver	Black	Silver	Black	Silver
ELECTRICAL RESISTANCE OHMS/SQUARE @ .001"	<.060	<.025	<.040	<.020	<.015	<10.0	<.015
TYPICAL APPLICATIONS:	Membrane Touch Switches	Membrane Touch Switches	Membrane Touch Switches	Resistors	Membrane Touch Switches	Sensor Electrodes	Membrane Touch Switches
	RFID Antenna	RFID Antenna			RFID Antenna	Heater Elements	RFID Antenna
	Printed Conductors	Printed Conductors			Printed Conductors		Medical Electrodes

Typically, the printed ink layer is .00035" in thickness. Conductivity of the layer can be increased (ohm resistance decreased) by printing multiple layers of ink. (Notice that ink manufacturers test for conductivity at .001" thick.)

Contact Marian for design suggestions, samples, and prototypes for your electrically conductive printed parts. Our team is eager to help with your next design.



A global leader in providing precision die-cut component parts for customers across many markets all over the world. All facilities certified to ISO 9001:2015.

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