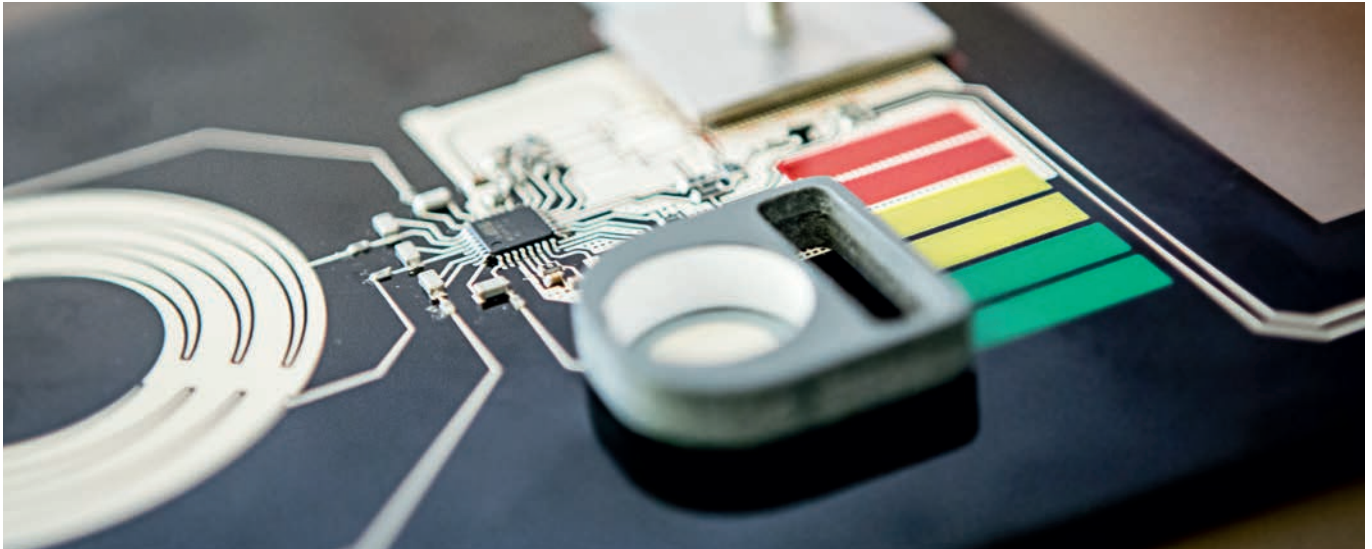


SCHOTT Printed Circuits

Explore printed circuits integrated in glass



Product description

Glass is ideally suited as a base material for printed circuits. SCHOTT Flat Glass offers glass panels with printed circuits for direct assembly of electronic components, LED lights, or capacitive sensors on the glass. With this solution, foils with printed circuits and capacitive sensor areas are no longer necessary, which offers the advantages of a longer lifetime and a slimmer more flexible design.

Benefits

- All-in-one solution: sensor areas for capacitive switch buttons or circuits are printed directly on the glass
- Extremely long-lasting: no aging effect, no moving part
- Highly flexible: the electronic card can be positioned anywhere on the glass panel
- Increased design flexibility: ability to combine capacitive sensors with LED light points
- Aesthetics: the circuits allow a slim design when printed on glass
- Safety: the use of toughened glass offers high security
- Easy care: the smooth surface of the glass is quick and easy to clean

Applications

Printed circuits on glass are suited for control panels of electric devices and a variety of other applications:

- Oven control panels
- Coffee machines
- Lift control panels
- Vending machines
- Professional cooking
- Ticketing machines
- Home automation
- Fitness control panels
- Medical instruments
- Automation control/touch for industrial processes



Front side

Control panel printed with circuits for the assembly of capacitive sensors



Rear side

SCHOTT
Gemtron

Technical Specification

Color options

The printed circuit can be either visible or invisible on the front side:

- Visible circuit lines: red or yellow
- Colors background or graphics: black, white, yellow, red, blue.

Other colors available upon request

Print options

Sensor area for capacitive switch buttons on glass:

4 standard shapes are available (other shapes available upon request):



Round



Circular



Rectangular



Rectangular with hole for LED

Print characteristics

- Sheet resistance: 0.004 Ω /sq
- Minimum distance between two circuit lines: 0.25 mm
- Minimum thickness of the circuit line: 0.3 mm
- Circuit thickness: 10 to 20 μ m
- Minimum distance between the edge of the glass and the circuit print: twice the thickness of the glass

General features

Printed sensor areas for capacitive switch buttons and printed circuits are possible for the following glass sizes:

- Maximum glass size: 1.200 x 2.400 mm
- Minimum glass size: 225 x 100 mm
- Thickness: 3 to 4 mm for printed sensor areas for capacitive switch buttons
3 to 10 mm for printed circuits

Possible glass substrates

All glass types, except conductive or metal coated glasses, can be used as substrate.

Processing

All standard glass processing technologies can be combined with capacitive and conductive printing.

Reach, RoHS compliance

Printed circuits fully comply with Reach and RoHS directives.

SCHOTT Gemtron
615 Highway 68
Sweetwater, TN 37874
USA
Phone: +1 (0)423 337 3522
Fax: +1 (0)423 337 7979
salesinfo@us.schott.com

www.schottgemtron.com

SCHOTT
Gemtron