

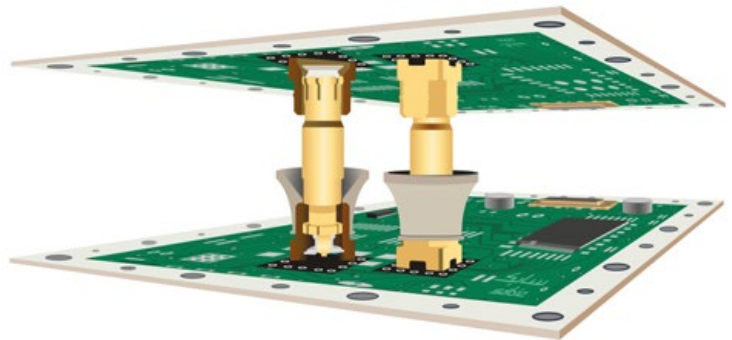
ADVANCED BOARD-TO-BOARD CONNECTORS

WITH ULTEM™ RESIN

As the adoption of 5G communications technology continues to accelerate, the need for small cells, base stations and servers increases. Infrastructure and system components, including optical transceiver modules and radio frequency (RF) coaxial board-to-board connectors (in plug-in style or pogo-pin style), can benefit from the use of high-performance engineering thermoplastics. ULTEM resin is non-halogenated with no intentionally-added PFAS.

PROVEN RELIABLE SOLUTION THAT MAY BE USED FOR HIGH PERFORMANCE BOARD-TO-BOARD CONNECTORS

- Replacement of the PTFE dielectric insulator with an injection moldable and reliable thermoplastic solution
- Provides long-term outstanding dimensional, thermal and mechanical performance over a wide temperature range
- Offers stable dielectrics over a wide temperature and humidity range



IMPROVED DESIGN FREEDOM WITH CUSTOM COLORS

- Injection molding offers better design possibilities for improved assembly, functionality and system cost out opportunities
- A wide selection of inherently FR materials, without intentionally-added PFAS
- Most ULTEM resins can be custom colored for part recognition during assembly



Coaxial connector made with ULTEM resin providing dielectric insulation

ECONOMICAL MASS PRODUCTION OF COMPONENTS AND AVAILABLE AS A BIOBASED SOLUTION

- Proven large series production with high yields
- ISCC+ certified biobased solutions are available to support carbon footprint reduction



Pogo pin made with ULTEM resin providing outer insulation

ULTEM™ RESIN VERSUS COMPETITIVE MATERIALS

	ULTEM resin	PTFE	LCP
Injection molding/mass production	++	O	+
Strength and stiffness	++	O	+
Knitline strength	++	O	-
Dimension stability	++	O	+
Dielectric Dk/Df	+	++	O
Density	++	-	O
Colorability	+	-	O

++ Very good + Good O Neutral - Poor

ULTEM RESINS ARE AVAILABLE IN A WIDE OFFERING OF STANDARD AND GLASS FILLED (GF) GRADES

ULTEM resin grades	Unreinforced	10%GF	20%GF	30%GF	40%GF	GF/MF
Standard	1000	2100	2200	2300	2400	3452
Flow improved	1010(UCL), DT1810EV	2110	2210, SF2270	2310, 2312	2410	
Mold release	1000R, 1010R	2100R, 2110R	2200R, 2210R	2300R, 2310R		
SMT capable	XH1015UCL			XH2315		
Flexible	STM1500, STM1600					

CONTACT INFORMATION

AMERICAS

SABIC Americas

E productinquiries@sabic.com

T +1-800-845-0600

ASIA PACIFIC

SABIC Shanghai

E asiaproductinquiries@sabic.com

T +86-21-2037-8118

EUROPE

SABIC Bergen op Zoom

E webinquiries@sabic.com

T +31 164 292 911



SABIC MATERIAL FINDER
Find the right Specialties material
for your application ▶



MATERIAL FINDER



LINKEDIN

DISCLAIMER: THE MATERIALS, PRODUCTS AND SERVICES OF SAUDI BASIC INDUSTRIES CORPORATION (SABIC) OR ITS SUBSIDIARIES OR AFFILIATES ("SELLER") ARE SOLD SUBJECT TO SELLER'S STANDARD CONDITIONS OF SALE, WHICH ARE AVAILABLE UPON REQUEST. INFORMATION AND RECOMMENDATIONS CONTAINED IN THIS DOCUMENT ARE GIVEN IN GOOD FAITH. HOWEVER, SELLER MAKES NO EXPRESS OR IMPLIED REPRESENTATION, WARRANTY OR GUARANTEE (I) THAT ANY RESULTS DESCRIBED IN THIS DOCUMENT WILL BE OBTAINED UNDER END-USE CONDITIONS, OR (II) AS TO THE EFFECTIVENESS OR SAFETY OF ANY DESIGN OR APPLICATION INCORPORATING SELLER'S MATERIALS, PRODUCTS, SERVICES OR RECOMMENDATIONS. UNLESS OTHERWISE PROVIDED IN SELLER'S STANDARD CONDITIONS OF SALE, SELLER SHALL NOT BE RESPONSIBLE FOR ANY LOSS RESULTING FROM ANY USE OF ITS MATERIALS, PRODUCTS, SERVICES OR RECOMMENDATIONS DESCRIBED IN THIS DOCUMENT. Each user is responsible for making its own determination as to the suitability of Seller's materials, products, services or recommendations for the user's particular use through appropriate end-use and other testing and analysis. Nothing in any document or oral statement shall be deemed to alter or waive any provision of Seller's Standard Conditions of Sale or this Disclaimer, unless it is specifically agreed to in a writing signed by Seller. Statements by Seller concerning a possible use of any material, product, service or design do not, are not intended to, and should not be construed to grant any license under any patent or other intellectual property right of Seller or as a recommendation for the use of any material, product, service or design in a manner that infringes any patent or other intellectual property right.

SABIC and brands marked with ™ are trademarks of SABIC or its subsidiaries or affiliates, unless otherwise noted.

© 2023 Saudi Basic Industries Corporation (SABIC). All Rights Reserved. Any brands, products or services of other companies referenced in this document are the trademarks, service marks and/or trade names of their respective holders.