

Polyflon Company

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Polyflon Bonding Film

Polyflon Bonding Film is a thermally stabilized, irradiated polyolefin co-polymer developed to achieve excellent bond strength with *low-flow* characteristics. The film can be use for fabricating strip-line circuits using most of today's microwave/RF laminate materials. The low bonding temperature is ideal for temperature critical materials/applications.

Features and Benefits

• Low Dk

Low Loss

Low Flow

Property	Value	Units	Direction	Frequency	Test Method/Condition
Thickness	.002	Inches			
Dielectric Constant	2.34	-		9.5 GHz	ASTM D-150
Dissipation Factor	.002	-		9.5 GHz	ASTM D-150
Dielectric Strength (0.002")	1000	V/mil	Z	-	ASTM D 149
Volume Resistivity	10 ¹⁶	ohm • cm	Z	-	ASTM D 257
Tensil Strength	3000 min	psi			ASTM D-882
Elongation	300 min	%			ASTM D-882
Specific Gravity	2.15	-	-	-	ASTM D 792
Density	0.929	gm/cm ³			ASTM D-1052
Color	Translucent				
Water Absorption	<.01	%	-	-	ASTM D 570
RoHS Compliant	Yes	Compliance Statement Available Upon Request			

Bonding Technique

- 1. The boards to be bonded must be clean and free from skin oils, dust and foreign matter. The dielectric surfaces should be primed with appropriate commercial preparations (e.g. Use a sodium etch treatment such as Tetra Etch to prepare PTFE based boards). Copper surfaces can be cleaned using a scrubber, however, do not make contact with primed surfaces.
- 2. Place bonding film between boards to be laminated. A thermocouple is recommended at the bondline.
- 3. Place in hot press at 100-125 psi and raise temperature of bondline to 250-300°F.
- 4. Hold under pressure for 6-10 minutes.
- 5. Cool under pressure to less than 100°F before removing from press.

Polyflon Bonding Film Ordering Information					
Thickness	Thickness Sheet Size*				
0.002" (51µm)	24" x 36" (610mm x 914mm)	PPBF-200			

^{*}Also available in roll form. Contact us for details

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