



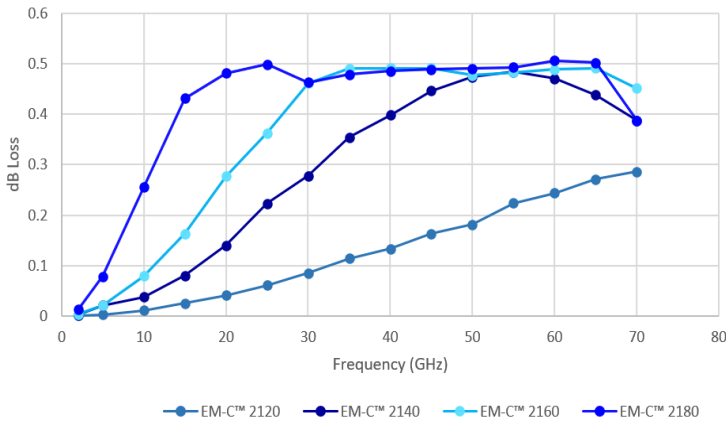
EM-C™ Microwave Transparent Laminate

PTFE LAMINATE ENGINEERED FOR RADOMES

EM-C™ Description:

EM-C™ is a family of high strength pure PTFE laminates designed to protect high performance antennas in the most challenging environments. A unique multidirectional lamination process creates structural composites free of reinforcements with exceptionally low dielectric constants and loss tangents. EM-C™ products are available in both planar and three-dimensional designs.

EM-C™ Transmission Loss



Average Dk
 EM-C™ 2120 - 1.93
 EM-C™ 2140 - 1.95
 EM-C™ 2160 - 2.02
 EM-C™ 2180 - 2.03



- Low transmission loss over a multitude of frequencies
- Maintenance free permanent hydrophobic surface
- Environmentally stable from -425°F – 600°F (-254°C – 316°C)
- Monolithic construction (no reinforcement)
- Moldable - Ideal for shipboard applications
- Standard and custom colors - logos available

EM-C™ PHYSICAL PROPERTIES:

	2120	2140	2160	2180
Weight: oz/yd ² (g/m ²)	29 (984)	60 (2034)	90 (3052)	120 (4069)
Thickness: mils (mm)	0.020 (0.51)	0.040 (1.02)	0.060 (1.52)	0.080 (2)
Tensile Strength: lbs/in (N/50mm)	74 (648)	132 (1156)	190 (1664)	230 (2000)
Tear Strength: N	59 (262)	106 (472)	152 (676)	175 (780)
Dielectric Constant:	1.93 Nominal	1.95 Nominal	2.02 Nominal	2.03 Nominal
Width: in (mm)	60" (1524 mm)			24" (600 mm)
Seal/Splice Strength:	≤ 98% of Composite Material			
Loss Tangent:	0.00052 Nominal			
Water Absorption:	≥ 0.3%			
Incombustibility:	0 Seconds to Flameout			
Hydrophobic Contact Angle:	≤ 95 Degrees, Nominal			

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