

POLYURETHANE FOAM BASED MULTI-LAYER FLAT MICROWAVE ABSORBERS (MICROWAVE ABSORBENT MATERIAL)



FEATURES:

- ❖ Our foam absorbers are fire retardant with zero halogen means thereby avoid formation of toxic gases like HCl /HBr and poisonous gases like phosgene.
- ❖ RoHS Compliant.

TYPICAL REFLECTIVITY PERFORMANCE

Absorber Type	Thickness	Reflectivity (dB) at Near Normal Incidence with respect to Metal at frequency.			
		500MHz	1 GHz	3 GHz	10 GHz - 120 GHz
95.00397-00	150 mm	-15 dB	-17 dB	-17 dB	-20 dB
95.00009-00	120 mm	-15 dB	-15 dB	-17 dB	-20 dB
95.00394-00	100 mm	-12 dB	-15 dB	-17 dB	-20 dB
95.00398-00	60 mm	-	-10dB	-17 dB	-20 dB
95.00399-00	50 mm	-	-	-17dB	-18 dB
95.00400-00	30 mm	-	-	-15 dB	-17 dB

FU-ML MICROWAVE ABSORBERS

- ❖ Lightweight, flexible, broadband, Multilayer PU foam based microwave absorber.
 - ❖ SOL.RA is an electrically graded flat PU foam Based microwave absorber.
 - ❖ Carbon loaded laminate polyurethane sheets.
 - ❖ Can be readily cut on a band saw, with scissors, or a sharp knife.
 - ❖ SOL.RA is not waterproof and will not operate correctly when wet, since there is not washout.
 - ❖ SOL.RA will function as expected after being allowed to dry.
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- ❖ If required can be coated with plastic blue paint which makes it Clean Room Absorbers suitable for use in class 10,000 to 100,000 of FED STD 209E clean room standard which is equivalent to ISO-7 and ISO-8 of ISO 14644-1 clean room standard. These absorbers are termed by adding suffix CR.
 - ❖ The suffix WP means the absorber will be wrapped in weather proof cloth. The impedance of cloth will be matched with the absorber

AREA OF APPLICATION :

- ❖ SOL.RA has been used in reducing cross talk between adjacent antennas, shrouding antennas to improve the antenna patterns and undesired back lobes, as well as selective shadowing of parts a target for RCS measurements.
- ❖ Shadowing of posts and supports in anechoic chambers, and as absorbing blankets for testing radar systems without harm to personnel.
- ❖ SOL.RA is also effective in reducing surface current waves on metal shapes.

MATERIAL PROPERTIES:

- ❖ Color: As Desired, generally available in blue color.
- ❖ Dimensions: 60 cm X 60 cm.
- ❖ Typical Weight of 60 cm X 60 cm X 12 cm sheet: 2.5 kg.
- ❖ Chemical Composition: Carbon ferrite impregnated polyurethane foam.
- ❖ Power handling capacity up to 0.16 W/ sq. cm max under normal air circulation available in a proper air-conditioned room.
- ❖ Maximum service temperature: 90 degree Centigrade.
- ❖ Fire Retardency: Passes NRL-8093, USA test 1, 2 & 3 With Zero Halogen Means.

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