

RETICULATED FOAM BASED MEDIUM POWER RF MICROWAVE ABSORBERS-P GRADE (FU-SE-P-CR-1) (MICROWAVE ABSORBENT MATERIAL – PYRAMIDAL TYPE)



FEATURES:

- ❖ Absorption over a wide frequency range
- ❖ Long product life.
- ❖ High performance, up to Typical –50 dB attenuation
- ❖ These absorbers are supplied with a fire retardant finish.
- ❖ RoHS Compliant.

Absorber Type	Pyramid Height, A (Approx)	Pyramid Width, B (Approx)	Base Height, C (Approx)	Total Absorber Height, D (Approx)	Number of Pyramids per Absorber
FU-SE-21-P / FU-SE-21-P-CR-1	45 cm	12 cm	8 cm	53 cm	25

Note: Above dimensions are indicative and subject to change for specific application.

TYPICAL PERFORMANCE OF MEDIUM POWER PYRAMIDAL ABSORBER:

Absorber Type	Thickness (Inch)	Guaranteed Reflectivity (dB) for near normal incidence relative to metal surface of Same size at different frequency					
		300 MHz	1 GHz	2 GHz	3 GHz	6-18 GHz	18-50 GHz
FU-SE-21-P/FU-SE-21-P-CR-1	21 (Approx)	-25	-37	-40	-45	-50	-45

FU-SE SERIES OF PYRAMIDAL MEDIUM POWER RF MICROWAVE ABSORBERS :

- ❖ FU-SE absorber product line is a complete range of high performance pyramidal microwave absorber.
- ❖ Available in wide range of thickness and absorbencies.
- ❖ Variety of thickness gives the chamber designer the opportunity to choose grades appropriate for specific frequencies and incidence angles
- ❖ The pyramidal structure gives it the geometrical matching and the carbon dispersed gives the attenuation required at near normal incidences.
- ❖ Provide engineers with the building blocks needed in the design and construction of RF absorbing surface used in anechoic chambers, antenna assemblies and microwave measuring facilities.
- ❖ FU-SE absorbers are reticulated foam, impregnated with a carbon black ferrite formulation to achieve the desired electrical performance.
- ❖ Our FU-SE-P grade absorbers are reticulated foam based absorbers, and can attenuate more power than FU-SE grade once, and are termed medium power absorbers.
- ❖ Our Clean Room Absorbers are 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-1 FOR EXAMPLE FU-SE-21-P clean room absorbers be FU-SE-21-P-CR-1.

MATERIAL PROPERTIES:

- ❖ Color: Black
- ❖ Dimensions: 60 cm X 60 cm
- ❖ Chemical Composition: Carbon impregnated polyurethane foam.
- ❖ Maximum service temperature: 90 degree Centigrade.
- ❖ Fire Retardency: Passes NRL-8093, USA test 1, 2 & 3 With Zero Halogen Means.
- ❖ Our foam absorbers are fire retardant with zero halogen means thereby avoid formation of toxic gases like HCl / HBr and poisonous gases like phosgene.

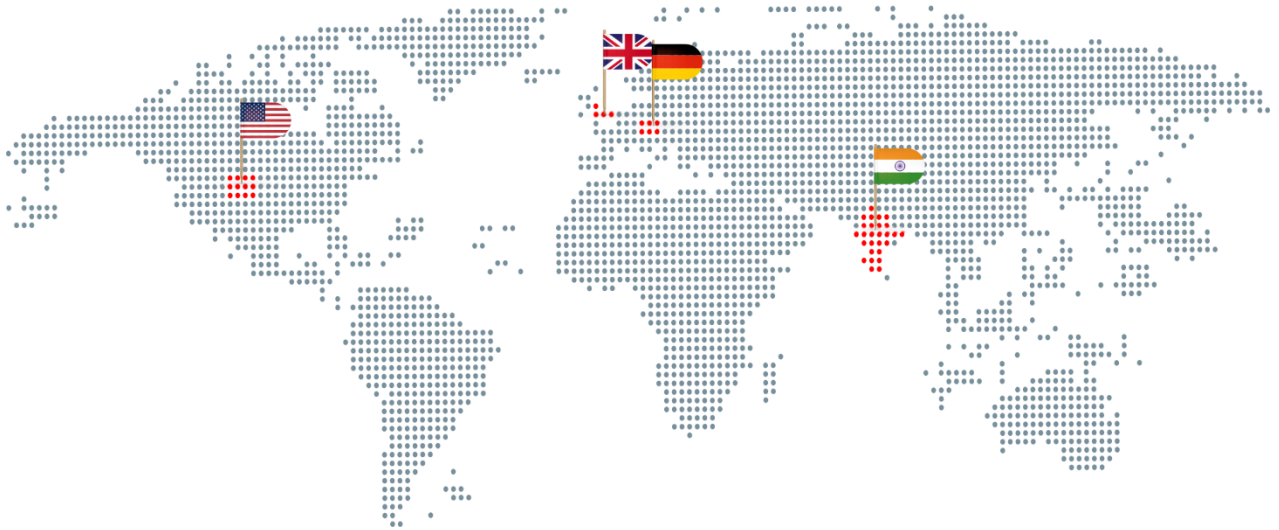
DETAILS OF THE POWER HANDLING:

- ❖ Please note that Power Handling of Absorber is defined by thermal equilibrium achieved and arrived while the power absorbed and re-appeared in the form of heat is under thermal equilibrium with conduction, convection and radiation losses. In case of Polyurethane foam based absorber thermal equilibrium is achieved at 70 degree Celsius while absorber can withstand 90 Degree Celsius.
- ❖ The power handling capability of our FU-SE-21-P / FU-SE-21-P-CR-1 absorbers ranges from 1500 W/square meter to 10000 W/square meter depending upon forced air circulation thru the absorbers. With standard convection cooling it can withstand 1500 W/ square meter and for 4000 W/ square meter it must be forced air cooled with air velocity of 20 feet per minute to dissipate the heat generated. Should you use forced air cooling at 60 ft per minute even 15 KW/ square meter power can be dissipated

AREAS OF APPLICATION:

- ❖ Broadband absorbers suitable for in-door measurements.
- ❖ Used in making microwave anechoic chambers for performing measurements like RCS, Antenna Measurements etc.
- ❖ Used in making Moving screens for hiding the areas of maximum reflections.
- ❖ Used for obtaining Quiet Zones in very wide frequency range.

GLOBAL PRESENCE



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 Renewable Energy
 Cleaning
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 Automations

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MICRO MACHINING

SLTL'S STRENGTH

<p>Experience</p> <p>34+ Years</p>	<p>Mfg. Plants</p> <p>6 Laying Over</p> <p>54000 Sq. mtr.</p>	<p>10%</p> <p>Yearly R&D</p>	<p>Exports</p> <p>40+</p> <p>Countries</p>
<p>15000+</p> <p>Systems</p>	<p>ISO</p> <p>9001-2015</p>	<p>26+</p> <p>Patents</p>	<p>29+</p> <p>Awards</p>

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