

DMC Polypropylene Broadband Microwave Absorber

DMC-PP-MI series are broadband high performance polypropylene based absorber that covers frequency from 60MHz to 80GHz. The appearance and characteristics are similar to **HY** series, but **MI** series has been specifically designed for best performance in **Microwave frequency** range. Therefore, this series of absorbers are highly preferred for Antenna Pattern Measurement (APM), Compact Antenna Test Range (CATR), Radar Cross Section (RCS) and Electronic Warfare Test (EWT) application.

Depends on application, **MI** series can cover lower frequency band without going with ferrite tile. In such case, the size and height of the absorber should be large enough to cover lower frequency band.

MI series can also be installed on the floor for testing VSWR in EMC chambers. In addition to implementing pseudo-free space at microwave frequency, **MI** series can be used for Semi-anechoic chamber. Based on size we have different models, **DMC-PP-MI-300**, **DMC-PP-MI-500** and **DMC-PP-MI-750**.

DMC ABSORBER	MI SERIES		
Color	Black		
Shape	Pyramid		
Power Handling	1 kW/m² or 600 V/m		
Max Service Temp.	100°C		
Cleanroom Equipment Suitability	ISO 14644 Class 5		
Fire Retardant	UL94 HBF / DIN 4102 Class B2		

KEY POINTS

- Polypropylene based microwave/RF absorber
- Unique synthesis technology of carbon powder
- High uniformity of carbon powder density
- Low carbon dust ISO 14644-1 Class 5
- Outstanding impedance matching with ferrite tiles
- Foaming expansion molding manufacturing system
- Plug & Pull; easy & eco-friendly installation
- Water & fire resistance
- Low maintenance cost
- 35-year guarantee

PHYSICAL PROPERTIES

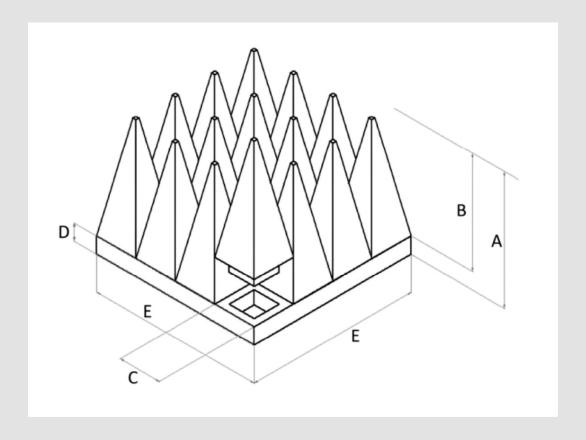
Part Number	Weight in Kg	No of Tips	Absorber Dimension				
			Α	В	C	D	E
DMC-PP-MI-300	2.70	36	300	260	100	40	600
DMC-PP-MI-500	3.08	16	500	440	150	60	600
DMC-PP-MI-750	4.51	9	750	670	200	80	600

Certification

Fire Retardancy	UI94 HBF/ DIN 4102 Class B2		
Maximum Compressive load Certified	ISO 12048		
Halogen Free Test	ISO 60754-1		
Weather Proof Test	ISO 4892-2		

Typical Reflectivity (in dB) over Frequency for EPP Microwave Absorbers

	Reflectivity loss in dB					
Frequency	DMC-PP-MI-300	DMC-PP-MI-500	DMC-PP-MI-750			
@60MHz	-	-5	-5			
@80MHz	-	-8	-8			
@100MHz	-	-10	-10			
@300MHz	-25	-34	-30			
@500MHz	-28	-34	-38			
@700MHz	-37	-42	-45			
@1GHz	-47	-48	-50			
@3GHz	-53	-55	-56			
@6GHz	-55	-59	-63			
@10GHz	-57	-58	-63			
@18GHz	-57	-58	-63			
@40GHz	-72	-72	-74			
@60GHz	-80	-80	-80			
@80GHz	-80	-80	-80			



Disclaimer

Values shown are based on testing of laboratory test product and represent data that falls within normal range purpose. These values are not intended for use in establishing maximum, minimum or range of values for specification purposes. Construction standards and absorber mounting procedure define accurate results. The given information is based on data and knowledge considered to be true and accurate and is offered for the user's consideration, investigation and verification but we don't warrant the results to be obtained.