Ventilated Absorbers - AEPV Series



SOLL TION FOR

- Chamber HVAC Systems
- Medium Power Applications
- NRL 8093 1, 2, 3
- ISO 11925-2
- DIN 4102-B2

Main features

- Low Air Flow Resistance
- Open Cell Structure for Rapid Cooling

Product configuration

Shape

- Pyramidal
- Wedge
- Flat

Frequency band

• From 125 MHz to 40 GHz

Standard base size

• 2' x 2' (60.96 cm x 60.96 cm)

Height

• 4" to 72" (10.2 cm to 121.9 cm)

Operating conditions

- Temperature: 70°F +/-5° (21°C +/-3°)
- Relative humidity: 55% RH +/-15%

Indoor/outdoor

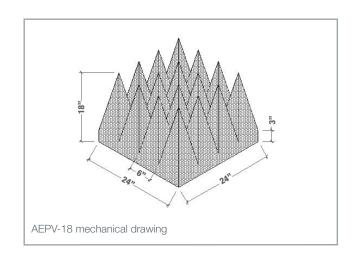
Indoor

Description

Ventilated absorbers are manufactured from special reticulated (open cell) foam. When used as a vent material, this product allows air to move freely.

Medium Power Absorber Specifications

When the material is used as a medium power absorber, it can safely dissipate 2 W/in2 CW with standard convection cooling. This is accomplished by the open cell characteristics of the reticulated foam, which increases the ability of the absorber to dissipate the heat generated by the absorption of the microwave energy. For higher power applications, the material must be force-cooled.



ORDERING CODE

• AEPV-XX, where XX designates absorber height in inches

Pressure Drop Specifications

HVAC professionals use pressure drop calculations to ensure adequate air flow for proper air turn-over within a chamber.

Specifications

			AEPV-2	AEPV-4	AEPV-6	AEPV-8	AEPV-12	AEPV-18	AEPV-24	AEPV-36	AEPV-48
Height		in	2	4	6	8	12	18	24	36	48
		cm	5.1	10.2	15.2	20.3	30.5	45.7	61	91.4	121.9
Pyramids		per block	256	144	64	64	36	16	9	4	4
Absorption @ Normal Incidence	@ 125 MHz	dB									28
	@ 250 MHz	dB							30	32	35
	@ 500 MHz	dB						30	35	37	40
	@ 1.0 GHz	dB				30	35	37	40	45	45
	@ 3.0 GHz	dB		30	33	37	40	45	45	50	50
	@ 6.0 GHz	dB	20	35	37	45	45	50	50	50	50
	@ 10.0 GHz	dB	30	40	40	50	50	50	50	50	50
	@ 15.0 GHz	dB	30	45	50	50	50	50	50	50	50
	@ 18.0 GHz	dB	35	50	50	50	50	50	50	50	50
	@ 40.0 GHz	dB	35	50	50	50	50	50	50	50	50
Power*		Watt/in ²	2	2	2	2	2	2	2	2	2
		Watt/m ²	3100	3100	3100	3100	3100	3100	3100	3100	3100
Weight		lbs/pc.	1.2	2.5	3.5	4.5	6.5	8	11.5	16	22
		kg/pc.	0.5	1.1	1.6	2	2.9	3.6	5.2	7.3	10

 $^{^{\}star}$ Absorbing material can with stand higher power with forced air cooling

