GLOBAL EMC

PRODUCT DATA SHEET
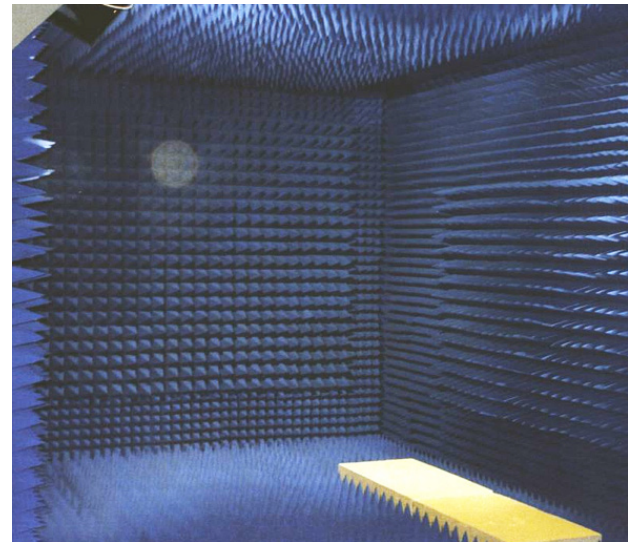# GDS PYRAMIDAL ABSORBER

GDS ANECHOIC ABSORBER

The principal of Pyramidal Absorbers is to avoid the reflection of radiated electromagnetic energy by absorbing the energy through a resistive medium shaped to mimic free space via progressive impedance.

The GDS absorber uses the very latest technology in anechoic absorbers. The double dipping process increases return loss so that it can achieve -50dB (normal) at 2.5xλ. Where the wavelength is less than 0.25 of absorber depth (and the absorber is > 4xλ) the return loss exceeds -55dB (normal incidence).

A Quite Zone (QZ) in a chamber can be achieved by careful calculation of absorber material and verified by a VSWR test.

GDS PYRAMIDAL ABSORBER

WAVELENGTHS - GDS NEW GENERATION PYRAMIDAL ABSORBER

Part No	Absorber Height	Return Loss in Normal Incidence						Peaks per m^2	Peak Base size (mm)	Weight Kg/m^2
		0.5GHz	1GHz	3GHz	5GHz	10GHz	20GHz			
GDS50	50mm	N/O	N/O	30dB	35dB	40dB	60dB	1600	25 x 25	2.5
GDS100	100mm	N/O	N/O	32dB	40dB	50dB	60dB	576	40 x 40	3.8
GDS300	300mm	30dB	35dB	40dB	50dB	60dB	60dB	100	100 x 100	11
GDS500	500mm	32dB	40dB	45dB	55dB	60dB	60dB	36	167 x 167	18
GDS700	700mm	35dB	45dB	50dB	60dB	60dB	60dB	16	250 x 250	25
GDS1000	1000mm	40dB	50dB	55dB	60dB	60dB	60dB	9	333 x 333	36

N/O = Not Optimised

Off normal degradation of return loss	
Up to 30o	No appreciable difference
50o	10~12%
60o	15~20%
70o	25~30%

FIRE SAFETY

Fully Compliant to NRL8093 parts I II & III Halogen free

OTHER ABSORBER TYPES

Block Absorber (mono) - For corners of chamber and general use
Block Absorber (layered) - Graded layers of carbon doping, not as good as pyramid
Truncated Absorber - Space saving but low performance in microwave frequencies
Hollow Absorber - Very long pyramid absorbers for high performance low frequencies
Outdoor Absorbers - Specific external use absorbers, higher cost.
Pyramidal Wedge - Biased towards lower frequencies, not suitable for high frequency high performance use