

DESIGNED SPECIFICALLY FOR OBLIQUE INCIDENCE FOR USE IN MICROWAVE ANECHOIC CHAMBERS

IS-SM MATERIAL

This electromagnetic absorber consists of a polyethylene foam base and utilizes the ohmic loss of carbon. Not only is the IS-SM absorber, which is designed specifically for oblique incidence, capable of absorbing microwaves, it also delivers excellent electromagnetic absorption performance through millimeter waves.

IS-SM050

This is a special pyramidal electromagnetic absorber with a length of 50cm. It provides excellent oblique incidence characteristics for a wide band between 0.8 and 110GHz. It is optimally suited for applications in a wide range of wireless access operations and as sidewall panels in microwave anechoic chambers for conducting cellular phone related tests. It is also optimally suited to be used as CISPR compliant electromagnetic absorbent floor material for the 1GHz plus range. Our line up includes IS-SM080 and IS-SM100 that deliver excellent electromagnetic absorption performance starting at low frequency ranges.



FEATURES

- · Ultra-wideband electromagnetic absorber
- Excellent electromagnetic absorption performance for oblique incidences.
- The product can be made thinner than pyramidal absorbers.
- The tip is designed to reduce creep and deliver stable performance.
- · Stable against chemicals and offers long service life.
- Uses materials that, when burned, emit gases that are relatively harmless to humans.
- Fire retardant (NRL Classes 1, 2 and 3; UL-94HBF).

PRODUCT IDENTIFICATIONS

 $\frac{I}{(1)} \frac{S}{(2)} - \frac{SM}{(3)} \frac{050}{(4)}$

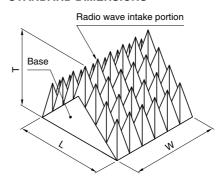
(1) TDK electromagnetic absorbers

(2) Base material(S: Polyethylene foam)

(3) Designed specifically for oblique incidence. Supports millimeter waves.

(4) Length dimensional code(050: 50cm)

STANDARD DIMENSIONS



Material name	Standard dimen- sions(mm) [L×W×T]
IS-SM050	600×600×500
IS-SM080	840×600×800
IS-SM100	840×600×1000

TYPICAL ABSORPTION CHARACTERISTICS (50° INCIDENCE ANGLE)

Unit: dB

Material name		0.3GHz	0.5GHz	0.8GHz	1GHz	3GHz	5GHz	10GHz	30GHz	50GHz	110GHz
IS-SM050	TE	_	_	35	40	45	50	55	55	55	50
	TM	_	_	30	35	45	50	55	55	55	50
IS-SM080	TE	_	30	40	40	55	55	55	55	55	50
	TM	_	30	40	45	55	55	55	55	55	50
IS-SM100	TE	30	35	40	45	55	55	55	55	55	50
	TM	20	30	40	45	55	55	55	55	55	50

[•] Representative power withstand performance: 100mW/cm²

[•] All specifications are subject to change without notice.

[•] It may not be allowed to export these absorbers due to Export Control regulations.