

## DESIGNED SPECIFICALLY FOR OBLIQUE INCIDENCE

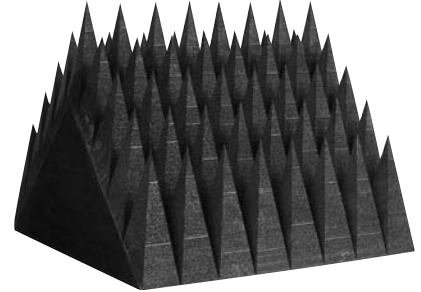
## IS-SM MATERIAL

An electromagnetic absorber consisting of a polyethylene foam base and utilizing 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**

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 side-wall panels in microwave anechoic chambers for conducting cellular phone related tests.

Our line up includes IS-SM080 and IS-SM100 that deliver excellent electromagnetic absorption performance starting at low frequency ranges.

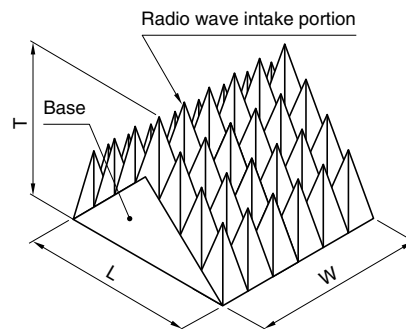
**FEATURES**

- 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**

**I S - SM 050**  
(1) (2) (3) (4)

- (1) TDK electromagnetic absorbers  
 (2) Base material code (S: Polyethylene foam)  
 (3) Designed specifically for oblique incidence.  
 Supports millimeter waves.  
 (4) Length dimensional code (050: 50cm)

**STANDARD DIMENSIONS**

Material name	Standard dimensions(mm) [L×W×T]	Standard weight (g)
IS-SM050	600×600×500	4.8
IS-SM080	840×600×800	10.0
IS-SM100	840×600×1000	12.5

**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: 50mW/cm<sup>2</sup>