

## FOR ANECHOIC CHAMBERS USED IN HIGH-POWER TESTS

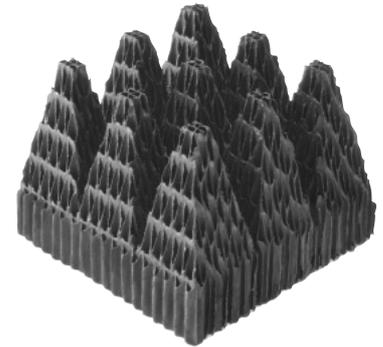
### ICT MATERIAL

This is a pyramidal electromagnetic absorber with a corrugated structure that consists of an inorganic base and utilizes the ohmic loss of carbon. The corrugated structure is designed to radiate heat efficiently during power irradiations of 1W/cm<sup>2</sup> or greater.

#### ICT-012

This is a 12-cm long pyramidal electromagnetic absorber with a corrugated structure.

It delivers excellent electromagnetic absorption performance over a wide band between 0.8 and 110GHz. Our line up includes ICT-030 that delivers excellent electromagnetic absorption performance starting at low frequency ranges. These products are optimally suited for anechoic chambers and small anechoic dark boxes used in high-power tests.



#### FEATURES

- Ultra-wideband electromagnetic absorber
- Excellent heat radiation for heat generated during high-power irradiation.
- Constructed of nonflammable materials to withstand the heat generated during high-power irradiation.
- Lightweight and strong

#### PRODUCT IDENTIFICATIONS

I C T - 012

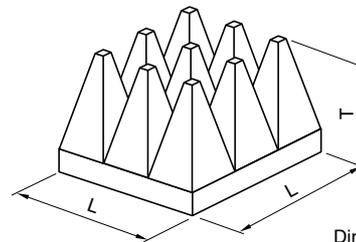
(1) (2) (3) (4)

- (1) TDK electromagnetic absorbers
- (2) Base material(C: Inorganic material)
- (3) For high power
- (4) Length dimensional code(012: 12cm)

#### STANDARD MATERIALS

| Material name | Standard dimensions(mm)<br>[L×L×T] | Standard weight(kg) |
|---------------|------------------------------------|---------------------|
| ICT-012       | 150×150×120                        | 0.35                |
| ICT-030       | 300×300×300                        | 3                   |

#### SHAPES AND DIMENSIONS



Dimensions in mm

#### TYPICAL ABSORPTION CHARACTERISTICS (VERTICAL INCIDENCE)

Unit: dB

| Material name | 0.3GHz | 0.5GHz | 0.8GHz | 1GHz | 3GHz | 5GHz | 10GHz | 30GHz | 50GHz | 110GHz |
|---------------|--------|--------|--------|------|------|------|-------|-------|-------|--------|
| ICT-012       | —      | —      | 15     | 20   | 25   | 30   | 35    | 40    | 40    | 35     |
| ICT-030       | 10     | 15     | 20     | 25   | 35   | 35   | 40    | 40    | 40    | 35     |

#### EXAMPLE OF RESULTS FROM A HIGH-POWER IRRADIATION TEST

##### (Heat generation characteristics)

| Material name | 1.5W/cm <sup>2</sup>    | 5W/cm <sup>2</sup> |
|---------------|-------------------------|--------------------|
| ICT-012       | Tip: 140°C/Bottom: 80°C | —                  |
| ICT-030       | Tip: 140°C/Bottom: 60°C | Tip: 300°C         |

- All specifications are subject to change without notice.
- It may not be allowed to export these absorbers due to Export Control regulations.