

Solid Phantom Standard Specification

Specification

Working Frequency range	0.5 to 1.0GHz 1.0 to 2.0GHz 2.0 to 6.0GHz
Relative Permittivity (Real part)	±20%
Relative Permittivity (Imaginary part)	±30%
Working Temperature range	-50 to +60 degC

Used Materials

Head	Silicon resin Hollow microspheres Conductive Carbon fibers Ferroelectric Ceramics Aerosil	Hand	Silicon resin Epoxy resin Hollow microspheres Conductive Carbon fibers Ferroelectric Ceramics Aerosil
Jiont	Polyvinyl chloride resin Polycarbonate resin	Jiont	Polyether-ether ketone resin Polycarbonate resin Polyamide resin Nitrile butadiene rubber

*** These materials do not possess properties that are toxic to living organisms or that will damage the environment, so our solid phantom can be used safety and with peace of mind.**

Notes ;

1. This phantom is chemically stable, so no special maintenance is required.
2. The solid phantom will be damaged if unreasonable force is applied to it.

1. Relative Permittivity of CITA & FCC standard with Specification ;

① 0.5GHz - 1.0GHz

Frequency GHz	Real Part		Imaginary Part	
	STD.	Spec.	STD.	Spec.
*0.5	43.2	34.6~51.8	32.8	22.9~42.6
*0.75	41.5	33.2~49.8	19.4	13.6~25.2
*1.0	41.3	33.0~49.6	18.6	13.0~24.2

* Calculated from CTIA, FCC standard

② 1.0GHz - 2.0GHz

Frequency GHz	Real Part		Imaginary Part	
	STD.	Spec.	STD.	Spec.
*1.0	41.3	33.0~49.6	18.6	13.0~24.2
*1.5	40.4	32.3~48.5	14.7	10.3~19.1
2.0	40.0	32.0~48.0	12.6	8.8~16.4

* Calculated from CTIA, FCC standard

③ 2.0GHz - 6.0GHz

Frequency GHz	Real Part		Imaginary Part	
	STD.	Spec.	STD.	Spec.
2.0	40.0	32.0~48.0	12.6	8.8~16.4
4.0	36.2	29.0~43.4	15.4	10.8~20.0
6.0	35.1	28.1~42.1	16.4	11.5~21.3

Please use the information for considering or confirming the specification of the product since it is provided for development, research, and examination.