



3695 - High power SIC pyramid absorber



Order information

When you want to order 3695 series High power SIC pyramid absorber please specify the part number as follow.

Part number	thickness (mm)
3695	50

High-power silicon carbide pyramid absorbing material is a kind of inorganic sintered materials, resistant to strong power, commonly used in high power absorbing box and comprehensive test for high power airborne antenna, power resistance no less than 30 kw/m², easy install with a metal T shape slot on a cold plate and with high reliability.

Product specification and performance

Part number	Thickness mm	Weight Kg/sqm	Normal incidence reflectivity max(-dB)			
			S band *1 (2 to 4 GHz)	C band *2 (4 to 8 GHz)	X band *3 (8 to 12 GHz)	Ku band *4 (12 to 18 GHz)
3695-50	50	40	-15dB	-20dB	-25dB	-30dB
3695-90	90	60	-25dB	-30dB	-35dB	-40dB

These values are measured under laboratory conditions. In your situation results may differ, please read our Guarantee

1 : The S band is part of the microwave band of the electromagnetic spectrum. It is defined by an IEEE standard for radio waves with frequencies that range from 2 to 4 GHz, crossing the conventional boundary between UHF and SHF at 3.0 GHz. The S band is used by weather radar, surface ship radar, and some communications satellites, especially those used by NASA to communicate with the Space Shuttle and the International Space Station.

2 : The C band is a name given to certain portions of the electromagnetic spectrum, including wavelengths of microwaves that are used for long-distance radio telecommunications. The IEEE C-band (4 to 8 GHz) and its slight variations contain frequency ranges that are used for many satellite communications transmissions, some Wi-Fi devices, some cordless telephones, and some weather radar systems. For satellite communications, the microwave frequencies of the C-band perform better under adverse weather conditions in comparison with the Ku band (12 GHz to 18 GHz), microwave frequencies used by other communication satellites. Rain fade – the collective name for the negative effects of adverse weather conditions on transmission – is mostly a consequence of precipitation and moisture in the air.

3 : The X band is a segment of the microwave radio region of the electromagnetic spectrum. In some cases, such as in communication engineering, the frequency range of the X band is rather indefinitely set at approximately 7.0 to 11.2 gigahertz (GHz). In radar engineering, the frequency range is specified by the IEEE at 8.0 to 12.0 GHz.

4 : The Ku band is the 12–18 GHz portion of the electromagnetic spectrum in the microwave range of frequencies. This symbol refers to “K-under” (originally German: Kurz-unter)—in other words, the band directly below the K-band. In radar applications, it ranges from 12-18 GHz according to the formal definition of radar frequency band nomenclature in IEEE Standard 521-2002.

Ku band is primarily used for satellite communications, most notably for fixed and broadcast services, and for specific applications such as NASA's Tracking Data Relay Satellite used for both space shuttle and International Space Station (ISS) communications. Ku band satellites are also used for backhauls and particularly for satellite from remote locations back to a television network's studio for editing and broadcasting. The band is split into multiple segments that vary by geographical region by the International Telecommunication Union (ITU). NBC was the first television network to uplink a majority of its affiliate feeds via Ku band in 1983. Some frequencies in this radio band are used for vehicle speed detection by law enforcement, especially in Europe.

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