Technical Data Sheet

Engineered Materials



C-STOCK™ AK-S

Flexible, low loss, adjusted dielectric constant material

Description

C-STOCK[™] AK-S is a series of flexible, low loss, silicone based dielectric materials with adjusted dielectric constant value ranging from K=1.75 to K=27.

C-STOCK™ AK-S is very flexible allowing the material to easily conform to most geometries.

Availability

C -STOCK[™] AK-S is available in standard sheet size measuring 12"x12" and thickness ranging from 0.025" to 0.140".

Dielectric constants available from K=1.75 to K=27.

C-STOCK[™] AK-S can be supplied with pressure sensitive adhesive (PSA). Product designation for material supplied with PSA where K=3 is C-STOCK[™] AK-S-3/PSA.

Without PSA is C-STOCK™ AK-S-3.

Applications

Loss tangent:

- Outdoor applications due to low water absorption
- As a matching layer in radome applications

Typical properties

Service temperature °C (°F): -62° to 149° (-80° to 300°) Dielectric constant tolerance: +/-5% for K=1.75 to K=14 +/-10% for K=15 to K=27

Specific gravity (varies widely on grade):

AK-S-1.75 has density of 0.6 g/cc. AK-S-27 has density of 3.3 g/cc. Generally less than 0.01 at 1 GHz.

All recommendations, statements, and technical data contained herein are based on tests we believe to be reliable and correct, but accuracy and completeness of said tests are not guaranteed and are not to be construed as a warranty, either expressed or implied. User shall rely on his own information and tests to determine suitability of the product for the intended use and assumes all risks and liability resulting from his use of the product. Seller's and manufacturer's sole responsibility shall be to replace that portion of the product of this manufacturer which proves to be defective. Neither seller nor manufacturer shall be liable to the buyer or any third person for any injury, loss, or damage directly or indirectly resulting from use of, or inability to use, the product. Recommendations or statements other than those contained in a written agreement signed by an officer of the manufacturer shall not be binding upon the manufacturer or seller.

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Made in the USA Issue Date: 10/24 Supersedes: New Lit: #4906