



Product: Silicon Mica Sheet

Technical Data LSAT

GRADE: LSAT

COLOUR: Sheets are supplied in natural colour

DESCRIPTION: LSAT consists of several layers of muscovite or phlogopite mica paper impregnated with a silicone binder having excellent mechanical, thermal and electrical properties.

| Properties                       | Unit              | Average Test Results       |            |
|----------------------------------|-------------------|----------------------------|------------|
| <b>Physical</b>                  |                   |                            |            |
| Thickness Range                  | mm                | >0.75 - 100                |            |
| Thickness Tolerance              | mm                | 10% on nominal thickness   |            |
| Density                          | g/cm <sup>2</sup> | 2.1 to 2.5                 |            |
| Mica Content                     | %                 | 90±2                       |            |
| Water Absorption                 |                   |                            |            |
| After 24 Hour Immersion          | %                 | <1.0                       |            |
| Weight Loss at 823 K/4 Hours     | %                 | <2.0                       |            |
| <b>Mechanical</b>                |                   |                            |            |
| Flexural Strength                | N/mm <sup>2</sup> | >130                       |            |
| Tensile Strength                 | N/mm <sup>2</sup> | >100                       |            |
| Impact Strength                  | Kg-cm             | 10.5                       |            |
| Compressive Strength             | N/mm <sup>2</sup> | >300                       |            |
| <b>Thermal</b>                   |                   | Muscovite                  | Phlogopite |
| Continuous Operating Temperature | °C                | > 500                      | >700       |
| Thermal Expansion Parallel to:   |                   |                            |            |
| The Laminate                     | cm/cm/K           | 4.7 x 10 <sup>-5</sup> Min |            |
| Specific Heat                    | J/kgK             | > 850                      |            |
| Thermal Conductivity             | w/m K             | 0.16 min                   |            |
| <b>Electrical</b>                |                   |                            |            |
| Dielectric Strength              | kv/mm             | > 20                       |            |
| Arc Resistance                   | S                 | > 300                      |            |
| Surface Resistivity              | Ohm               | > 10 <sup>13</sup>         |            |
| Volume Resistivity               | Ohm-cm            | > 10 <sup>13</sup>         |            |
| Dielectric Constraint            |                   | 3.8 min                    |            |
| Comparative Tracking Index       | V                 | > 600                      |            |

This data, while believed to be accurate and based on reliable analytical methods, is for informational purposes only. Data supplied above are "Typical Values", not to be considered "Specification Values".