



ABS-M30 (FDM)

a Stratasys Material

STRONG, AFFORDABLE PROTOTYPING

Ideal for concept models and moderate requirement parts including functional prototypes, jigs, fixtures, manufacturing tools and production parts.



Colors Available



| Mechanical Properties ¹ | Test Method | Result |
|---|-------------|-------------------------|
| Tensile Strength (Type 1, 0.125", 0.2"/min) | ASTM D638 | 31 MPa • 4,650 psi |
| Tensile Modulus (Type 1, 0.125", 0.2"/min) | ASTM D638 | 2,230 MPa • 320,000 psi |
| Tensile Elongation (Type 1, 0.125", 0.2"/min) | ASTM D638 | 7% |
| Flexural Strength (Method 1, 0.05"/min) | ASTM D790 | 60 MPa • 8,700 psi |
| Flexural Modulus (Method 1, 0.05"/min) | ASTM D790 | 2,060 MPa • 300,000 psi |
| IZOD Impact, notched (Method A, 23°C) | ASTM D256 | 128 J/m • 2.4 ft-lb/in |
| IZOD Impact, un-notched (Method A, 23°C) | ASTM D256 | 300 J/m • 5.6 ft-lb/in |

| Thermal Properties ² | Test Method | Result |
|--|-------------|---------------|
| Heat Deflection (HDT) @ 66 psi, 0.125" unannealed | ASTM D648 | 96°C • 204°F |
| Heat Deflection (HDT) @ 264 psi, 0.125" unannealed | ASTM D648 | 82°C • 180°F |
| Vicat Softening Temperature (Rate B/50) | ASTM D1525 | 99°C • 210°F |
| Glass Transition (Tg) | DSC (SSYS) | 108°C • 226°F |

Stratasys makes no warranties of the materials for any particular application, nor does it make a warranty of any type, expressed or implied, including but not limited to, the warranties of merchantability for a particular purpose.



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| Electrical Properties ³ | Test Method | Result |
|------------------------------------|------------------------|------------------------------|
| Volume Resistivity | ASTM D257 | 4.0x10e15 • 3.3x10e16 ohm-cm |
| Dielectric Constant | ASTM D150-98 | 2.6 - 2.86 |
| Dissipation Factor | ASTM D150-98 | .0048 - .0054 |
| Dielectric Strength | ASTM D149-09, Method A | 360 V/mil |

| Other ² | Test Method | Result |
|----------------------|-------------|---------------------|
| Specific Gravity | ASTM D792 | 1.04 |
| Flame Classification | UL94 | HB (0.09", 2.50 mm) |
| Rockwell Hardness | ASTM D785 | 109.5 |

¹ Build orientation is on side long edge.

² Literature values unless otherwise noted.

³ All Electrical Property values were generated from the average of test plaques built with the default part density (solid). Test plaques were 4.0 x 4.0 x 0.1 inches (102 x 102 x 2.5 mm) and were built both in the flat and vertical orientation. The range of values is mostly the result of the difference in properties of test plaques built in the flat vs. vertical orientation.

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