

High Temp TS

Material Introduction



Advantages

High Temp TS exhibits superior strength and durability. Heat tolerance up to 60° C. It has a wide range of applications. With High Temp TS, you can create large, accurate parts with excellent surface quality and isotropic mechanical properties.

Disadvantage

There will be support points on the support surface, and there will be colour difference after polishing.

Tolerance

200µm or 0.2%

Recommendation

High Temp TS brings the combination of thermal and mechanical performance that until now was not possible with stereolithography materials. Its robustness combined with a dark blue appearance makes it ideal for the most demanding functional prototyping and even end-use applications.

Attention >

Textured surface and finished product is slightly rough.

Attributes

HDT @ 0.46 MPa (66 psi)(ASTM Method D648-16): 62 °C

HDT @ 1.81 MPa (264 psi)(ASTM Method D648-16): 50 °C

Hardness(Shore D)(ASTM Method D2240-15): 83
Tensile strength at Yield(ASTM Method D638M-14): 46 MPa
Tensile Modulus(ASTM Method D638M-14): 2,310 MPa
Elongation at break(ASTM Method D638M-14): 24%
Flexural Strength(ASTM Method D790-15e2): 73 MPa
Flexural Modulus(ASTM Method D790-15e2): 2,050 MPa
Izod Impact (Notched)(ASTM Method D256-10e1): 47 J/m
Water Absorption(ASTM Method D570-98): 0.75%
Dielectric Constant 60 Hz(ASTM Method D150-11): 4.6
Dielectric Constant 1 KHz(ASTM Method D150-11): 4.2
Dielectric Constant 1 MHz(ASTM Method D150-11): 3.7
Dielectric Strength (ASTM Method D149-09): 17.7 kV/mm

Applications

- Structure and appearance verification of auto parts and supplies:
 - Rear-view mirrors, dashboards, steering wheels, lights, seats and handles, and other auto accessories; car navigators, driving recorders, car vacuum cleaners and other automotive supplies, etc.
- Functional test of aerospace industry:
 - UAV housing and internal parts, spacecraft model housing, aerospace industry components, etc
- Structural and functional verification of digital electronic products:
 - Laptops, tablets, mobile phones, digital cameras, game consoles, audio, mobile power, etc.
- Mechanical and electrical equipment structure and appearance verification:
 - Industrial display panels, cameras, switches, sockets, power tools, electrical instruments, experimental instruments, measuring tools, etc.