Laser Sintering MATERIAL SPECIFICATIONS



PA 830-ESD12 Preliminary

HIGHLIGHTS

- Electrostatically dissipative nylon 11 without carbon fibers
- High stiffness, high tensile strength
- Easy to machine, less abrasive and excellent surface finish

APPLICATIONS

- Assembly fixtures semiconductor industry
- Applications requiring ESD Capabilities
- Electronic products

TYPICAL PHYSICAL PROPERTIES

PROPERTY	TEST METHOD	METRIC
Color/Appearance	Visual	Black with Silver Flakes
Bulk Density	ASTM D1895	0.49 g/cc
Sintered Density	ASTM D792	1.1 g/cc
Melt Viscosity (Virgin)	ASTM D1238	25 g/10 min
Elongation at Break (XY)	ASTM D638	8%
Ultimate Tensile Strength (XY)	ASTM D638	4,200 psi
Tensile Modulus (XY)	ASTM D638	427,000 psi
Tensile Strength	ASTM D638	47 MPa
Surface Resistivity (Top facing surface Ω)	ASTM D257	2.4×10^3
Surface Resistivity (Bottom facing surface Ω)	ASTM D257	3.3×10^4
PSD D10-D90 (D50)	Laser Diffraction	31μ-95μ (55μ)

The material properties provided herein are for reference purposes only. Actual values may vary significantly as they are dramatically affected by part geometry and process parameters. Material specifications are subject to change without notice.

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