

Prosilas

ULTEM 9085

FDM MATERIAL

		XZ Orientation ⁽¹⁾	ZX Orientation ⁽¹⁾
Tensile Properties: ASTM D638			
Yield Strength	MPa	69.2 (1.0)	No yield
	psi	10000 (150)	No yield
Elongation @ Yield	%	5.4 (0.50)	No yield
Strength @ Break	MPa	68.1 (1.6)	39.4 (8.7)
	psi	9870 (230)	5710 (1300)
Elongation @ Break	%	5.4 (0.50)	1.9 (0.51)
Modulus (Elastic)	GPa	2.52 (0.062)	2.41 (0.15)
	ksi	365 (8.9)	350 (22)
Flexural Properties: ASTM D790, Procedure A			
Strength @ Break	MPa	104 (2.2)	73.1 (13)
	psi	15000 (320)	10600 (1900)
Strain @ Break	%	No break	3.67 (0.55)
Modulus	GPa	2.40 (0.032)	2.13 (0.081)
	psi	348 (4.6)	309 (12)

Prosilas

Additive Manufacturing Service & Consulting

+39 0733 892665
info@prosilas.com
www.prosilas.com

		XZ Orientation ⁽¹⁾	ZX Orientation ⁽¹⁾
Compression Properties: ASTM D695			
Yield Strength	MPa	139 (9.4)	342 (27)
	psi	20100 (1400)	49600 (390)
Modulus	GPa	2.22 (0.047)	2.28 (0.080)
	Ksi	321 (6.8)	331 (12)
Impact Properties: ASTM D256, ASTM D4812			
Izod, Notched	J/m	88.5 (21)	39.2 (4.3)
	ft*lb/in	1.66 (0.40)	0.735 (0.080)
Izod, Unnotched	J/m	647 (66)	187 (42)
	ft*lb/in	12.1 (1.2)	3.51 (0.79)

(1) Values in parentheses are standard deviations

Prosilas

Additive Manufacturing Service & Consulting

+39 0733 892665
info@prosilas.com
www.prosilas.com