

Objet ABS-like Digital Material\*\* (RGD5160-DM) is fabricated from FullCure®515 and FullCure®535. It is designed to simulate ABS-grade engineering plastics by combining high-temperature resistances with high toughness. This material is ideal for: Functional prototypes, snap-fit parts for high or low temperature usage, electrical parts casings, mobile telephone casings, engine parts and covers. Objet ABS-like Digital Material has a high impact resistance of 65-80J/m (1.22-1.5 ft lb/inch) and a heat deflection temperature (HDT) of 58-68 °C (136–154 °F) upon removal from the printer. A higher HDT of 82-95°C (179–203 °F) can be achieved after thermal post treatment in a programmable oven using different temperature profiles.



### Engineering Plastics (ABS-like) Family

ABS-like Digital Material offering high-impact resistance and shock-absorption.

DMAB (RGD5160-DM)					
Property	ASTM	Metric		Imperial	
Tensile Strength	D-638-03	Mpa	57.5	psi	8,350
Modulus of Elasticity	D-638-04	Mpa	2,800	psi	405,000
Elongation at Break	D-638-05	%	33%	%	33%
Flexural Strength	D-790-03	Mpa	70	psi	10,250
Flexural Modulus	D-790-04	Mpa	1,950	psi	282,500
Izod Notched Impact	D-256-06	J/m	72.5	ft lb/in	1.36
Shore Hardness	D-2240-03	Scale D	76	Scale D	76
Rockwell Hardness	D-785-03	Scale M	97	Scale M	97
HDT at 0.45 Mpa	D-648-06	°C	63	°F	145
HDT at 0.45 Mpa after post curing	D-648-06	°C	86	°F	187
Tg	DMA, E"	°C	50	°F	122
Ash Content	USP 28	%	0.04	%	0.04
Shore Hardness (D)	Scale D	Scale D	85-87	Scale D	85-87
Water Absorption	D570-98 24 Hr	%	1.3	%	1.3
Typical achievable tolerance	-	First cm: +/- .127mm; Every cm after: +/- .025 mm		First Inch: +/- .005; Each Inch after +/- .001 in	

## At the core:

### Advanced Polyjet Technology

Connex500™ is the first 3D printing system that offers the ability to print parts and assemblies made of multiple model materials, with different mechanical or physical properties, all in a single build. By printing with Digital Materials, the Connex500™ allows you to print parts with specific Shore A values to match the values of the intended production materials. This capability opens up new opportunities, bringing you much closer to realizing the final product at an early stage, including feasibility testing and over-molding process simulation.

### Real Accuracy

PolyJet technology uses a jetting head that slides back and forth along the X-axis to accurately build each layer at 16 microns (0.0006 inches) thick.

### Get your benchmark on the future of manufacturing

Fine details. Smooth surface finishes. Accuracy. Strength. The best way to see the advantages of a Connex machine is to have your own part built on this system today!

## About Additive Manufacturing LLC

Additive Manufacturing LLC is a privately held additive manufacturing company located in San Juan Capistrano, California, dedicated to improving design through engineering and rapid prototyping. We strive to be at the cutting edge, bringing both knowledge and resources directly to customers. With our team of engineers, we help guide customers to the process that best suits their specific application, without holding a bias to a specific platform or technology.