

Digital ABS (RGD5160 – DM) is fabricated from RGD515 and RGD535. It is designed to simulate ABS engineering plastics by combining high-temperature resistances with high toughness. Digital ABS is suitable for any simulated parts that require high-impact resistance and shock-absorption.

Digital ABS 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.

Ideal for:

- Functional prototypes
- Snap-fit parts for high or low temperature usage
- Electrical parts, casings, mobile telephone casings
- Engine parts and covers



Digital ABS(RGD5160-DM) made of RGD515 & RGD535

	ASTM	Units	Metric	Units	Imperial
Tensile strength	D-638-03	MPa	55-60	psi	8000-8700
Elongation at break	D-638-05	%	25-40	%	25-40
Modulus of elasticity	D-638-04	MPa	2600-3000	psi	375,000-435,000
Flexural Strength	D-790-03	MPa	65-75	psi	9,500-11,000
Flexural Modulus	D-790-04	MPa	1700-2200	psi	245,000-320,000
HDT, °C @ 0.45MPa	D-648-06	°C	58-68	°F	136-154
HDT, °C @ 0.45MPa after thermal post treatment procedure A	D-648-06	°C	82-90	°F	180-194
HDT, °C @ 0.45MPa after thermal post treatment procedure B	D-648-06	°C	92-95	°F	198-203
HDT, °C @ 1.82MPa	D-648-07	°C	51-55	°F	124-131
Izod Notched Impact	D-256-06	J/m	65-80	ft lb/inch	1.22-1.50
Tg	DMA, E _s	°C	47-53	°F	117-127
Shore Hardness (D)	Scale D	Scale D	85-87	Scale D	85-87
Rockwell Hardness	Scale M	Scale M	67-69	Scale M	67-69
Polymerized density	ASTM D792	g/m ³	1.17-1.18		

PolyJet Materials Data Sheet



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