

ABS is a strong, durable production-grade thermoplastic used across many industries. ABS is an ideal material for conceptual prototyping through design verification through direct digital manufacturing, in a variety of standard and custom colors.

Mechanical Properties ¹	Test Method	Imperial	Metric
Tensile Strength, Type 1, 0.125	ASTM D638	3,200 psi	22 MPa
Tensile Modulus, Type 1, 0.125	ASTM D638	236,000 psi	1,627 MPa
Tensile Elongation, Type 1, 0.125	ASTM D638	6 %	6 %
Flexural Strength	ASTM D790	6,000 psi	41 MPa
Flexural Modulus	ASTM D790	266,000 psi	1,834 MPa
IZOD Impact, notched	ASTM D256	2 ft-lb/in	106.78 J/a
IZOD Impact, un-notched	ASTM D256	4 ft-lb/in	213.56 J/a

Thermal Properties	Test Method	Imperial	Metric
Heat Deflection Temperature @ 66 psi	ASTM D648	195° F	90° C
Heat Deflection Temperature @ 264 psi	ASTM D648	169° F	76° C
Glass Transition Temperature (Tg)	DMA (SSYS)	219° F	104° C
Coefficient of Thermal Expansion	ASTM D696	5.60E-05 in/in/F	-----
Melt Point	-----	Not Applicable ²	Not Applicable ²

Other	Test Method	Value
Specific Gravity	ASTM D792	1.05
Rockwell Hardness	ASTM D785	R105
Flame Classification	UL 94	HB
Dielectric Strength kV/mm	IEC 60112	32
Dielectric Constant @50Mhz	IEC 60250	2.4