

## ABS (Acrylonitrile Butadiene Styrene):

ABS use has grown over the last 50 years as more and more molders and OEMs take advantage of the it's processing and property versatility. ABS Applications run from automotive interiors and exteriors, boat hulls and appliances to, Low tension electrical/ electronic components, and industrial equipment.

In general, ABS has high impact strength and rigidity, stands up well to chemicals and weather, and it can easily be processed with good as-molded surfaces.

Following are the Physical , Mechanical , Thermal , Electrical properties of ABS FR grade .

S.R. No .	Property	ASTM Test Method	Units	ABS FR
	<b>Physical</b>			
1	Specific Gravity :	D792		1.21
	<b>Mechanical</b>			
2	Compressive Strength	D695	psi	7650
3	Flexural Modulus	D790	psi	330000
4	Flexural Strength @yield	D790	psi	9500
5	Hardness–Rockwell	D785		R 97
6	Izod Impact Strength, Notched @–40°F	D256	ft*lbs/in	1.0
7	Izod Impact Strength, Notched @73°F	D256	ft*lbs/in	4.0
8	Tensile Modulus	D638	Psi	320000
9	Tensile Strength @yield	D638	Psi	5500
	<b>Thermal</b>			
10	Flammability Rating, @.058”	UL 94		V-0
11	Flammability Rating, @.108”	UL 94		5V-A
12	Heat Deflection Temperature, @66 psi	D648	°F	190
13	Heat Deflection Temperature, @264 psi	D648	°F	162
	<b>Electrical</b>			
14	Dielectric Strength	D149	V/mil	400

ABS is suitable for LT Electrical application and it is used in manufacturing Low Tension Current Transformers. It has replaced Polyester Resin Cast and Tape insulated Ct's due to it's following advantages.

1. CT's become Light weight that Resin cast Ct's.
2. Temper proof termination can be achieved.
3. Ct's are hermetically sealed.
4. Excellent aesthetic.
5. Busbar clamping arrangement.
6. Dinrail mounting arrangement.
7. Low Cost .
8. Less manufacturing time hence faster delivery.
9. Excellent Quality.