



## G-7 (Glass / Silicone) General Material Properties

Property	Metric	units	English	units
<b>General</b>				
Density	1.6e3 - 2e3	kg/m <sup>3</sup>	0.0578 - 0.0723	lb/in <sup>3</sup> USD/lb
<b>Mechanical</b>				
Yield Strength	2.76e7 - 5.79e7	Pa	4.0 - 8.4	ksi
Tensile Strength	3.45e7 - 7.24e7	Pa	5 - 10.5	ksi
Elongation	0.00558 - 0.00645	% strain	0.558 - 0.645	% strain
Hardness (Vickers)	8.14e7 - 1.71e8	Pa	8.3 - 17.4	HV
Impact Strength (notched)	3.2e3 - 9.5e4	J/m <sup>2</sup>	1.52 - 45.2	ft.lbf/in <sup>2</sup>
Fracture Toughness	2.16e6 - 6.47e6	Pa/m <sup>0.5</sup>	1.96 - 5.89	ksi/in <sup>0.5</sup>
Young's Modulus	1.1e10 - 1.65e10	Pa	1.6 - 2.39	10 <sup>6</sup> psi
<b>Thermal</b>				
Max Service Temperature	141 - 157	°C	286 - 315	°F
Insulator or Conductor	Insulator		Insulator	
Specific Heat Capability	1.19e3 - 1.23e3	J/kg °C	0.283 - 0.295	BTU/lb. °F
Thermal Expansion Coefficient	7.2e-5 - 8.1e-5	strain/°C	40 - 45	μstrain/°F
<b>Eco</b>				
CO2 Footprint	3.67 - 4.06	kg/kg	3.67 - 4.06	lb/lb
Recycleable	No		No	

The information on this page is intended as general guidance only and is only accurate at the time of posting (9-10-12). Specific material properties vary by manufacturer. Please contact a Dielectric application engineer for help in choosing the optimal material for your application and budget.