

G270 is a one-component epoxy with high-thermal conductivity and adhesive strength. As a heat carrier, graphene provides high stability. G270 offers a good adhesive strength, in both metallic as well in plastic materials. G270 is widely used in LED and semiconductors industries for assembly and many other applications.

Properties	G270	Test Method
Thermal Conductivity	2.7W/mK	JESD51-14 After cured
	1.2W/mK	JESD51-14 Before cured
Appearance & Color	Gray black paste	Visual Inspection
Viscosity@ 25°C	200000cps / 220000cps	Brookfield DV-3
Density@ 25°C	1.0g/ml	ISO 1183
Coefficient of Thermal expansion		
Below Tg	$51 \times 10^{-6} \text{ K}^{-1}$	ISO 11359-2
Above Tg	$193 \times 10^{-6} \text{ K}^{-1}$	ISO 11359-2
Glass transition temperature	119°C.	ISO 11359-2
Lap Shear strength	11.0Mpa	ISO 4587
Hardness	79	ISO 868, Shore D
Working Temperature	-40°C. to 150°C.	Long term
	175°C.	Short term (15 mins)
Volume Resistivity	$>4.4 \times 10$	IEC 60093
Breakthrough Voltage	4000V/mm	
Insulation	500V/mm	
Operating Instructions		
Cure Condition	90 mins @ 100°C.	
	60 mins @ 120°C.	
	15 mins @ 150°C.	
Working Time	>120 hrs @ 25°C.	
Life Time and Storage temperature		
Seal avoid light @ 30°C.	3 months	
Seal avoid light @ 25°C.	12 months	
Seal avoid light @ -10°C.	24 months	
Standard Packaging		
Canning (small)	100ml/100g	
Tube	330ml/330g	
Canning	1000ml/1000g	