

HIGH THERMAL CONDUCTIVITY

C50

C50 is formulated to deliver excellent thermal performance whilst keeping cost low, making the material ideal for gaskets and large surface areas.

C50 is natural graphite based and designed to thermally connect metal to metal surface that require no electrical isolation.

C50 is silicone free, easy to handle and will deliver consistent and repeatable thermal performance. This provides a known and repeatable level of the thermal impedance.

C50 is available in 3 thicknesses: 0.13mm, 0.25mm and 0.5mm. Available on rolls and as custom die-cut shapes. With or without one side adhesive.



Properties	Unit	C50	Test Method
Base material		Flexible graphite	Visual
Tested thickness	mm	0.25	
Color		Pewter gray	Visual
Assembly		Single Layer	
Thermal Properties			
Thermal conductivity along material	W/mK	240	ASTM D5470
Thermal conductivity through	W/mK	5	ASTM D5470
Operating temperature	°C	-240 to +300	
Thermal resistivity @ 600 KPa	K cm ² /W	0.66	ASTM D5470
Mechanical Properties			
Tensile strength	MPa	4.5	ASTM D412
Hardness	Shore A	85	ASTM D2240
Outgassing CVCM	%	0.09	ASTM E595
Density	g/cc	2.20	Helium Pycnometer
Volume resistivity	ohm-cm	11 x 10 ⁻⁵	ASTM D257
Physical Properties			
Standard thicknesses	mm	0.127 / 0.254 / 0.508	
Flame rating	UL94	VO	

Ordering example:

C50-0127-A0

C = Carbon / 50 = 5.0 W/mK / 0127 = 0.127mm

A0 = without adhesive / A1 = with adhesive on one side