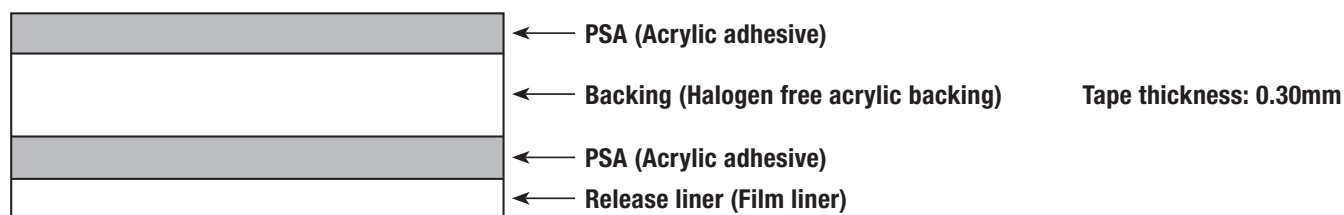


3M™ Thermally Conductive Adhesive Transfer Tape 8910-03

Product Description

3M™ Thermally Conductive Adhesive Transfer Tape (TCATT) 8910-03 is designed to provide a preferential heat-transfer path between heat generating components and heat sinks or other cooling devices (e.g., fans, heat spreaders or heat pipes). The 3M TCATT 8910-03 is a pressure sensitive adhesive with thermally conductive fillers that do not require a heat cure cycle to form an excellent bond to many substrates. Only pressure is needed to form an excellent bond and thermal interface. The tape offers good adhesion performance and has a UL 94 rating of V-2.

Product Construction



Properties

Note: The following technical information and data should be considered representative or typical only and should not be used for specification purposes.

Typical Properties and Performance Characteristics

Property	Method	Value
Color	–	White
Thermal Conductivity (W/mK)	3M Method	0.6
Flammability	UL 94 UL registration: file No. E176845	V-2
RTI	UL registration: file No. E321335	105°C
Density (g/cm ³ , @ 25°C)	JIS K6249	1.5

Properties (continued)

Note: The following technical information and data should be considered representative or typical only and should not be used for specification purposes.

Adhesive Strength

Property	Value
90° Adhesion Strength (N/cm)	20
Shear Strength (N/cm ²)	138
Shear Holding Power (90°C, mm)	0.5

(Test Method)

90° Adhesion Strength (N/cm):

Backside substrate: 130 μm Aluminum, Sample width: 25mm, Substrate: Stainless Steel (SS304BA)
 Pressure: 10kg roller twice for each direction, Dwelling condition: 23°C for 72 Hr., Peel speed: 300mm/min.

Shear Strength (N/cm²):

Substrate: Stainless Steel (SS304BA), Pressure: 10kg roller twice for each direction, Dwelling condition: 23°C for 72 Hr.,
 Peel speed: 300mm/min.

Share Holding Power (mm):

Substrate: Stainless Steel (SS304BA), Pressure: 10kg roller twice for each direction, Dwelling condition: 23°C for 72 Hr.,
 Load: 250g/ cm², Measure shift length after 10,000 min @ 90°C.

Electrical Properties of 3M™ Thermally Conductive Adhesive Transfer Tape 8910-03

Property	Unit	Value			Test Method
Surface Resistivity	Ω-cm	2.8 x 10 ¹⁵			Conducted in accordance with ASTM D-257
Volume Resistivity	Ω-cm	1.1 x 10 ¹⁴			Conducted in accordance with ASTM D-257
Dielectric Strength	kV/mm	32			Conducted in accordance with ASTM D-149
Dielectric Constant	Freq. (Hz)	3M	100M	1G	Conducted in accordance with ASTM D-150
	–	4.5	3.9	3.4	

Storage and Shelf Life

The product shelf life of 3M™ Thermally Conductive Adhesive Transfer Tape 8910-03 is 2 years from date of manufacture when stored at room temperature (20°C to 25°C) and 50% R. H. in the products original packaging.

Regulatory

For regulatory information about this product, contact your 3M representative.

Technical Information

The technical information, recommendations and other statements contained in this document are based upon tests or experience that 3M believes are reliable, but the accuracy or completeness of such information is not guaranteed.

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