

## 3M 9082 Ultra High Temperature 100 HT Adhesive Transfer Tape

Category : Polymer , Adhesive

### Material Notes:

3M™ Ultra High Temperature 100HT Adhesive Transfer Tapes 9082 and 9085 utilize a high performance and low outgassing adhesive system having excellent heat resistance in high temperature environments. Not only does it have excellent holding power, but also its adhesion strength is significantly higher than typical pressure sensitive tapes. 3M™ Ultra High Temperature 100HT Adhesive Transfer Tapes 9082UV and 9085UV have a UV fluoresce agent to allow black light inspection during converting and assembly. These adhesive transfer tapes are ideal for use in many industrial applications subjected to higher temperature environments. Typical examples are for automotive under-hood applications that require both higher processing and operating temperatures. Other areas include printed circuit boards and heat sink bonding in many electronics applications subjected to high solder reflow temperatures. Information provided by 3M

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_3M-9082-Ultra-High-Temperature-100-HT-Adhesive-Transfer-Tape.php](http://www.lookpolymers.com/polymer_3M-9082-Ultra-High-Temperature-100-HT-Adhesive-Transfer-Tape.php)

Physical Properties	Metric	English	Comments
Density	0.980 g/cc	0.0354 lb/in <sup>3</sup>	
Thickness	50.8 microns	2.00 mil	Adhesive
	81.3 microns	3.20 mil	Release Liner

Mechanical Properties	Metric	English	Comments
Tensile Strength at Break	0.0700 MPa	10.2 psi	T-Block on Aluminum; ASTM D987
	@Temperature 175 °C	@Temperature 347 °F	
	0.0700 MPa	10.2 psi	T-Block on Aluminum; ASTM D987
	@Temperature 230 °C	@Temperature 446 °F	
	0.100 MPa	14.5 psi	T-Block on Aluminum; ASTM D987
@Temperature 107 °C	@Temperature 225 °F		
Shear Strength	0.100 MPa	14.5 psi	T-Block on Aluminum; ASTM D987
	@Temperature 150 °C	@Temperature 302 °F	
	0.345 MPa	50.0 psi	T-Block on Aluminum; ASTM D987
	@Temperature 23.0 °C	@Temperature 73.4 °F	
	0.103 MPa	15.0 psi	Over-Lap Shear on Stainless Steel; ASTM D1002
@Temperature 230 °C	@Temperature 446 °F		
Shear Strength	0.138 MPa	20.0 psi	Over-Lap Shear on Stainless Steel; ASTM D1002
	@Temperature 175 °C	@Temperature 347 °F	

Mechanical Properties	0.207 MPa Metric	30.0 psi English	Over-Lap Shear on Stainless Steel; ASTM D1002
	@Temperature 150 °C	@Temperature 302 °F	
	0.241 MPa	35.0 psi	Over-Lap Shear on Stainless Steel; ASTM D1002
	@Temperature 107 °C	@Temperature 225 °F	
	0.621 MPa	90.0 psi	Over-Lap Shear on Stainless Steel; ASTM D1002
	@Temperature 23.0 °C	@Temperature 73.4 °F	
Peel Strength	0.263 kN/m	1.50 pli	Adhesion on Aluminum; ASTM D3330
	@Temperature 230 °C	@Temperature 446 °F	
	0.526 kN/m	3.00 pli	Adhesion on Aluminum; ASTM D3330
	@Temperature 175 °C	@Temperature 347 °F	
	0.614 kN/m	3.50 pli	Adhesion on Aluminum; ASTM D3330
	@Temperature 150 °C	@Temperature 302 °F	
	0.701 kN/m	4.00 pli	Adhesion on Aluminum; ASTM D3330
	@Temperature 107 °C	@Temperature 225 °F	
	0.877 kN/m	5.00 pli	Adhesion on Aluminum; ASTM D3330
	@Temperature 23.0 °C	@Temperature 73.4 °F	

Thermal Properties	Metric	English	Comments
CTE, linear	77.0 $\mu\text{m}/\text{m}\cdot\text{°C}$	42.8 $\mu\text{in}/\text{in}\cdot\text{°F}$	
Thermal Conductivity	0.669 W/m-K	4.64 BTU-in/hr-ft <sup>2</sup> -°F	ASTM C177
Maximum Service Temperature, Air	177 °C	351 °F	Long term
	280 °C	536 °F	Short term

Electrical Properties	Metric	English	Comments
Insulation Resistance	$\geq 1.00\text{e}+6$ ohm	$\geq 1.00\text{e}+6$ ohm	ASTM D1000
Dielectric Strength	11.8 kV/mm	300 kV/in	ASTM D149-97A
	@Temperature 23.0 °C	@Temperature 73.4 °F	
	30.3 kV/mm	770 kV/in	ASTM D149-97A
	@Temperature 175 °C	@Temperature 347 °F	
	34.3 kV/mm	870 kV/in	ASTM D149-97A
	@Temperature 150 °C	@Temperature 302 °F	

Electrical Properties	47.2 kV/mm Metric	1200 kV/in English	Comments
	@Temperature 23.0 °C	@Temperature 73.4 °F	J-97A

Processing Properties	Metric	English	Comments
Shelf Life	24.0 Month	24.0 Month	

Descriptive Properties	Value	Comments
Adhesive Type	Acrylic Adhesive	
Appearance	Clear	
Liner	White printed paper	

## Contact Songhan Plastic Technology Co.,Ltd.

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