



3M™ Pressure Sensitive Cover Tape 2698

Technical Data – December, 2014

Product Description

3M Pressure Sensitive Cover Tape 2698 is a transparent, polyester film tape with a synthetic, room temperature, pressure sensitive adhesive (PSA) zone along each edge. Cover Tape 2698 has been designed to seal electrical and electronic components into 3M's family of polycarbonate carriers. It also works well with certain other embossed carrier tapes.

Construction

Backing	Adhesive	Inner Face
Transparent polyester film	Pressure-sensitive, synthetic polymer	Transparent, conductive, polyester film

Available Widths

Cover Tape 2698 is available in the standard sizes listed below, with adhesive exposed only along the edges. All Cover Tape 2698 is supplied in 600 meter, splice-free rolls.

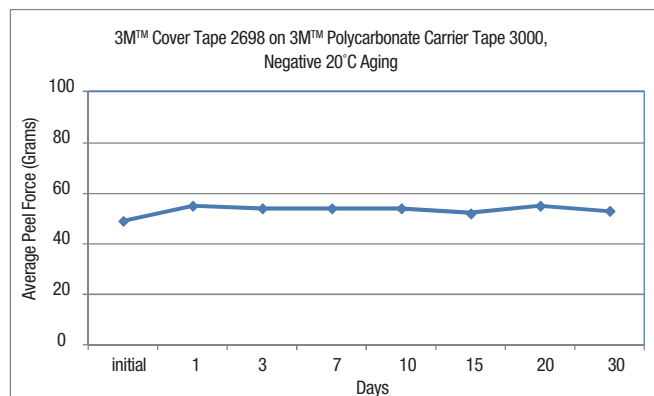
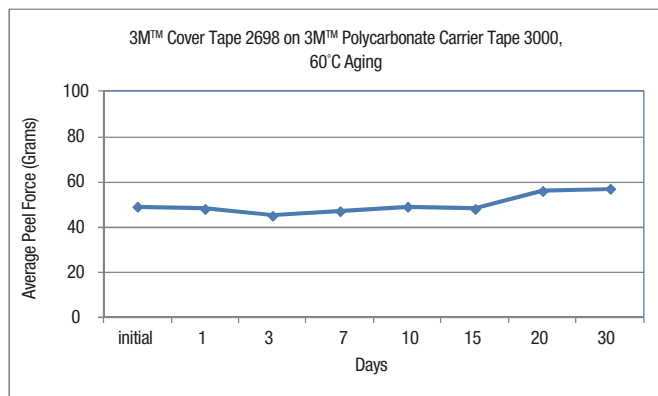
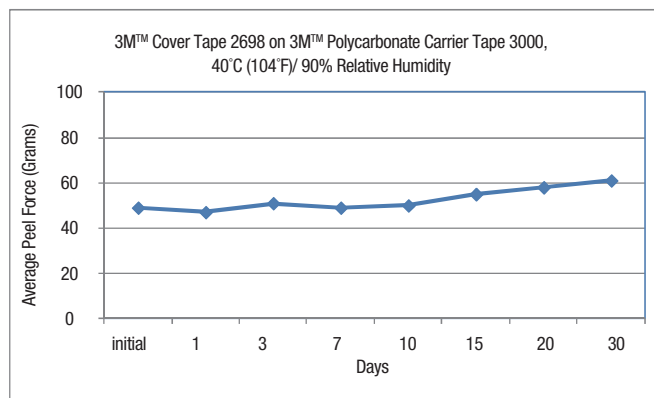
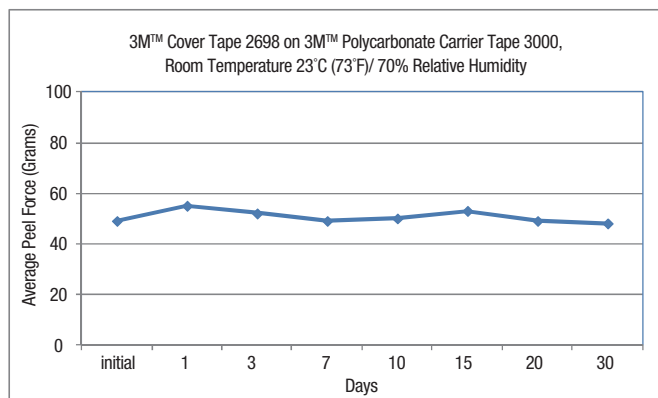
Standard Sizes	Widths (mm)						
Carrier Tape	8	12	16	24	32	44	56
Cover Tape	5.4	9.3	13.3	21.3	25.5	37.4	49.4
Adhesive Exposure each edge	1.0	1.1	1.3	1.3	1.3	1.4	1.4
Roll Length (m)	600	600	600	600	600	600	600



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Initial Adhesion and Aging Data

3M Pressure Sensitive Cover Tape 2698 has a simple process window. Desirable initial peel force values can be achieved through the application of adequate pressure to the non-adhesive surface of the cover tape over the adhesive stripes with a reciprocating shoe, or compliant roller mechanism. The following charts depict the typical room temperature and aging characteristics of Cover Tape 2698 after sealing to 3M™ Polycarbonate Carrier Tape 3000.



Note: The following technical information and data is based upon limited 3M testing conditions and should not be used for specification purposes.

Sealing Parameters

Cover Tape:	Cover Tape 2698, 5.4 mm
Carrier:	Polycarbonate Carrier Tape 3000, 8 mm
Sealing Mode:	Continuous (Rubber Pressure Roller)
Pressure:	1.0 bar
Temperature:	Room Temperature \approx 23°C (73°F)

Graph Notes

Notes: The graphs in this document represent sealing performance attained under the conditions specifically stated in the sealing parameters section above. Pressure is the indicated gauge pressure used to achieve the seals, and may vary among sealing equipment manufacturers. The use of a different sealing mechanism, i.e., reciprocating vs. roller, may have an effect upon the performance obtained under otherwise identical conditions due to differences in pressure or pressure distribution. The use of heat is specifically not recommended.

All data presented are representative of peeling studies conducted according to the requirements of the current ANSI/EIA481-D Standard. Sealed samples used in these studies were stored under the conditions noted, wound on 330 mm diameter reels to simulate typical production use. Samples being tested at elevated temperature and humidity were permitted a minimum equilibration period of one hour at room temperature prior to testing to simulate actual use conditions.

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Description		Units	Typical Performance	Test Notes	Test Method
Material Properties	Backing Type		Polyester	1	
	Adhesive Type		Pressure Sensitive Adhesive		
	Sealing Temp		Room Ambient		
Physical Properties	Tensile Strength	N/mm Width	7.0	2	Modified ASTM-D3759
	Elongation	%	90		Modified ASTM-D3759
	Transmission	%	66	3	ASTM-D1003
	Clarity	%	92	3	ASTM-D1003
	Haze	%	7.4	3	ASTM-D1003
	Thickness	mm (in)	.048 (.0019)		ASTM-D3652
Electrical Properties	Resistivity (Back Side)	Ohms/sq	Non-Conductive	4	3M Internal Test Method
	Resistivity (Component Side)	Ohms/sq	10 ⁵	4	3M Internal Test Method
Product Format	Core Type	Material	Plastic		
	Core Inner Diameter	mm (in)	76.2 (3.0)		
	Roll Diameter	mm (in)	220 (8.66)		
	Roll Length	m (yd)	600 (656)		

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Typical Adhesive Properties

The synthetic adhesive used in the construction of 3M Pressure Sensitive Cover Tape 2698 has been engineered to provide long term resistance to thermal degradation, even when exposed to environmental extremes such as the storage conditions depicted in the charts in this publication.

Storage Conditions

Cover Tape 2698 should be stored indoors, in its original packaging, in a controlled climate environment not exceeding 35°C (95°F) and 70% relative humidity. The product should be protected from direct sunlight and should be used on a "first-in, first-out" basis.

Shelf Life

It is recommended that Cover Tape 2698 be used within two years from the date of manufacture when stored according to the recommended storage conditions.

Test Notes

1. The application of heat to seal PSA cover tapes is specifically not recommended. Pressure in the range of 10 to 50 psig is sufficient to seal PSA adhesives.
2. Tensile tests are conducted at 21°C (70°F), 70% RH, in the machine direction of the polyester film.
3. Optical properties are measured using the BYK-Gardner Haze-Gard Plus Transmission Meter, Model 4725.
4. Resistivity is measured at room ambient temperature. Component side resistivity specification $1.0 \times 10^4 \leq R \leq 1.0 \times 10^8$ Ohms/sq. Measurement technique: Mitsubishi Hiresta HT-450 Surface Resistivity Meter.

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