

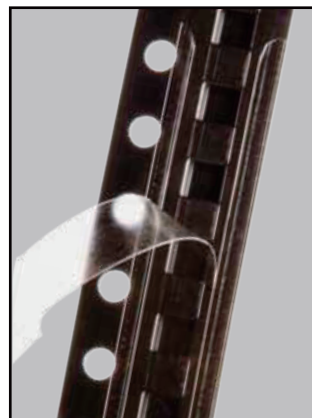
## 3M™ Static Dissipative Universal Cover Tape (UCT) 2688A

### Product description

3M™ Static Dissipative Universal Cover Tape (UCT) 2688A is a transparent, film tape with a synthetic, room temperature, pressure sensitive adhesive zones. 3M UCT 2688A is specifically designed to seal electrical and electronic components into all embossed carrier tape materials, including paper.

### Construction

Backing	Adhesive
Transparent film	Pressure-sensitive, synthetic polymer



### Available widths

3M UCT 2688A is available in the standard widths listed below, supplied in 300 meter, splice free rolls.

Standard sizes	Widths (mm)					
Carrier tape	8	12	16	24	32	44
Cover tape	5.4	9.3	13.3	21.3	25.5	37.4
Medial width	3.8	7.7	11.7	18.3	22.5	34.4
Roll length (m)	300	300	300	300	300	300

### Standard packaging format

3M UCT 2688A is available in standard packaging formats. Product is provided on a green plastic core, packaged with high density paper wafer inserts and a centering core. The product is then protected with a single, polyethylene bag and placed between two end-caps with corrugated pads on the top in a cardboard carton.

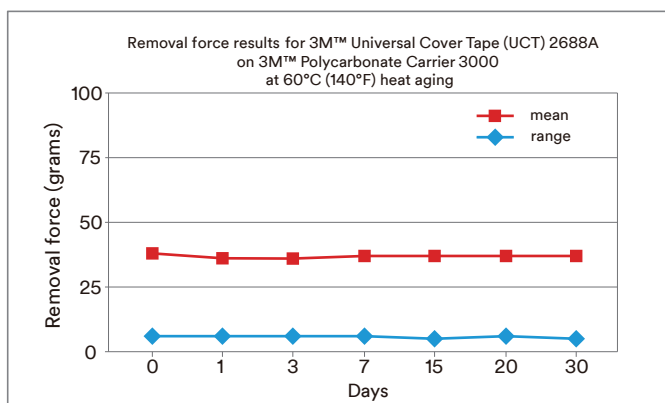
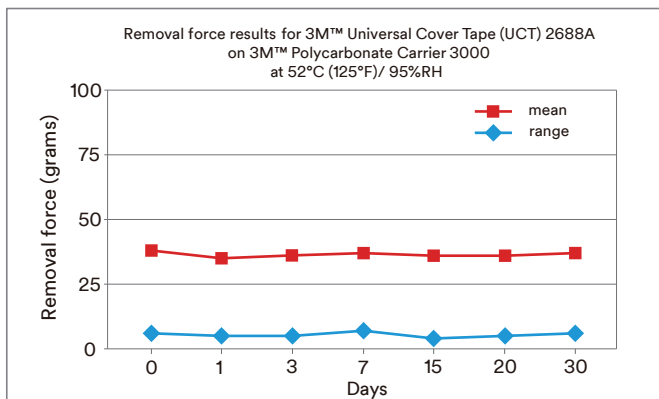
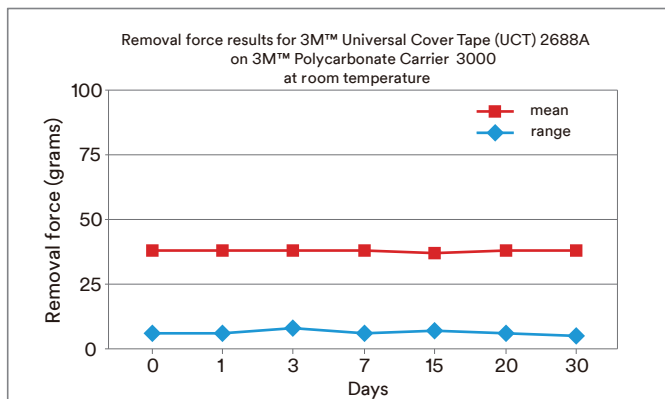
### Initial adhesion and aging data

3M UCT 2688A has a simple process window. Desirable adhesion to the carrier can be achieved with the application of pressure to the non-adhesive surface of the cover tape over the adhesive strips with a reciprocating pressure sensitive adhesive O-ring shoe, compliant roller, or mechanical mechanism for proper wet-out. The removal (peel) force is obtained by peel initiation and removal of medial section of cover tape. Still photos demonstrating typical peel initiation and removal force procedures are shown in this technical sheet. Visit [www.3Mtapeand reel.com](http://www.3Mtapeand reel.com) for full video viewing of these demonstrations. Removal force charts depict typical room temperature and aging characteristics of 3M UCT 2688A sealed to 3M™ Polycarbonate Carrier 3000.

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## Typical removal force results

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



## Sealing parameters

Cover tape: 3M™ Static Dissipative Universal Cover Tape (UCT) 2688A, 5.4 mm  
Carrier tape: 3M™ Polycarbonate Carrier 3000, 8 mm  
Sealing mode: Reciprocating (Rubber O-Ring Shoe)  
Pressure: 1.0 bar  
Dwell time: 0.1 sec  
Temperature: Room temperature ≈ 23°C (73°F)

## Graph notes

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

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Removal force “peel” data presented is representative of peel studies conducted according to the requirements of the current ANSI/EIA-481-E Standard. Sealed samples used in these studies were wound on 330 mm diameter reels to simulate typical production use. Samples tested at elevated temperature and humidity were stabilized at room temperature for a period of four hours prior to testing.



Peel initiation on 3M™ Universal Cover Tape (UCT) 2688A



Rework (at peel enabling feature) on 3M™ Universal Cover Tape (UCT) 2688A



Removal force testing of 3M Universal Cover Tape (UCT) 2688A



Rework (resealed) on 3M™ Universal Cover Tape (UCT) 2688A

## 3M™ Static Dissipative Universal Cover Tape (UCT) 2688A

### Typical physical properties and performance characteristics

Note: The following technical information and data should be considered representative or typical only and should not be used for specification purposes. Final product specifications and testing methods will be outlined in the products Certificate of Analysis (COA) that is provided once the product is approved by 3M for general commercialization and development work is completed.

Description		Units	Typical performance	Test notes	Test method
Material properties	Backing type		Polypropylene		
	Adhesive type		PSA		
	Sealing temp		Room temperature	1	
Physical properties	Tensile strength	N/mm Width	6.0	2	Modified ASTM-D3759
	Elongation	%	150	2	Modified ASTM-D3759
	Haze	%	2.4	3	ASTM-D1003
	Transmission	%	85	3	ASTM-D1003
	Thickness	mm (in)	0.048 (0.0019)	2	ASTM-D3652
Electrical properties	Resistivity (Back side)	Ohms/sq	10 <sup>12</sup>	4	ASTM-D257
	Resistivity (Component side)	Ohms/sq	10 <sup>7</sup>	4	ASTM-D257
Product format	Core type	Material	Plastic		
	Core inner diameter	mm (in)	76.2 (3.0)		
	Roll diameter	mm (in)	190.5 (7.5)		
	Roll length	m (yd)	300 (328)		

### Test notes

1. Sealing pressure sensitive adhesive cover tapes with heat is specifically not recommended. Pressure in the range of 10 to 50 psig is recommended.
2. Tensile tests and thickness measurement are conducted at 23°C (73°F), 70% RH, in the machine direction of the polypropylene film.
3. Optical properties are measured using a BYK-Gardner Haze-Gard Plus Transmission Meter.
4. Resistivity is measured at room temperature by resistance meter.

### Storage conditions and shelf life

3M™ Static Dissipative Universal Cover Tape (UCT) 2688A should be stored indoors, in its original packaging, in a controlled climate environment ranging 22°C - 28°C (72°F - 82°F) and not exceeding 70% relative humidity. The product should be protected from direct sunlight and should be used on a “first-in, first-out” basis.

The shelf life of 3M UCT 2688A is two years from the date of manufacture when stored according to the recommended storage conditions.

# 3M™ Static Dissipative Universal Cover Tape (UCT) 2688A

## Certificate of Analysis (COA)

The 3M Certificate of Analysis (COA) for this product is established when the product is commercially available from 3M. The commercially available product will have a COA specification established. The COA contains the 3M specifications and test methods for the products performance limits that the product will be supplied against. The 3M product is supplied to 3M COA test specifications and the COA test methods. Contact your local 3M representative for this product's COA.

This technical data sheet may contain preliminary data and may not match the COA specification limits and/or test methods that may be used for COA purposes.

Final product specifications and testing methods will be outlined in the products Certificate of Analysis (COA) that is shipped with the commercialized product.

**Safety Data Sheet:** Consult Safety Data Sheet before use.

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

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