



# **Technical Data Sheet**

3M™ VHB™ Thin Foam Tape 5980-015

English-US

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## **Product Description**

Finite Element Analysis (FEA)data is available for this product at: 3m.com/FEA

 $3M^{\text{TM}}$  VHB Thin Foam Tape 5980-015 is a thin foam tape with pressure sensitive adhesive on both sides and is used for bonding a wide range of high and low surface energy materials in the electronics industry. This specially formulated foam provides impact resistance and high bond strength while providing good conformability.

#### **Product Features**

- Thin foam tapes with pressure sensitive adhesive (PSA) on both sides
- Good impact resistance and conformability
- High bond strength

#### **Technical Information Note**

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

# **Typical Physical Properties**

Attribute Name	Test Method	Value
Color		Black
Adhesive Type		Acrylic
Density	ASTM D3574	910 kg/m³ (57 lb/ft³) ¹
Total Tape Thickness	ASTM D3652	0.15 mm (6 mil)
Liner		Polyester
Primary Liner Thickness		0.08 mm (3 mil)
Secondary Liner Thickness		0.05 mm (2 mil)
Primary Liner Color		Clear
Thickness Tolerance		± 15 %

<sup>&</sup>lt;sup>1</sup> Foam with adhesive

#### **Typical Performance Characteristics**

Substrate: Stainless Steel Temperature: 22 °C (72 °F)

Dwell Time: 72 h Backing: 2 mil PET

Attribute Name	Test Method	Value
90° Peel Adhesion	ASTM D3330	14 N/cm (8 lb/in) <sup>1</sup>

<sup>1 12</sup> in/min (300 mm/min)

#### **Static Shear**

Substrate: Stainless Steel

Temperature	Value
22 °C (72 °F)	750 g/0.5 in <sup>2</sup> <sup>1</sup>
70 °C (158 °F)	250 g/0.5 in <sup>2</sup> <sup>1</sup>

<sup>1</sup> Holds 10,000 min.

Attribute Name	Value
Short Term Temperature Resistance	93 °C (200 °F) ¹
Long Term Temperature Resistance	70 °C (158 °F) <sup>2</sup>

- <sup>1</sup> Short Term (minutes, hour)
- <sup>2</sup> Long Term (day, weeks)

## **Handling/Application Information**

#### **Application Examples**

Lens bonding, LCM attachment, touch panel bonding, bezel bonding.

#### **Application Techniques**

For maximum bond strength the surfaces should be thoroughly cleaned with a 50:50 mixture of isopropyl alcohol and water. Consult manufacturers directions for use and precautions when using cleaning solvents. Ideal tape application is accomplished when temperature is between 21°C and 38°C (between 70°F and 100°F) and the bond is allowed to dwell 72 hours. Initial tape application to surfaces at temperatures below 10°C (50°F) is not recommended.

#### Storage and Shelf Life

Store in original cartons at 4-38°C (40-100°F) and 0-95% relative humidity. Optimum storage conditions are 22°C (72°F) and 50% relative humidity. When stored under proper conditions, product retains its performance and properties for 24 months from date of manufacture.

#### **Available Sizes**

Attribute Name	Value
Core Size (ID)	76.2 mm (3 in)
Normal Slitting Tolerance	± 0.8 mm (± 1/32 in)
Standard Roll Length	65.8 m (72 yd)

#### **Automotive Disclaimer**

**Select Automotive Applications:** 

This product is an industrial product and has not been designed or tested for use in certain automotive applications, such as automotive electric powertrain battery or high voltage applications, which may require the product to be manufactured in a IATF certified facility, meet a Ppk of 1.33 for all properties, undergo an automotive production part approval process (PPAP), or fully adhere to automotive design or quality system requirements (e.g., IATF 16949 or VDA 6.3). Customer assumes all responsibility and risk if customer chooses to use this product in these applications.

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#### **ISO Statement**

This product was manufactured under a 3M quality system registered to ISO 9001 standards.

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