3M VHB[™] **Tape**4914

Technical Data		July, 2005
Product Description	3M TM VHB TM Tape 4914 is a double coated 0.010 inch (0.25 mm) pressure sensitive adhesive tape for bonding a wide range of materials, including many types of metal and plastics. This product has excellent adhesion and shear strength, and also resists to UV lights and elevated temperatures.	
Typical Physical Properties and Performance Characteristics	Adhesive:	General Purpose Acrylic Adhesive
	Adhesive Carrier:	Acrylic Foam (closed cell)
	Thickness:	0.010 in. (0.25 mm)
	Density:	50 lb./ft. ³ (800 kg/m ³)
	Liner:	Paper
	Tape Color:	White
	90° Peel Adhesion (ASTM D3330, Jaw s Stainless Steel Aluminum Galvanized Steel ABS Plastic FRP Plastic Acrylic Plastic	13 lb./in. width (230 N/100 mm) 10 lb./in. width (170 N/100 mm) 13 lb./in. width (230 N/100 mm) 10 lb./in. width (170 N/100 mm) 13 lb./in. width (230 N/100 mm) 8 lb./in. width (140 N/100 mm)
	Static Shear (ASTM D3654, measured a steel with 0.5 in.² overlap. Will hold the lis 72°F (22°C) 158°F (70°C) 200°F (93°C) 250°F (121°C) 300°F (149°C) 350°F (177°C)	at various temperatures and loadings on stainless sted weight for 10,000 minutes.) 1500 grams 1000 grams 500 grams 250 grams 200 grams 150 grams
	Dynamic Shear (ASTM D1002, Jaw spe Room Temperature	ed 0.5 in./min., on Stainless Steel) 130 lb./in.² (830 kPa)
	Normal Tensile (ASTM D897, 1 in. ² T-blo	ock on aluminum. Jaw speed 2 in./min.) 130 lb./in.² (830 kPa)
	Solvent Resistance	High
	Temperature Resistance Short Term (minutes, hours): Long Term (days, weeks):	300°F (149°C) 200°F (93°C)
	Electronic Properties Surface Resistance (ASTM D257):	>10 ¹⁶ ohms/in. ²

Volume Resistivity (ASTM D257):

Dielectric Strength (ASTM D149):

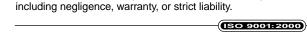
1.7 x 10¹¹ ohms-cm

7900 volts/mm

3MTM VHBTM Tape

4914

Available Sizes	Standard Length:	36 yds. (32.9 m)
	Standard Width:	11.8 in. (300 mm)
	Slitting Tolerance:	± 1/32 in. (0.8 mm)
	Core Size (ID):	3.0 in. (76.2 mm)
Application Guidelines	For maximum bond strength the surfaces should be thoroughly cleaned with a 50:50 mixture of isopropyl alcohol and water. Consult manufacturer's directions for use and precautions when using cleaning solvents. Ideal tape application is accomplished when temperature is between 70° and 100°F (21° and 38°C) and the bond is allowed to dwell 72 hours. Initial tape application to surfaces at temperatures below 50°F (10°C) is not recommended.	
Storage	Store in original cartons at 70°F (21°C) and 50% relative humidity.	
Shelf Life	When stored under proper conditions, product retains its performance and properties for 24 months from date of manufacture.	
Product Use	All statements, technical information and recommendations contained in this document are based upon tests or experience that 3M believes are reliable. However, many factors beyond 3M's control can affect the use and performance of a 3M product in a particular application, including the conditions under which the product is used and the time and environmental conditions in which the product is expected to perform. Since these factors are uniquely within the user's knowledge and control, it is essential that the user evaluate the 3M product to determine whether it is fit for a particular purpose and suitable for the user's method of application.	
Limited Warranty	3M warrants for 24 months from the date of manufacture that 3M [™] VHB [™] Tape will be free of defects in material and manufacture. 3M MAKES NO OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. This limited warranty does not cover damage resulting from the use or inability to use 3M [™] VHB [™] Tape due to misuse, workmanship in application, or application or storage not in accordance with 3M recommended procedures.	
Limitation of Remedies and Liability	REMEDY, AT 3M'S OPTION, SHALL	be defective within the warranty period stated above. THE EXCLUSIVE BE TO REFUND THE PURCHASE PRICE OF OR TO REPAIR OR VHB™ TAPE. 3M shall not otherwise be liable for loss or damages,



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whether direct, indirect, special, incidental, or consequential, regardless of the legal theory asserted,



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Liability

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