

310-1002 Wire Dots, .394" (10.0 mm) Square

Clean up your act when bonding wires. Wire Dots make the job of bonding jumper wires neat and fast.

Wire Dots are a wire tacking system consisting of pre-cut shapes of a thin, flexible polymer film coated on one side with a high-performance, electronics grade permanent pressure-sensitive adhesive. The result is a highly conformable, high-strength bond.

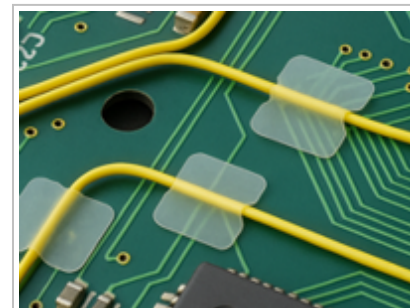
The adhesive on Wire Dots is commonly used for graphic attachment and membrane switch applications because it has excellent long-term quality, consistency, and durability. Wire Dots perform well after exposure to high humidity, UV, immersion in water, and hot/cold cycles.

Wire Dots will hold secure after exposure to numerous chemicals including cleaning solutions/sprays, saponifiers, mild acids, and alkalies, and will hold secure through a typical circuit board hot water wash.

Sold in packages.

Material Properties

Cover Film	Clear Polyester Film 1.0 mil (.025 mm) Thick
Adhesive	High performance Acrylic Adhesive 5.2 mils (0.13 mm) Thick (3M #3468MP)
Relative High Temperature Operating Ranges	Short term (minutes/hours) 400°F (204°C) Long term (days/weeks) 300°F (149°C)
Application	Specifically designed for long term bonding to printed circuit boards and high surface energy plastics for the aerospace, medical and industrial equipment, automotive, appliance and electronic markets.
Shelf Life	Minimum 12 months.
Safety Data Sheet	msds_wire_dots



Physical and Thermal Properties

Property	Typical Value	Unit	Test Method
Peel Strength 72 hrs @ 22 C	84	Oz./in.	ASTM D3330 Modified
Static Shear Strength 72 F (22 C) / 1000g	>10,000	min	ASTM D3654
Tensile Strength (Yield) 72 F (22 C)	>2600	psi	ASTM D2370
Elongation	100	%	ASTM D2370
Thermal Conductivity	0.17	w/m-k	ASTM C518
Coefficient of Thermal Expansion	5.5×10^{-4}	m/m/C	ASTM D696 25-175C

Electrical Properties

Property	Typical Value	Unit	Test Method
Dielectric Strength	1700	volts/mil	ASTM D149
Dielectric Constant 25 C, 1 kHz	3.4	-----	ASTM D150
Dissipation Factor 25 C, 1 kHz	0.018	-----	ASTM D150

Surface Resistivity - Adhesive Layer	$>1 \times 10^{14}$	ohm/square	ASTM D257
Surface Resistivity - Polymer Film Layer	$>1 \times 10^{16}$	ohm/square	ASTM D257
Volume Resistivity - Adhesive Layer	$>1 \times 10^{15}$	ohm/cm	ASTM D257
Volume Resistivity - Polymer Film Layer	$>1 \times 10^{18}$	ohm/cm	ASTM D257
Insulation/Moisture Resistance - Adhesive Layer	$>1 \times 10^{11}$	ohm	MIL-I-46058C (100 VDC 60 sec)
Insulation/Moisture Resistance - Polymer Film Layer	$>1 \times 10^{12}$	ohm	MIL-I-46058C (100 VDC 60 sec)
Voltage Breakdown	3500	volts	-----

Classifications

Harmonize Code	8207.19.5030
Export Administration Regulations (EAR)	EAR99
Export Control Classification Number (ECCN)	Not Applicable