

4 mils StencilQuik

GENERAL DESCRIPTION	StencilQuik stencils are made from two layers of clear amber polyimide film with an adhesive backing. It is coated with an aggressive permanent acrylic adhesive and backed with a 50# Kraft release liner. The StencilQuik stencils are pre-scored to allow for easy removal of the release liner.		
USES	Intended for use as a "remain-in-place" stencil for the application of solder paste or flux on printed circuit boards. The stencil material is designed to withstand high temperatures and harsh chemicals. It withstands through-hole and surface mount circuit board processes. This high-performance material is designed for applications requiring excellent solvent and heat resistance. StencilQuik stencils are designed with a permanent adhesive and they are not designed to be removed after being applied.		
FEATURES	Excellent chemical, and heat resistance. The StencilQuik stencil is dimensionally stable (no shrinkage) with a high-performance adhesive. StencilQuik stencils have insulative properties in the material and adhesive. The minimum break through voltage (the voltage that will not pass through the polyimide) is 5000 volts. The voltage that will pass through the polyimide material is approximately 7000 volts.		
PHYSICAL PROPERTIES			
THICKNESS	Material	Convention Units	S.I. Units
	Polyimide	2.0 mils	102 microns
	Adhesive	2.0 mils	102 microns
	Liner (50#)	3.0 mils	75 microns
	Total	7.0 mils	279 microns
	(Results in a solder print thickness of 0.008")		
ADHESIVE PERFORMANCE	Stainless Steel	72.00 oz/in	790.00 N/m
	Fiberglass	28.98 oz/in	317.32 N/m
	Phenolic	29.97 oz/in	328.17 N/m
	Nylon	40.55 oz/in	444.01 N/m
	(Adhesive performance after a 72 hour dwell)		
SERVICE TEMPERATURES	1-40 minutes	572°F	300°C
	2-4 minutes	617°F	325°C
	1-9 seconds	842°F	450°C
	1-3 seconds	1000°F	538°C
APPLICATION TEMPERATURE	Minimum	50°F	10°C
CHEMICAL RESISTANCE	Test should be conducted at room temperature after 24 hour dwell. Testing should consist of five cycles of 10 minute immersions in the specified chemical reagent followed by 30 minute recovery periods. Cotton swab rub prior to final immersion.		
	Household Cleaners	No effect	
	Mild Acid	No effect	
	Oil	No effect	
	Water	No effect	
	1 Part IPA, 1 Part Mineral Spirits	No effect	
	Terpene Defluxer	No effect	
	Toluene	No effect	
	Saponifier	No effect	
STORAGE STABILITY	Product should be stored at 70 degrees F (21 degrees C) and 40 – 50% relative humidity to ensure optimal performance.		
SHELF LIFE	2 Years at the proper storage conditions.		

8 mils StencilQuik

GENERAL DESCRIPTION	StencilQuik stencils are made from two layers of clear amber polyimide film with an adhesive backing. It is coated with an aggressive permanent acrylic adhesive and backed with a 50# Kraft release liner. The StencilQuik stencils are pre-scored to allow for easy removal of the release liner.		
USES	Intended for use as a "remain-in-place" stencil for the application of solder paste or flux on printed circuit boards. The stencil material is designed to withstand high temperatures and harsh chemicals. Withstands through-hole and surface mount circuit board processes. This high-performance material is designed for applications requiring excellent solvent and heat resistance. StencilQuik stencils are designed with a permanent adhesive and they are not designed to be removed after being applied.		
FEATURES	Excellent chemical, and heat resistance. The StencilQuik stencil is dimensionally stable (no shrinkage) with a high-performance adhesive. StencilQuik stencils have insulative properties in the material and adhesive. The minimum break through voltage (the voltage that will not pass through the polyimide) is 5000 volts. The voltage that will pass through the polyimide material is approximately 7000 volts.		
	PHYSICAL PROPERTIES		
THICKNESS	Material	Convention Units	S.I. Units
	Polyimide	4.0 mils	102 microns
	Adhesive	4.0 mils	102 microns
	Liner (50#)	3.0 mils	75 microns
	Total	11.0 mils	279 microns
	(Results in a solder print thickness of 0.008")		
ADHESIVE PERFORMANCE	Stainless Steel	72.00 oz/in	790.00 N/m
	Fiberglass	28.98 oz/in	317.32 N/m
	Phenolic	29.97 oz/in	328.17 N/m
	Nylon	40.55 oz/in	444.01 N/m
	(Adhesive performance after a 72 hour dwell)		
SERVICE TEMPERATURES	1-40 minutes	572°F	300°C
	2-4 minutes	617°F	325°C
	1-9 seconds	842°F	450°C
	1-3 seconds	1000°F	538°C
APPLICATION TEMPERATURE	Minimum	50°F	10°C
CHEMICAL RESISTANCE	Test should be conducted at room temperature after 24 hour dwell. Testing should consist of five cycles of 10 minute immersions in the specified chemical reagent followed by 30 minute recovery periods. Cotton swab rub prior to final immersion.		
	Household Cleaners	No effect	
	Mild Acid	No effect	
	Oil	No effect	
	Water	No effect	
	1 Part IPA, 1 Part Mineral Spirits	No effect	
	Terpene Defluxer	No effect	
	Toluene	No effect	
	Saponifier	No effect	
STORAGE STABILITY	Product should be stored at 70 degrees F (21 degrees C) and 40 – 50% relative humidity to ensure optimal performance.		
SHELF LIFE	2 Years at the proper storage conditions.		

