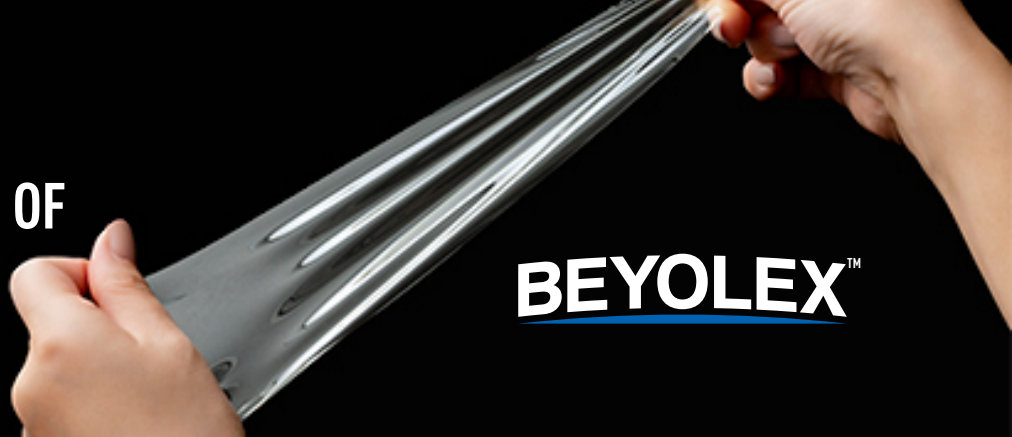


STRETCHING THE FUTURE OF ELECTRONIC MATERIALS



BEYOLEX™

BEYOLEX™ Thermosetting Stretchable Film

This novel polymer substrate is designed for flexible, stretchable, conformable and pliable printed electronics applications. It is a unique material based on a proprietary, thermoset, non-silicone polymer system which provides outstanding performance.

Features and Benefits

- Good Elongation
- Ultra Low Hysteresis
- High Temperature Resistance
- High Environmental Stability
- Compatible With Wide Variety Of Functional Inks

Typical Printed Electronic Applications

- Sensors
- Health And Wellness
- Automotive
- Aerospace
- Structural Electronics



Typical Properties

Properties	Test Method*	Unit	BEYOLEX™	
Elongation	Initial		> 200	
	Aft. High Temp & High Humid Test **	ASTM D822	%	> 200
	Aft. Heat Cycle ***			> 200
Modulus @ 50% Strain	Initial		< 2.5	
	Aft. High Temp & High Humid Test **	ASTM D822	MPa	< 2.5
	Aft. Heat Cycle ***			< 2.5
Hysteresis	Initial		< 0.1	
	Aft. High Temp & High Humid Test **	Panasonic Original	%	< 0.1
	Aft. Heat Cycle ***			< 0.1
Heat Resistance	TG/DTA (@Air)/ 5% weight loss	°C	302	
Breakdown Voltage	IEC 60243-1	KV/mm	98	
Dielectric Property (Dk/Df)	IPC TM650 2.5.5.10	@10GHz	2.8 / 0.052	
		@2GHz	3.3 / 0.073	
Transparency		%	> 90	
Stretch Cycle	50% stretch	cycle	> 10,000	

* Measurements are compliant with the standards other than Panasonic's original test

** Test Condition : 85°C / 85%RH / 1000h

*** Test Condition : -55°C(5min) → 125°C(5min) / 1000cyc

The values in this document are representative measured properties and not specifications or guarantees of performance

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