

HIGH-PERFORMANCE SDK KAPTON® TAPE

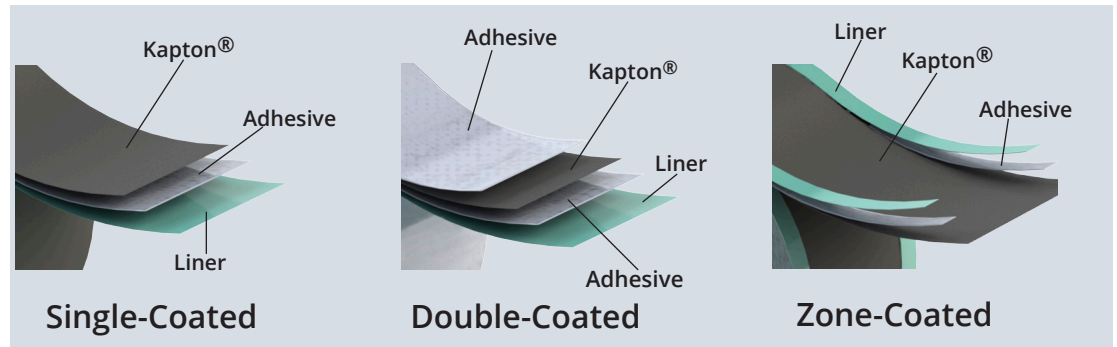
Technical Data Sheet

Fralock® SDK (Static Dissipative Kapton®) high-performance tape is manufactured with DuPont™ Kapton® XC film. In addition to the superior thermal and radiation resistance featured with Kapton polyimide films, this film is electrically conductive and is black in color. It is loaded with conductive carbons that provide tightly controlled surface resistivities, which are distributed throughout the film. This ensures that cracking, rubbing off or other damage cannot occur as it does with metallizations or surface coatings. These features enable SDK tape to perform in satellite and related applications where both anti-static and thermal control are required. This tape provides high mechanical integrity and is RoHS compliant. SDK tape is available with your choice of adhesives to best fit your requirements.

Applications

- Electrical insulation
- Mechanical/structural connections
- Flexible circuit bonding
- Thermal management
- Masking and protection
- Gaskets and seals

ADHESIVE CONFIGURATIONS



Film Properties (Kapton® XC)

Kapton® XC is available in Type 100XC10E7 and 100XC10E5.

Please specify which type you need.

PHYSICAL

Property	Typical Value	Test Method
Mechanical		
Tensile Strength, Kpsi	17	ASTM D-882-91, A
Tensile Modulus, Kpsi	480	ASTM D-882-91
Elongation to break, %	27	ASTM D-882-91
Tear Strength, initial, lb/mil	1.8	ASTM D-1505-90
Density, g/cc	1.41	ASTM D-1505-90
Optical		
Solar Absorbance	0.93	
Emissivity at 77°F	0.84 normal 0.78 hemispherical	
Light Transmission	opaque	
Thermal		
Meltpoint, polyimide, °C	none	ASTM E-794-85 (1989)

Fralock® offers complex precision laminating, adhesive coating, and a variety of cutting services for high-performance tapes. Our application engineers are available to assist with design and production of custom products that fulfill your performance requirements.

With manufacturing in the U.S.A., Fralock® offers product design, development, prototyping, converting, manufacturing, and automated placement services with ISO 9001:2015, AS9100D and ISO 13485:2016 Registered Quality Management system. ITAR compliant.

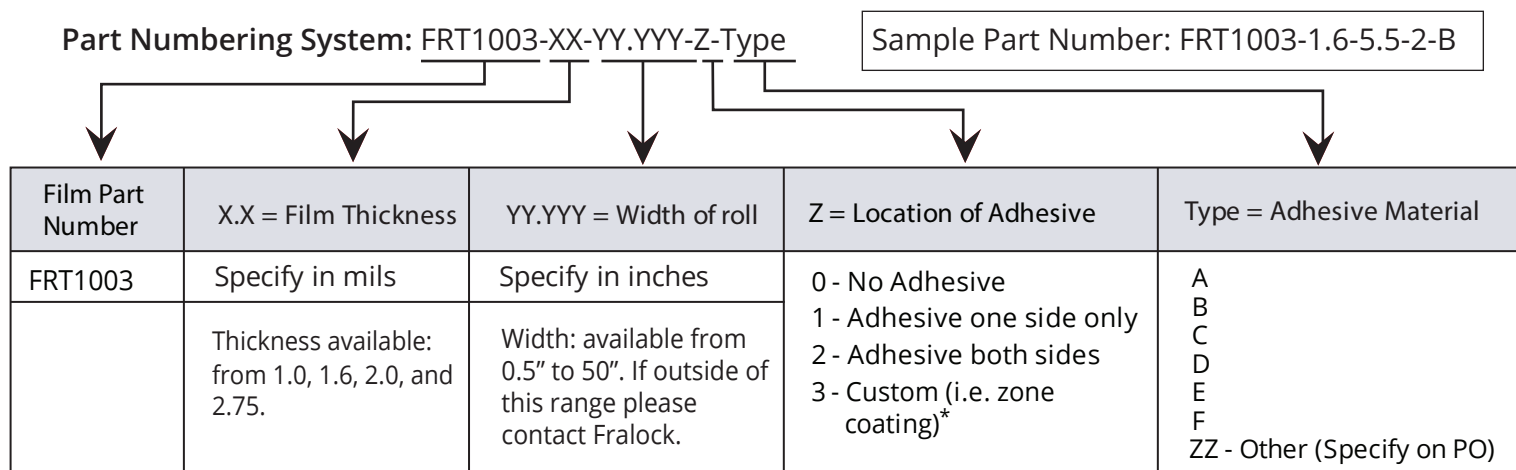
ELECTRICAL

Property	Typical Value	Test Method
Film Type 100XC10E7		
Surface Resistivity Aim, mega ohm/sq.	5	ETS 870 electrometer at 100V
Resistivity Range, avg, mega ohm/sq.	0.5-50	
Film Type 100XC10E5		
Surface Resistivity Aim, mega ohm/sq.	5	ETS 870 electrometer at 100V
Resistivity Range, mega ohm/sq.	0.1-1000	

Adhesives - Pressure-Sensitive

Adhesive ID #	A	B	C	D	E	F
Temp range Min/Max	-40°F (-40°C) to 450°F (232°C)	-40°F (-40°C) to 450°F (232°C)	-40°F (-40°C) to 500 °F (260 °C)	-40°F (40°C) to 203°F (95°C)	Up to 400°F (204°C)	-100°F (-38°C) to 500°F (260°C)
Adhesive Material	Acrylic	Acrylic	Acrylic	Acrylic	Silicone	Silicone
Adhesive Thickness	2 mil	1 mil	2 mil	2 mil	4 mi	2 mil
Key Features	Exceptional shear values Low outgassing	Exceptional shear values Low outgassing	UV and solvent resistant	Anisotropically electrically conductive Good adhesion to common PCB substrates	Low surface energy Isotropically electrically conductive Performs at high temperatures	Electrically Conductive in the Z axis Excellent bond strength Chemically resistant Temperature extremes

Ordering Information



*Custom zone coating: Please specify areas for coating

Standard length is 100 ft. roll. Custom lengths available.