

# **Conductive** Tape

## High-Flex<sup>®</sup> Conductive Fabric Shielding Tape

High-Flex® conductive fabric shielding tapes offer exceptional conformability and conductivity for dynamic flex applications. High-Flex® tapes are constructed of Flectron® nickel/copper metallized ripstop or plain weave fabric with a pressure sensitive adhesive (PSA). This reliable tape design provides outstanding shielding performance while offering superior abrasion and corrosion resistance under high dynamic flex conditions.

The proprietary anti-fray coating of High-Flex® EMI shielding tapes virtually eliminates concerns of loose conductive fibers and their potential to cause board level damage. Other significant advantages over other fabric and foil shielding tapes include:

Thinner design provides superior flexibility and durability.

- High conductivity and shielding effectiveness.
- Adhesive system provides high peel strength.
- Easy die-cutting and processing.
- Superb adhesion of nickel copper plating.
- Eliminates the potential of injury due to the sharp edges of metal foil tapes.

High-Flex® EMI shielding tape is available in standard roll widths from 0.394" (10 mm) to 1.969" (50 mm) in 0.197" (5 mm) increments and roll lengths of 65.62' (20 M). Master rolls are available in sizes up to 1.4 meter widths and 300 meter lengths. For your unique design requirements, custom die-cut parts are also available.

Some typical applications for High-Flex® EMI shielding tapes include:

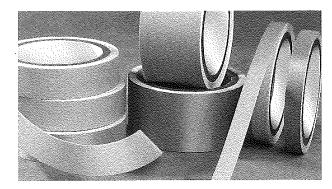
- Shielding cables on notebook computers, copiers or other electronic equipment.
- "Fix-it" applications in test laboratories.
- Shielding over a component in which high conformability is essential.
- Shielding or grounding in weight sensitive applications. Shielding or grounding for electronic equipment
- where vibration may be present during operation.

#### Tape Construction

Carrier	Flectron® Nickel Copper Ripstop Fabric (1A) Flectron® Nickel Copper Ripstop Fabric (2T) Flectron® Metallized Nickel Copper Plain Weave Fabric (2Z)	
Adhesive	High Strength Pressure Sensitive Acrylic Adhesive	
Liner	Kraft Paper	

Performance Characteristics			
High-Flex* Tape		High-Flex II <sup>®</sup> Tape	
	1A = Nickel Copper Ripstop Fabric	2T = Nickel Copper Ripstop Fabric 2Z = Nickel Copper Plain Weave Fabric	
Tape Thickness	0.004 to 0.005 inches (0.10 mm to 0.13 mm)	0.003 to 0.005 inches (0.08 mm to 0.13 mm)	
Liner Thickness	0.005 to 0.006 inches (0.13 mm to 0.15 mm)	0.003 to 0.004 inches (0.08 mm to 0.10 mm)	
Break Strength (ASTM 5035)	50 lb/in. (856/100 mm)	50 lb./in. (856/100 mm)	
Weight (LT 500)	2.3 to 3.0 oz./sq. yard (78.0 to 118.7 grams/sq. Meter)	2.3 to 3.0 oz./sq. yard (78.0 to 118.7 grams/sq. Meter)	
XY Sheet Resistivity (ASTM F390)	Below 0.08 ohms/sq. (Typically 0.03 ohms/sq.)	Below 0.05 ohms/sq. (Typically 0.02 ohms/sq.)	
Peel Strength (ASTM D330 & PSTC-1)	48 oz./in. (52 N/100 mm)	54 oz./in. (59 N/100 mm)	
Abrasion Resistance (ASTM D3886)	> 1,000,000 Cycles	> 1,000,000 Cycles	
Temperature Range	-40 °F to 212 °F (Min/Max) (-40 °C to 100 °C)	-40 %F to 212 %F (Min/Max) (-40 %C to 100 %C)	
Shielding Effectiveness per Mil-Std-285 (Mod.)	> 70 dB up to 18GHz	> 70 dB up to 18GHz	

All dimensions shown are in inches (millimeters) unless otherwise specified



### Ordering Information:

1 2 3 4 5 6 Digits: 78 9 10 11 1 A 0 2 5 0 R 0 2 0 0

Digits 1 and 2

Designate conductive tape product line and fabric options: 1A = Nickel Copper Ripstop Fabric 2T = Nickel Copper Ripstop Fabric

2Z = Nickel Copper Plain Weave Fabric

Digits 3 through 6

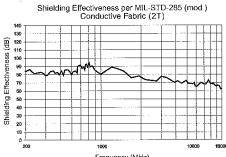
Designate width in millimeters to one decimal place. (i.e., in the above example, the 0250 indicates a 25 mm wide roll).

Digit 7

Designates the form the tape is provided in: K = Kiss-Cut in Pieces R = Roll P = Pieces Digits 8 through 14

Designate the roll length in meters to one decimal place (i.e., in the above example 0200 indicates a roll length of 20 meters).

Shielding Effectiveness



Frequency (MHz)



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