

## High-Flex<sup>™</sup> Conductive Fabric Tapes



#### HIGH-FLEX™ CONDUCTIVE FABRIC TAPES

Laird High-Flex<sup>™</sup> Conductive Fabric Tapes offer exceptional conformability and conductivity for dynamic flex applications. It is constructed of nickel/copper metallized fabric with a conductive pressure sensitive adhesive (PSA). This reliable tape design provides outstanding shielding performance while offering superior abrasion and corrosion resistance under high dynamic flex conditions.

Laird High-Flex<sup>™</sup> Conductive Fabric Tapes are halogen free products and can be supplied in tape or further customized to application by die-cutting or hole punching.

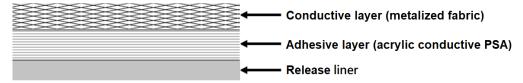
#### **FEATURES**

- Shielding effectiveness of >60 dB across a wide spectrum of frequencies RoHS compliant
- Halogen-free per IEC-61249-2-21 standard
- Low surface resistivity provides excellent conductivity
- Shielding effectiveness of >62 dB across a wide spectrum of frequencies

#### **APPLICATIONS**

- Cabinet applications
- Displays
- Medical equipment
- Servers
- Desktop/laptop computers
- Telecommunications cabinets

### **COMPOSITION**





# High-Flex<sup>™</sup> Conductive Fabric Tapes

#### **CHARACTERISTICS**

ITEM	UNIT	Value						TEST METUOD
		85785	86750	86748	81720	87580	1A	TEST METHOD
Fabric^	-	PTAF	PTAF	PTAF	PTAF	PTAF	NRS	
Thickness	mm	0.12	0.075	0.060	0.027	0.13	0.15	-
Peel Adhesion	N/25 mm	>11	>9	>11	>8	>8	>10	PSTC 101*
Shear Adhesion at R.T.	Hrs	>168	>24	>24	>72	>72	>24	PSTC 107#
Tensile Strength	Kgf/25 mm	>12	>7	>6	>7	>6	>6	-
Operation Temperature	°C	-40 - 85	-40 - 85	-40 - 85	-40 - 85	-40 - 85	-40 - 85	-
Surface Resistivity (Fabric Side)	Ω/□	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.07	ASTM F390
Z-axial Resistance	Ω	< 0.04	< 0.03	< 0.05	< 0.05	< 0.05	< 0.03	-
Flame Retardant	-	n/a	n/a	n/a	n/a	UL510FR	n/a	
Shielding Effectiveness+								ASTM D4935
at 100 MHz	dB	76	68	60	60	75	70	
at 1GHz	dB	82	75	68	66	72	75	
Package Dimensions Width: customized, max. width 1000 mm								_
(Max. Width: 1000 mm)	Length: standard length 20 M.							-
Shelf Life	f Life 12 months under 23°C/65% R.H.							

<sup>^:</sup> PTAF-polyester taffeta; NRS-Nylon ripstop \*:Test Method A, dwell time 30-60min. #:Contact area 25 mm by 25 mm +:Typical value

**APPLICATION TECHNIQUES** 

- Adhesion is dependent upon the amount of adhesive-to-surface contact developed. Apply normal pressure to the bonding surface will develop better adhesive contact, and thus improve adhesion.
  - To a 25mm(1in.) width tape, recommend to use a 2Kgf rubber roller to press back and forth twice under the speed of 5mm/sec. Users may adjust the speed or roller loading according to different application.
  - Users may also apply 5psi for 10sec to the surface. The loading and residual time can be adjusted as well according to the application and area.
- 2. After applying the tape onto a surface, the adhesion will go up gradually.
- 3. To obtain optimum adhesion, the bonding surfaces must be clean, dry and well unified. A typical surface cleaning solvent is isopropyl alcohol. Use proper safety precautions for handling solvents.
- 4. Ideal tape application temperature range is 21°C to 38°C. Initial tape application to surfaces at temperatures below 10°C is not recommended because the adhesive becomes too firm to adhere readily. However, once properly applied, low temperature holding is generally satisfactory.

### LAIRD PERFORMANCE MATERIALS

#### **DuPont Electronics & Industrial**

Americas: +1 866 928-8181 Europe: +49 8031 2460 0 China: +86 7552 7141166

#### www.laird.com



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