

CT2 Series Conductive Double Sided Adhesive

for EMI Shielding and Grounding Applications

General Description

This technical data sheet covers the core products within Ultrafab CT2 Series of double sided pressure sensitive adhesives (PSA). These products are produced using highly conductive adhesives either on their own or combined with conductive textiles. The CT2 Series of conductive PSA offer superior mechanical, electrical and adhesive properties.



Properties

- Highly flexible allowing conformance to a wide variety of substrates
- High conductivity results in excellent shielding effectiveness
- Can be supplied on rolls at various widths or die cut to customers specifications
- Variety of adhesive strengths available to meet any application requirement
- Among the thinnest reinforced conductive PSA available



Application Techniques

- To obtain maximum adhesion, the bonding surfaces must be clean and dry. Isopropyl alcohol is recommended as a cleaning solvent.
- Bond strength is dependent upon the amount of adhesive-to-surface contact developed. This wetted area can be increased by applying CT2 Series PSA firmly with a roller or finger pressure to exclude air entrapment.
- Adhesion is optimized when the substrates are flat or conformable.
- Adhesion increases after application, up to 24 hours later, due to increased wetting by the tape.
- Electrical performance is dependent upon the nature of the metal and its surface. Most metal surfaces give enhanced electrical performance with CT2 Series PSA when the surface has been lightly abraded.
- CT2 Series PSA should be applied between 60°F - 100°F (15°C - 38°C). Tape application below 50°F (10°C) is not recommended because the adhesive will be too firm to wet the substrates, resulting in low adhesion. Warming the substrates to 100°F (38°C) facilitates adhesion. Once properly applied, low temperature holding power is generally satisfactory.

Standard Configurations

Part Number CT2MWF007

Ultrafab CT2MWF007 is among the thinnest reinforced conductive adhesives available today. Because of the reinforcing metalized fabric it exhibits excellent mechanical and electrical properties. It compares very favorably to 3M 9713.

Release Liner
Conductive Adhesive
Woven Conductive Fabric
Conductive Adhesive
Release Liner

Release Liner
Conductive Adhesive
Non-Woven Conductive Fabric
Conductive Adhesive
Release Liner

Part Number CT2NWT033

Ultrafab CT2NWT033 exhibits very high adhesive force. Because of the reinforcing metalized fabric it exhibits excellent mechanical and electrical properties.

Release Liner
Conductive Adhesive
Conductive Mesh
Conductive Adhesive
Release Liner

Part Number CT2MES013

Ultrafab CT2MES013 is reinforced with conductive mesh which results in an extremely flexible pressure sensitive adhesive. This product is also available in flame retardant and silicone bases configurations so it will fit almost any application

Part Number Convention

P/N: CT2 00 0 000 000 00

Product Family	Base Material	Special Attributes	Width (0.00mm)	Thickness (0.00mm)	Tape Material
(1)	(2)	(3)	(4)	(5)	(6)
	W: Woven, NW: Non-Woven, ME: Conductive Mesh	F: Flame Retardant, S: Silicone			N: Nickel, C: Copper, AL: Aluminum

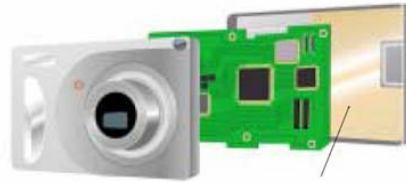
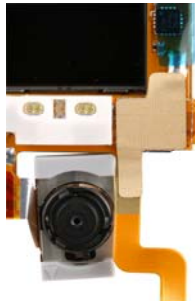
NOTE:
 All information supplied by Ultrafab is believed to be correct. It is supplied upon the express condition that the customer shall make its own assessment to determine the product suitability for a particular use.

Physical and Electrical Properties

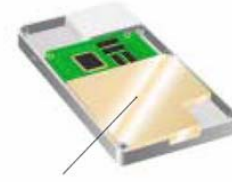
Attribute	CT2WMF007	CT2NWT033	CT2WMES013
Base Material	Woven Metalized Fabric	Non-woven Metalized Fabric	Metalized Polyester Mesh
Thickness (mm)	0.07 (0.0027")	0.33 (0.013")	0.13 (0.0051")
Surface Resistance (Ω / in)	0.1 MAX	0.1 MAX	0.2 MAX
Adhesive Force (g/10mm)	900 MIN	1200 MIN	1200 MIN
Working Temperature Range ($^{\circ}$ C)	-40 to 150	-40 to 150	-40 to 150
Maximum Roll Width (mm)	1000	1000	1000

Application Examples

Shield for flat cable



Grounding enhancement for printed circuit boards



Shielding enhancement

Shield for signal cable



Other Available Options

In addition to the standard configurations detailed here, Ultrafab offers Conductive Adhesive Tapes with the following characteristics:

- Silicone based adhesives for use with silicone elastomers or absorbers
- Non woven paper fillers with flame retardant characteristics
- Single sided adhesives bonded to metal foils and conductive fabrics
- Double sided adhesives up to 0.69mm (0.027") thick for gap filling etc.
- High tack adhesives with adhesive forces up to 1500 g/10mm



Contact Ultrafab for details

R a p i d P r o t o t y p e S e r v i c e A v a i l a b l e

