

Shielding foils 5800

Die-cut/Jet cut to any shape



For shielding enclosures made of plastics and PCB



Foils for EMI Shielding

Many EMI problems can be solved easily by the use of conductive foils and conductive sheets. Some of the most commonly used materials are Mu-copper foil, reinforced Amucor foil and highly conductive textile.

All of these materials can be produced with or without (conductive) self-adhesive and an optional insulation layer.

Applications

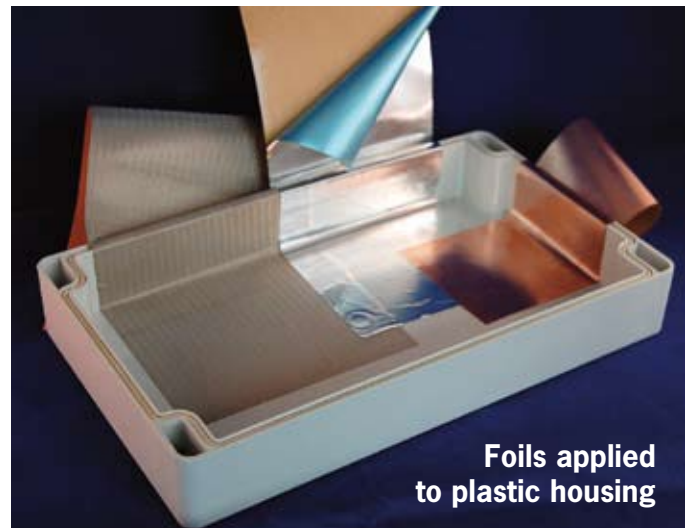
- Shielding plastic enclosure parts
- Shielding all non-conductive materials
- Ground plane
- Antistatic floor
- Electrical connection between surfaces (sheets / foils)
- Die-cuts
- Shielding in housings
- Shielding cables
- Temporary shielding during tests

Options

- Flame retardant version
- With (conductive) self-adhesive backing
- With insulation layer
- Die-cut to any shape

Standard part numbers

Product name	Thickness (mm)	Max. width (mm)	Part number	Part number with insulation layer (UL94V-0)	
				0.15 mm (white)	0.22 mm (black)
Copper	0.035	600	3281	3401	3451
Copper	0.12	1000	3282	3412	3452
Copper	0.18	1000	3283	3418	3458
Copper with paper insulation	0.035	1500	3287	3407	3457
Tinned copper	0.035	400	3285	3402	3462
Aluminium	0.035	1000	3286	3403	3453
Amucor	0.023	1100	4701	4704	4705
Mu-ferro (Low frequency shielding)	0.1	400	3284	3408	3468
Conductive textile	0.06	1070	4711	4714	4715
Amucor with PET in the middle	0.35	-	4716	4719	4720



Foils applied to plastic housing

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We can flash-cut foil to any shape

3281, 3282, 3283 Mu-copper foil

Mu-copper foil has superb shielding performance (also at low frequencies), can be soldered, and can easily be folded into the right shape

Part numbers

- 3281 Mu-copper foil (0.035 mm thick)
- 3282 Mu-copper foil (0.12 mm thick)
- 3283 Mu-copper foil (0.18 mm thick)

Benefits

- High shielding performance
- Easy to solder
- Flame retardant

3284 Mu-ferro foil

Metal foil used for shielding against low magnetic frequencies. For more information see page 57.

3285 Tinned copper foil

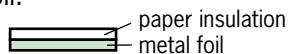
Same as 3281 with tin layer added for corrosion protection and improved solderability.

3286 Aluminium foil

Special developed especially for aluminium housings and frames to prevent galvanic corrosion.

3287 Copper foil with paper insulation

Same as 3281 but with a layer of paper added to insulate the top layer of the foil.



4701 Amucor foil

The reinforced Amucor foil is both cost effective and heat resistant. This thin foil can be applied easily to any surface or housing shape. We can also supply it in a die cut version. Thickness 0.04 mm.



Benefits

- Cost effective
- Follows the contours of your housing easily
- Flame retardant
- Extremely strong
- Corrosion free

4711 Conductive textile foil

Conductive textile with self adhesive can be applied easily to plastic housings to cover non-standard forms and shapes. Laminates of metal foils with flame retardant Nomex or Valox are also available.

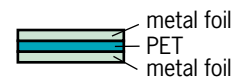
Our engineers can help you develop the right design to create overlaps, holes or connectors, cables and spuds. Thickness 0.10 mm

Benefits

- Follows the contours of your housing easily
- Flame retardant
- Extremely strong
- Corrosion free

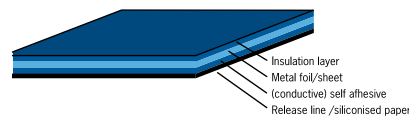
4716 Amucor with PET in the middle

Amucor foil + PET film + Amucor foil. 2 layers of 11 micron thick Amucor (aluminium type) with 23 microns of polyester inside. This material is extremely strong.



Shielding performance

Field	Frequency	Mu-Copper	Amucor-foil	Conductive textile
-	-	0.12 mm thick	0.04 mm thick	0.10 mm thick
E	1 MHz	125 dB	121 dB	115 dB
E	10 MHz	101 dB	110 dB	108 dB
E	100 MHz	120 dB	103 dB	102 dB
E	400 MHz	115 dB	98 dB	92 dB
P	1 GHz	110 d	92 dB	90 dB
P	10 GHz	120 dB	85 dB	80 dB
See Guarantee				



Ordering information

Example

Sheet of Amucor foil, 300 x 200 mm, with conductive self adhesive, without insulation layer. Part number: **4701-300-200-03-#01**

Part number	Height (mm)	Width (mm)	Option	Top finish
4701	300	200	03	#01
see part number table page 36	01 : standard adhesive (non-conductive) 02 : without self adhesive 03 : with conductive self adhesive		#01 without insulation layer #02 with insulation layer #03 with flame retardant insulation layer #04 with conductive self adhesive layer	