

3281 - Mu-copper foil

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 any non-conductive materials
- Ground plane
- Anti-static floor
- Electrical connection between surfaces (sheets / foils)
- Die-cuts
- Shielding in housings
- Shielding cables
- Temporary shielding during tests

Options

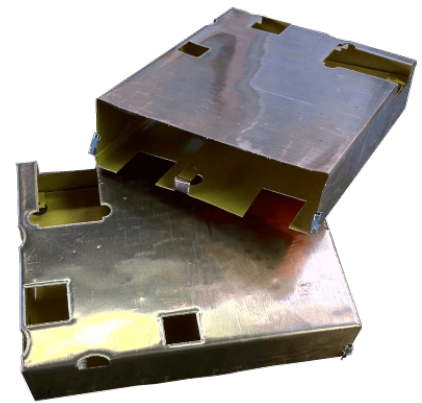
- Flame-retardant version
- With (conductive) self-adhesive backing
- With insulation layer
- Cut into the desired shape (possible via CAD drawing)



Colour of Mu-copper foil



Mu-copper foil can be easily cut into any desired shape.



Mu-copper foil can be bent into shape, for example to fit inside plastic electronics enclosures (For more information [click here](#))



Thanks to our automated CNC cutting system we can also cut our shielding foils in large quantities and according to your CAD drawing

Mu-copper foil (3281, 3282, 3283)

Mu-copper foil has superb shielding performance (also at low frequencies), can be soldered, and can easily be folded into the desired shape. Mu-copper foil is used to make small EMI shields like PCB-shielding cans, but also to EMI-shield entire existing rooms (Faraday cages, screen rooms, shielded boxes etc.).

Examples where Mu-copper foil is used



3281 - Mu-copper foil

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)

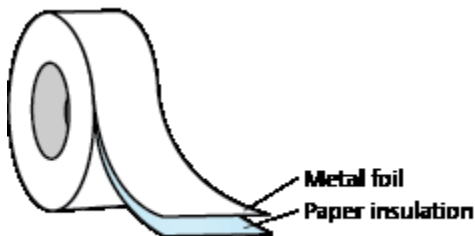
Benefits

High shielding performance
 Easy to solder (a tinned version is also available, Part number 3285)
 Flame retardant

Tinned Mu-copper foil (3285)

Similar to Mu-copper foil Part number 3281, but with a tin layer for corrosion protection and improved solderability.

Mu-copper foil with paper insulation (3287)



Technical drawing

Similar to Mu-copper foil Part number 3281, but with a layer of paper added to insulate the top layer of the foil.

Shielding performance

Field	Frequency	Mu-copper 0.12 mm thick
E	1 MHz	125 dB
E	10 MHz	101 dB
E	100 MHz	120 dB
E	400 MHz	115 dB
P	1 GHz	110 dB
P	10 GHz	120 dB

*These values are measured under laboratory conditions.
 In other situations, results may differ; please read our Guarantee.*

Standard part numbers

Foil name	Thickness (mm)	Max. width (mm)	Part numbers		
			Foil only (UL94V-0) 0.15 mm (white)	Foil with insulation layer (UL94V-0) 0.22 mm (black)	Foil with insulation layer (UL94V-0) 0.22 mm (black)
Mu-copper	0,035	600	3281	3401	3451
Mu-copper	0.12	1000	3282	3412	3452
Mu-copper	0.18	1000	3283	3418	3458
Mu-copper with paper insulation	0.035	1500	3287	-	-
Tinned Mu-copper	0.035	400	3285	3402	3462

Films or tapes with different specifications are available on request. Please send an e-mail to info@hollandshielding.com

3281 - Mu-copper foil

Part number	Length (mm)	Width (mm)	Option
Select an option:			Select an option:
3281 : Mu-copper foil (0,035 mm thick)	Specify the length of the Mu-copper foil in mm	Specify the width of the Mu-copper foil in mm	01 : Standard adhesive (non-conductive) 02 : Without self adhesive 03 : With conductive self adhesive
3282 : Mu-copper foil (0,12 mm thick)			
3283 : Mu-copper foil (0,18 mm thick)			
3285: Tinned Mu-copper foil			
3287 : Mu-copper foil with paper insulation			
3401 : Mu-copper foil (0,035 mm thick) with insulation layer (UL94V-0) 0,15 mm (white)			
3412 : Mu-copper foil (0,12 mm thick) with insulation layer (UL94V-0) 0,15 mm (white)			
3418 : Mu-copper foil (0,18 mm thick) with insulation layer (UL94V-0) 0,15 mm (white)			
3402 : Tinned Mu-copper foil with insulation layer (UL94V-0) 0,15 mm (white)			
3451 : Mu-copper foil (0,035 mm thick) with insulation layer (UL94V-0) 0,22 mm (black)			
3452 : Mu-copper foil (0,12 mm thick) with insulation layer (UL94V-0) 0,22 mm (black)			
3458 : Mu-copper foil (0,18 mm thick) with insulation layer (UL94V-0) 0,22 mm (black)			
3462 : Tinned Mu-copper foil with insulation layer (UL94V-0) 0,22 mm (black)			