

# 3208 - Mu-ferro tape and foil

Mu-ferro foil/tape is a thin foil with a thickness of 0,023 mm. It combines excellent soft magnetic properties with an unusual mechanical hardness and flexibility. This means that very tight bendings can be realised with only very slight impairment of permeability. The fine strip thickness and comparatively very low electric conductivity permit effective shielding even of higher-frequency fields.

#### **Applications**

Its main applications are flexible shielded cables with small diameters and rapid and flexible solutions to problems at low field strengths. Other applications:

Magnet heads

Magnetic field sensors

Chokes

**Transformers** 

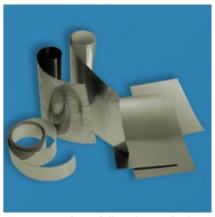
Electronic article surveillance tags

#### **Benefits**

Very high permeability Low losses

#### **Characteristics**

Mu-ferro foil for shielding of low-frequency magnetic fields. Due to the low electrical resistance even for shield- ing low-frequency electric fields (LF) and high-frequency fields (HF).



3208 Mu-ferro foil and tape for lowfrequency magnetic shielding



We can slice all our EMI/RFI shielding tapes in any specific width

#### **Properties**

Easy to bent

Easy to fold

Can be cut with scissors

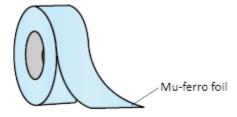
Good corrosion resistance in a normal environment

Above mentioned can be done without big attenuation loss

#### Grounding

Due to the highly conductive surface this material can be contacted and grounded easy to shield low frequency (LF) electric fields. For professional grounding please contact us.

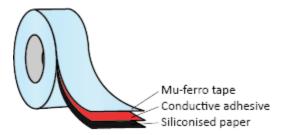
### Mu-ferro foil(3284)



Technical drawing

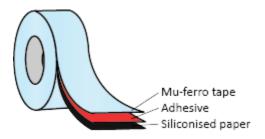


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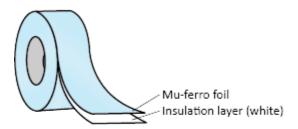
Technical drawing

## Mu-ferro tape with standard adhesive(3305)



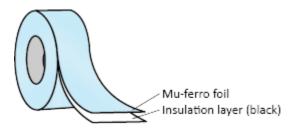
Technical drawing

# Mu-ferro foil with 0.15 mm thick white insulation layer(3408)



Technical drawing

## Mu-ferro foil with 0.22 mm thick black insulation layer (3468)



Technical drawing

#### **Technical data**



## 3208 - Mu-ferro tape and foil

Can be supplied in any width from 50 mm Width By the meter / up to 100 m roll Length Attenuation LF magnetic field 14 dB = 80 % (for more shielding use multiple layers); Attenuation HF: 100 dB at 1 GHz Permeability 4 = 10000; max. = 25000 Saturation induction B<sub>s</sub> 0.58 T 7.7 g/cm 3 Density Curie temperature C 200 Crystallisation-temperature  $T_x$  C 530 Specific electrical resistance 1.4 m In your situation results may differ, please read our Guarantee

### Standard part numbers

	Part number				
Specification	3284	3208	3305	3408	3468
Construction					
Product description	Mu-ferro <b>foil</b>	Mu-ferro <b>tape</b> with conductive adhesive	Mu-ferro <b>tape</b> with standard adhesive	Mu-ferro <b>foil</b> with 0.15 mm thick white insulation layer	Mu-ferro <b>foil</b> with 0.22 mm thick black insulation layer
Foil material	Mu-ferro	Mu-ferro	Mu-ferro	Mu-ferro	Mu-ferro
Surface	Silver colour	Silver colour	Silver colour	Silver colour	Silver colour
Foil thickness	0.023 mm	0.023mm	0.023 mm	0.023 mm	0.023 mm
Total thickness	0.023 mm	0.048 mm	0.048 mm	0.175 mm	0.243 mm
Adhesive	No adhesive	Synthetic conductive resin	Synthetic conductive resin	No adhesive	No adhesive
Adhesive performance	-	4.5 N/cm	4.5 N/cm	-	-
Tensile strength	-	-	-	-	-
Temperature resistance	-	-	-	-	-
El. resistance through adhesive	-	0.003 Ohm	0.003 Ohm	-	-
Standard roll widths (mm)*	max. 50 mm	max. 50 mm	max. 50 mm	max. 50 mm	max. 50 mm
Roll lengths*	max. 100 meter	max. 100 meter	max. 100 meter	max. 100 meter	max. 100 meter
These values are measured under laboratory conditions. In your situation results may differ, please read our Guarantee.					

### \*Other roll width / length on request

