Conductive nickel coating 3801

For plastics

A fast and easy way to shield plastic enclosures is by applying a conductive paint containing nickel, copper or silver. The paint comes in aerosols for easy use, but can also be supplied in tins of 7 kg (3805) and 28 kg (3820) for larger quantities.

Benefits

- Low surface resistivity of 0.9Ω/sq yielding a high attenuation
- Aerosol enables speed and ease of coverage of complex shapes
- Delivery from stock

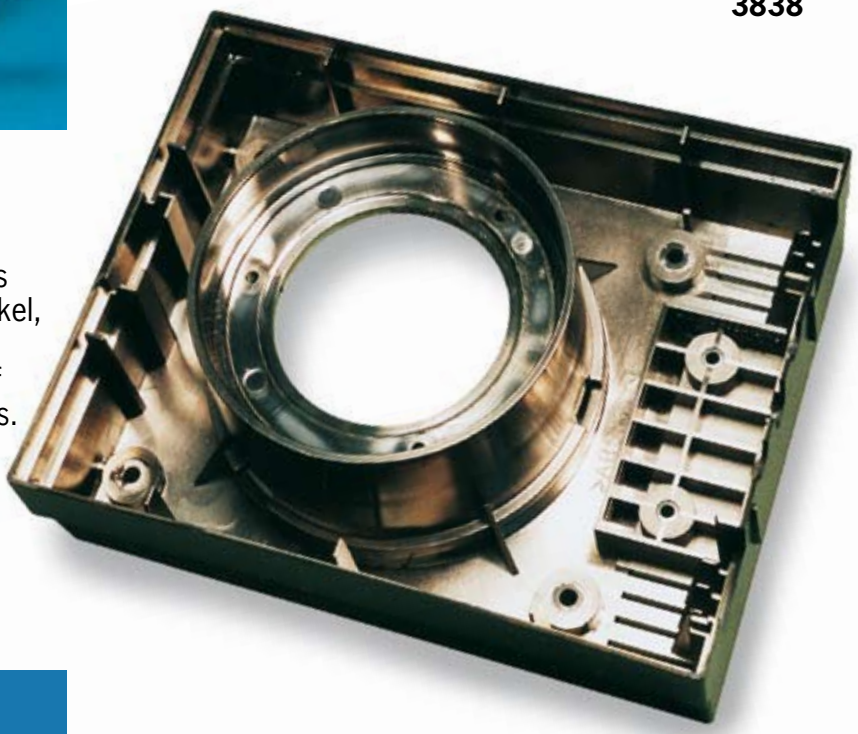
Conductive nickel coating 3801

Conductive metallization 3838

For higher demands and larger quantities we can sputter a full metal coating on 90% of all commonly used plastics, even on PTFE! Applied as a sandwich of three thin layers of metal.

First a thin layer of stainless steel, to prevent the softeners in the plastic affecting the shielding. Secondly a thin layer of copper for superb shielding performance. And thirdly another layer of stainless steel to avoid corrosion.

Conductive metallization 3838



Shielding performance

Frequency (Hz)	Attenuation (dB)	
	Coating	Metallization
30M	36	50
100M	38	68
200M	44	70
500M	54	74
700M	54	72
900M	50	70
See guarantee		

Shielding effectiveness depends on surface and material used.

Conductive silver coating 3850

Silver pigmented conductive coating

Silver coating 3850 is the latest in a series of coatings which provide electromagnetic compatibility (EMC). This product has been specifically designed to offer increased coverage while maintaining very high conductivity.

This it is a very economic means of achieving excellent shielding against emitted electromagnetic interference (EMI).

This coating retains its low resistance even after exposure to heat, cold, humidity and salt spray. It is an air drying system that requires no primer or top coat.

It is easily applied by spray or brush and is compatible with plastics commonly used for electronic equipment enclosures.

Benefits

- Excellent conductivity
- Very smooth, bright coating
- Meets UL specification 746-C
- Overspray easily removable with MEK
- Excellent adhesion to substrates such as polycarbonate, ABS, polystyrene and PC/ABS blends

Curing

Silver coating dries in 4 to 16 hours of air drying.
It may be force dried for 20 minutes at 60-70°C.

Conductive silver coating 3850

Conductive adhesive 3980

Shieldokit 3980 creates an electrically and thermally conductive connection between components.
One of the applications is EMI shielding.The glue can cure at room temperature and has excellent filling properties. The thickness is like peanut butter, so uneven surfaces can be filled in. The product consists of a 80% silver-filled two-component epoxy-based glue. It is a past and adheres to metals (copper, aluminium, stainless steel, brass, etc.), ceramics and most plastics.

Curing

Temperature	Time
21°C	30 hours
50°C	3 hours
80°C	2 hours
100°C	1 hour
200°C	10 min

Specifications

Silver Content	± 80%
Surface Resistance	0.5 Ohm/cm²
Specific Resistance	0.0025 Ohm/cm
Shelf Life	6 months (cool and dry)
Shear Strength	10-13 N/cm²
Temprature (continuous)	150°C
Temprature (brief)	200°C

Part numbers of conductive coatings and glue.

Ordering information

Part number

3801

3801 : Aerosol 365 ml
3805 : Tin 5 liters (7 kg)
3820 : Tin 20 liters (28 kg)
3838 : Conductive metallization
3850 : Silver coating 100 gr
3980 : Conductive adhesive 50 gr