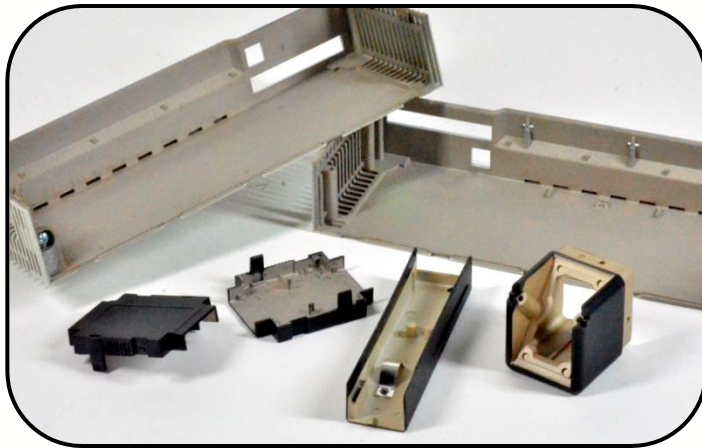


EMI-RFI Shielding

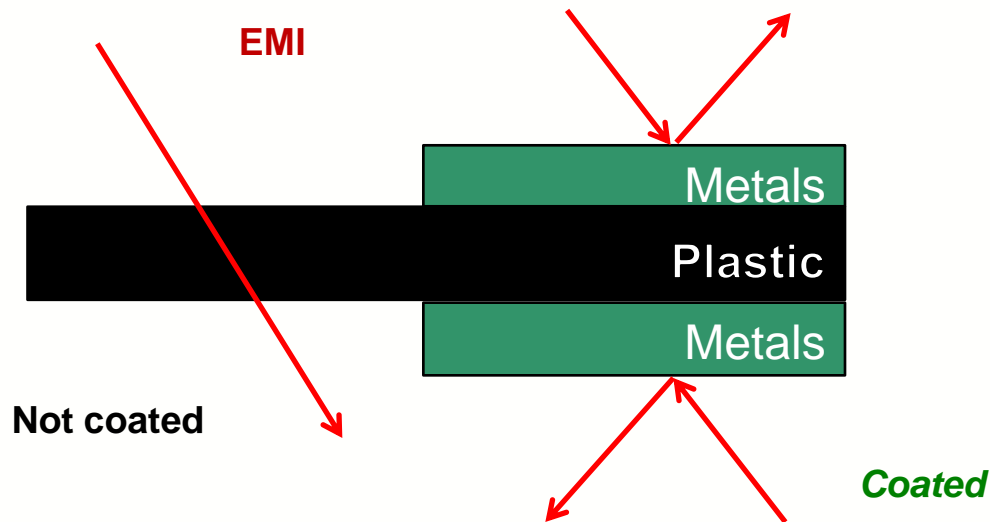


Metal layers to **shield from electromagnetic interferences**

EMI-RFI Shielding

Features

We deposit thin **layers of different metals** which can absorb and reflect electromagnetic waves. The treatment is applied to the plastic **for protection of internal circuit boards**.



Available **shielding between 10 and 2000 MHz**, depending on the final use of the equipment.

EMI-RFI Shielding **Advantages**

- Versatility of applications: you can metalize **a wide range of plastics** (PS, ABS, PC, PC-GF-FR, PC + ABS, PPO, Nylon, PAI, PU) and details of various formats.
- The shield is **tunable** according to the thickness of metal used and the type of treatment (**SST** o **DST**).
- It is possible have tin as final layer to obtain the "**metal effect**" and enable subsequent **welding** on the electronic circuit boards.
- The use of plastic housings instead of metal ones, **lightens** the final product and leaves free design expression to the customer.

EMI-RFI Shielding

Performances and Technology

Chemical metallization properties	
PROPERTIES	VALUES
Thickness	Cu 1.0 – 2.2 micron Ni 0.3 – 0.8 micron Sn 10 micron
Adhesion	Class I ISO 2409
Resistivity	20 – 100 mΩ / 10 cm

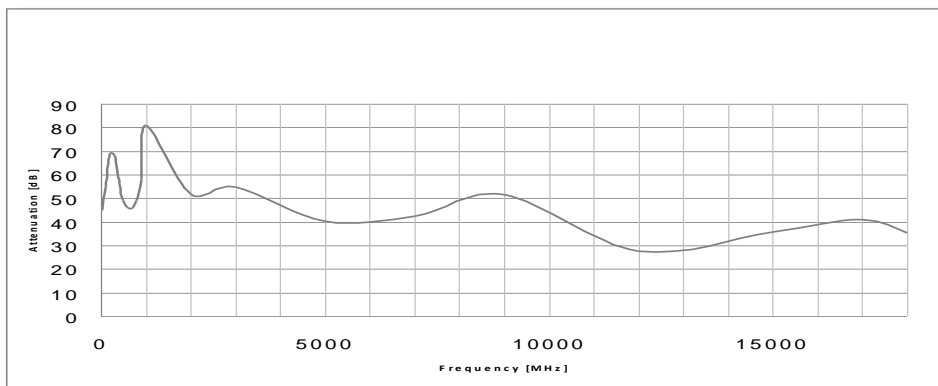
Conductive coatings properties			
PROPERTIES	VALUES		
	Ag	Ni	Cu
Thickness	15-25 micron	50-75 micron	25-50 micron
Adhesion	5B ASTM 3359B	5B ASTM 3359B	5B ASTM 3359B
Resistivity	70-200 mΩ/cm	250-500 mΩ/cm	< 500 mΩ/cm

OPTIONS		DESCRIPTION
CHEMICAL METALLIZATION	DST	Double Side Treatment: metallization on both surfaces of the substrates; more shielding power.
	SST SELECTIVE	Single Side Treatment: metallization of single side. Only on areas chosen by the customer.
CONDUCTIVE COATINGS		Wide range of plastics to coat showing excellent performance of adhesion and chemical resistance.

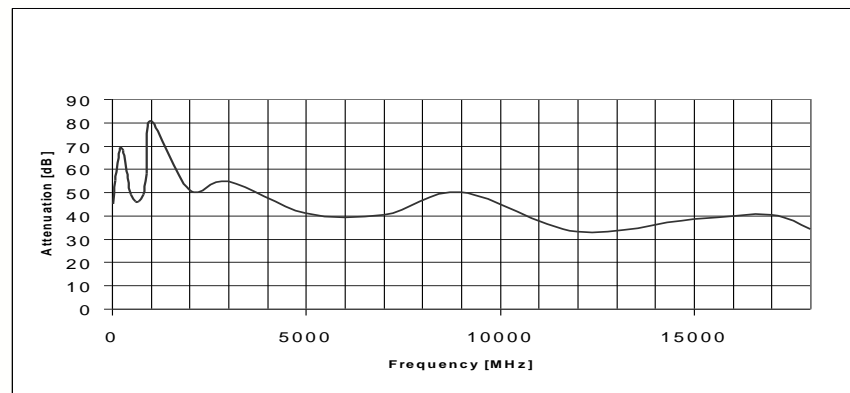
Emi – RFI Shielding

Shield effect charts

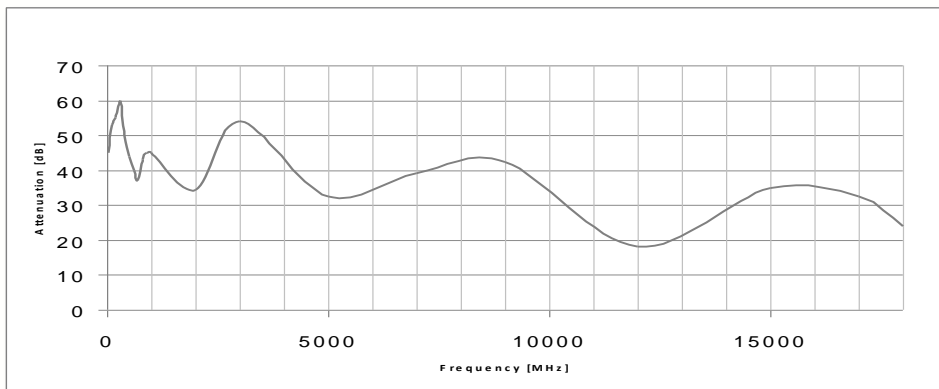
Metallization DST – Electroless Cu + Ni



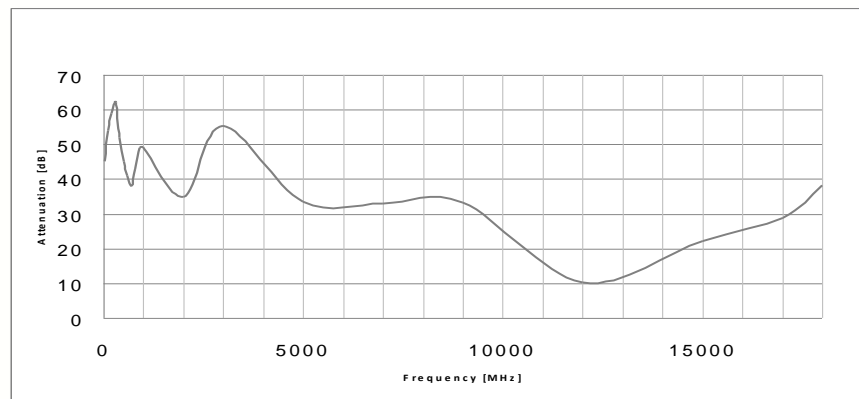
Metallization DST – Electroless Cu + Galvanic Sn



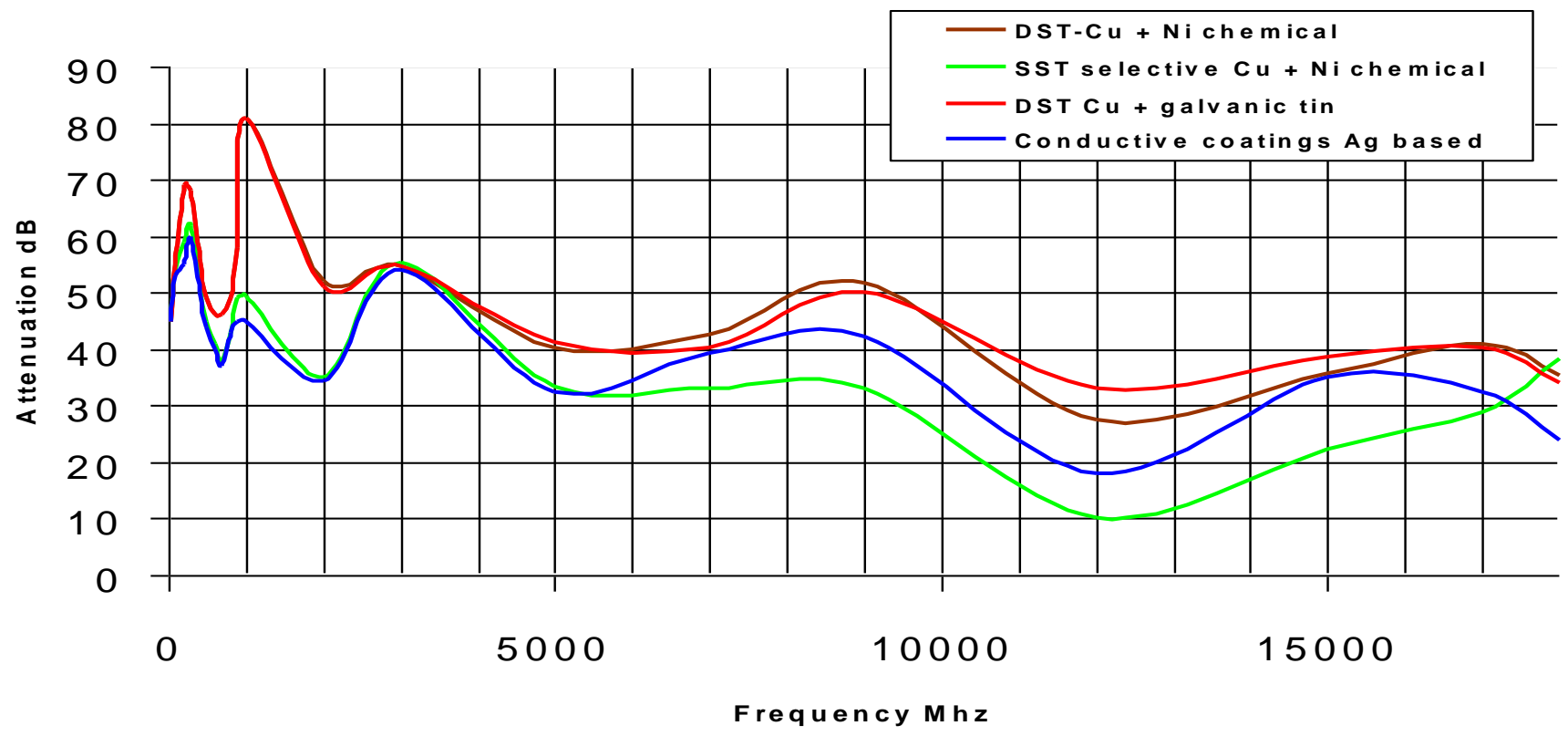
Conductive coatings base Ag



Metallization SST Selective electroless Cu + Ni

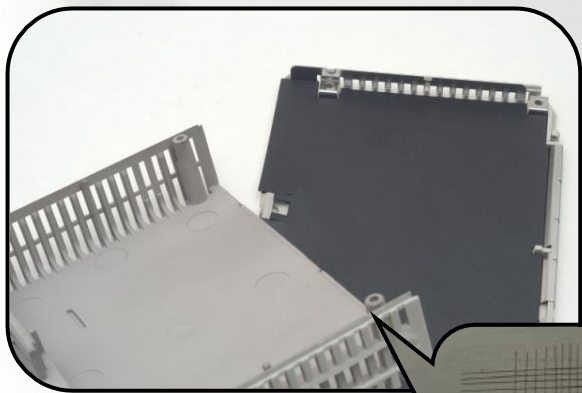


EMI –RFI Shielding Shield effect comparison

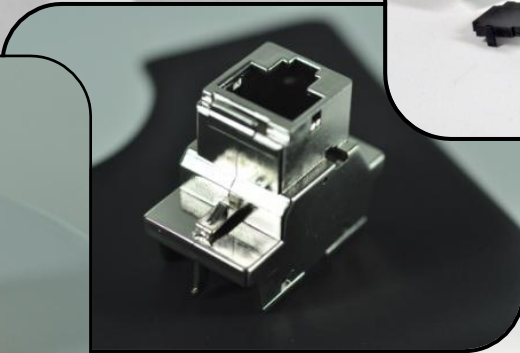
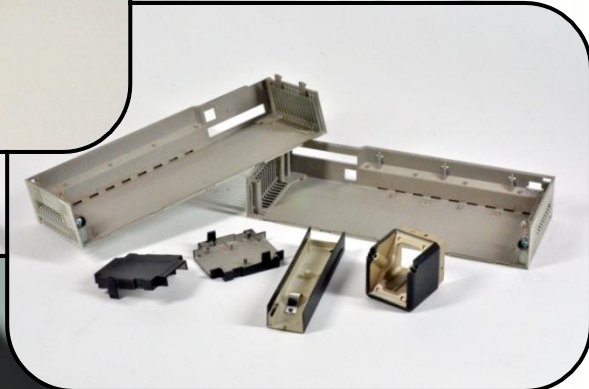
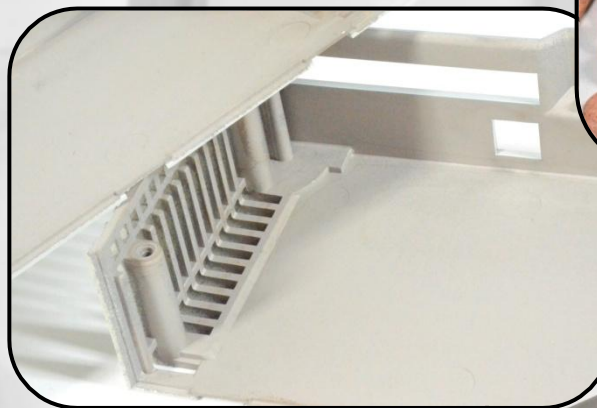




EMI-RFI Shielding Applications



Type test Class I ISO 2409/5B ASTM 3359B



EMI-RFI Shielding

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