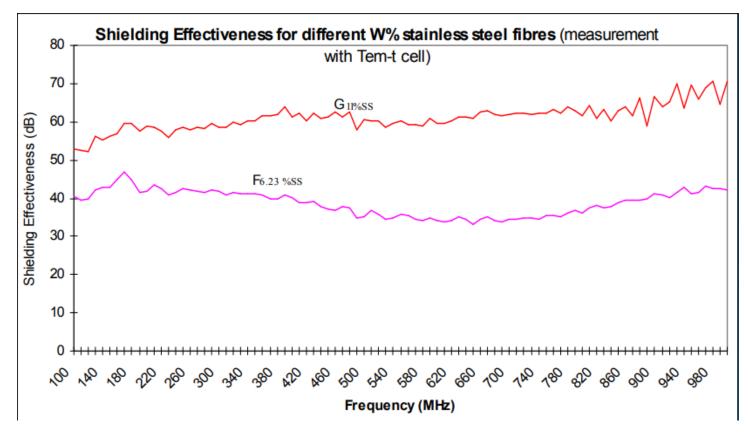


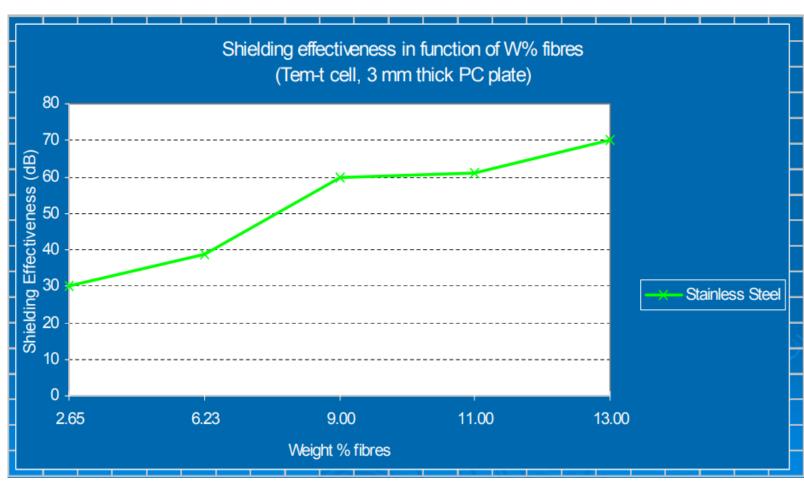
## **EMI Shielding**

Shielding effectiveness of 11 and 6.23 weight % stainless steel fibres in 3 mm thick injection moulded polycarbonate plates (measurement with Tem-T cell)





# **EMI Shielding**

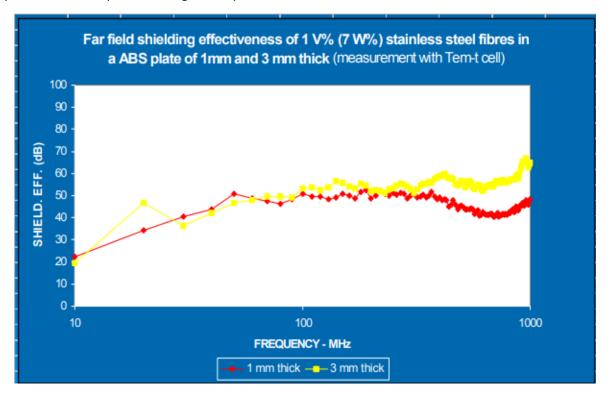




## **EMI Shielding**

Shielding effectiveness of conductive plastics is influenced by the wall thickness

- Shielding = reflection + absorption
- Absorption of EM waves is proportional with wall thickness
- Absorption components more important at higher frequencies



# **EMI Shielding: Near Field**

### H-field shielding

- ullet Quasi-static field: shielding is proportional with frequency and independent from magnetic permeability  $\mu_r$
- Static fields: shielding dependent from  $\mu_r$  ( $\mu_r >> 1$ ) and wall thickness => use of hugh  $\mu$  metals

