

EMC-Shielding Systems

$$c = \lambda \cdot f$$

c = speed of light in
air or vacuum

c = 300,000 km/s = $3 \cdot 10^8$ m/s

λ = wavelength (m)
(λ = Lambda)

f = frequency (Hz)

Examples

Example 1

f = 100 MHz (UKW radio)

$$\lambda = \frac{c}{f} = \frac{300,000,000 \text{ m/s}}{100,000,000 \text{ Hz}} = \underline{3 \text{ m}}$$

Example 2

f = 960 MHz (D-Net mobile)

$$\lambda = \frac{c}{f} = \frac{300,000,000 \text{ m/s}}{960,000,000 \text{ Hz}} = \underline{31,25 \text{ cm}}$$