

**THE EFFECT OF CIRCUIT IMPEDANCE
ON FIELD-COUPLED CROSSTALK**

by

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For details of this Experiment Demonstration refer to the IEEE EMC Soc
Demonstration Manual Vol. 1.

The effect of circuit impedance on field-coupled crosstalk.

Summary of effects.

Electric field coupling.

Electric field coupling is a high impedance phenomena.

Occurs through mutual capacitance.

Voltage measured highest when resistance in victim is highest.

Magnetic field coupling.

Current flowing with short circuit excites primarily magnetic fields.

Mutual inductance controls coupling.

Voltage measured highest with minimum resistance in victim.