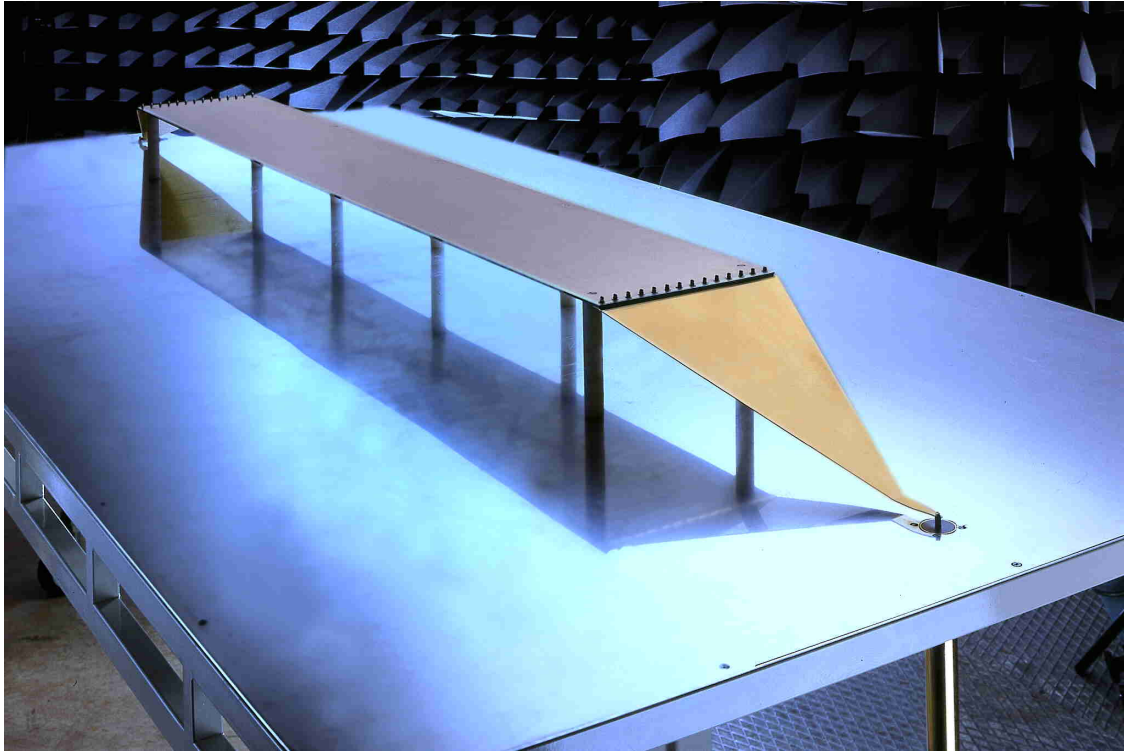


90 Ohm Stripline

A Powerful and Economic Alternative to Antennas



This presentation is about the Stripline used in automotive technology according to ISO 11452-5 and CISPR 25 3rd edition, Annex G.

The Stripline is designed for the frequency range from 150KHz to 1000MHz. It is constructed to perform high field strength with less RF-power e.g. 200V/m with 10W RF-power and a high sensitivity for radiation measurement.

Advantages

- Shortened measuring time by saving antenna polarization.
- More sensitive than an antenna in a wide frequency range.
- Operation in a shielded room is sufficient, no absorber are necessary.
- Needs factor 1.4 less RF-power than a 50 Ohm Stripline for the same field strength.

90 Ohm Macro-Stripline for EMC Testing

The parameters of the RF-characteristics are excellent because of a small standing wave ratio (see diagram of SWR), a low transmission loss, a very good field homogeneity, small dimensions because of the special impedance transformer from 50 Ohm to 90 Ohm (saving of about 2m in the length).

The good high frequency qualities save expensive RF-power. Reflected power does not produce any field.

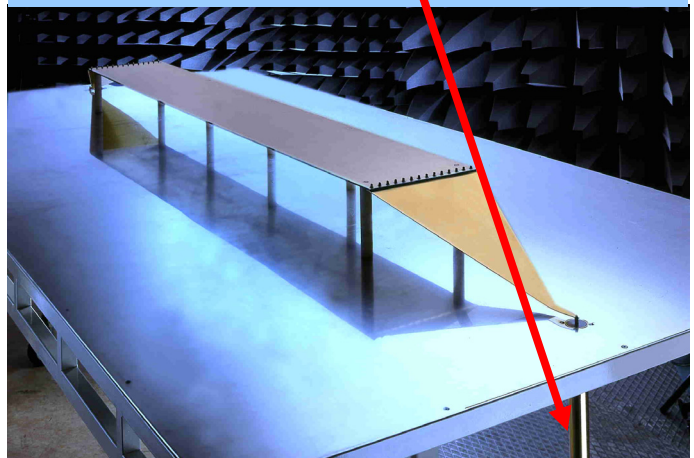
The warranted useable frequency is up to 1000 MHz.

It is built up symmetrically with 50 Ohm of connection impedance and can be terminated therefore with a commercial RF-resistor.

It is mounted on a robust steel construction but is mobile by wheels and by the 90 degrees turnable stripline plate (easy transportation through doors).

Dimensions:
length = 3.2 m for test boards with a 1.5 m cable harness or
length = 2.7 m for test boards with a 1.0 m cable harness
width of the table = 1.5 m.
height of the septum = 0.15 m

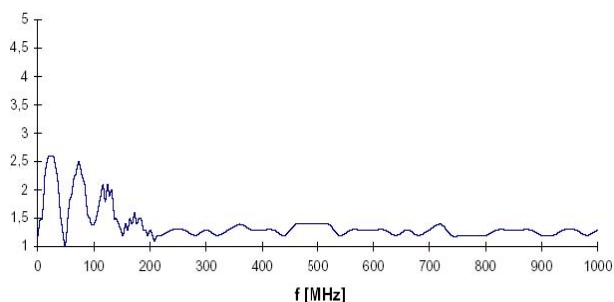
Space-saving layout of the impedance transformer



Upright position for transportation



Typical SWR



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