



TPL 3000 TRI-PLATE LINE 10 KHZ TO 1 GHZ



- EMC tests for vehicle components immunity to RF fields
- Meets the requirements of SAE J1113-25 and MES PW 67600A:2001
- Efficient power conversion provides high fields with minimum power
- N-Connectors for 50 Ω line feed and termination load

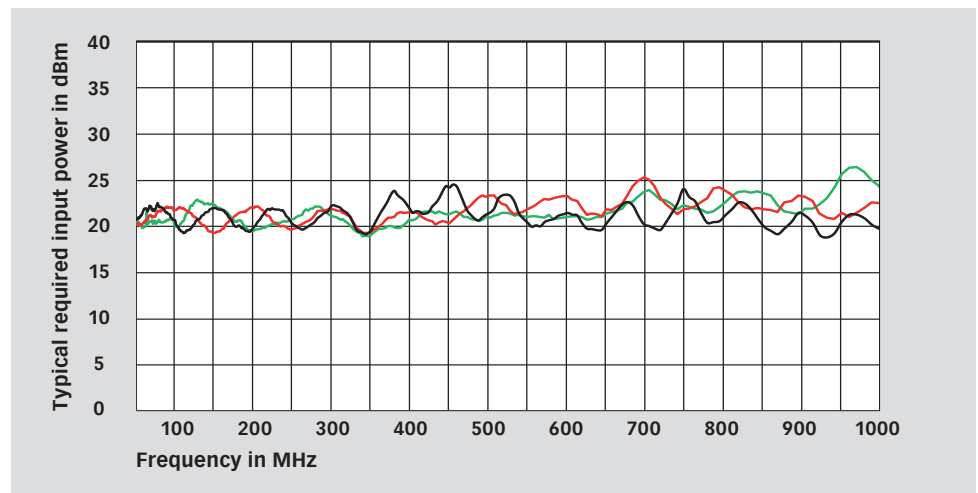
The Tri-Plate test method is specified in the surface vehicle standard SAE J1113-25 "Electromagnetic Compatibility Measurement Procedure for Vehicle Components-Immunity to Radiated Electromagnetic Fields, 10 kHz to 1 GHz" and applicable for testing products such as air-bag control modules, engine and transmission control modules and other subsystems and their associated cables. The EUT height should be less than 1/3 of the distance between septum and outer plates. The Tri-Plate Line (TPL) works as an open TEM cell. It is a broadband parallel-plate construction with grounded top and bottom outer plates and an isolated center-plate. When RF signals are input at one end, the TPL will generate an electro-magnetic field between the plates. The opposite end is terminated with a 50 Ω load. A typical test configuration consists of signal generator, power amplifiers, power meters, TPL, 50 Ω load and (absorber lined) shielded room.

The TPL 3000 is designed as specified in the SAE J1113-25. The TPL 3000 is shipped in a transportable form with complete assembly instructions for customer on-site installation.

Technical specifications

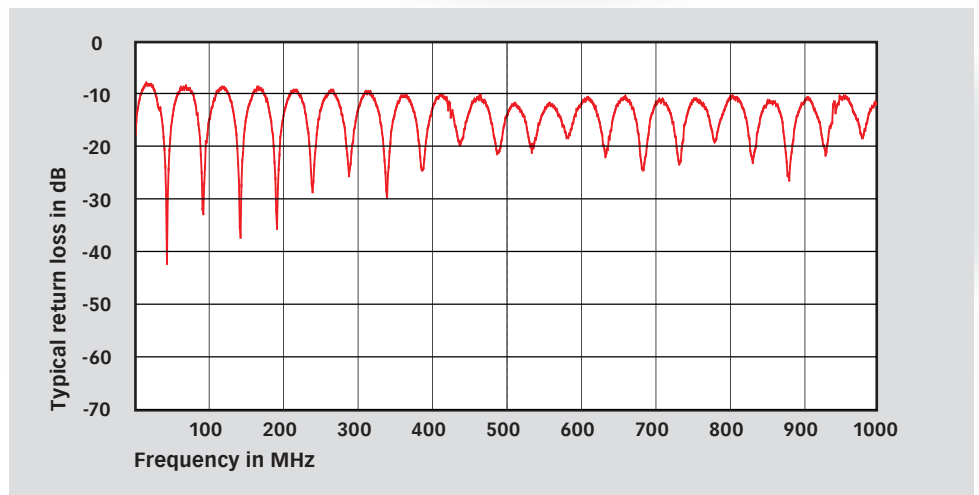
| | |
|------------------------------|---|
| Frequency range: | 10 kHz to 1 GHz |
| Max. input power: | 1000 W |
| Connectors: | N-type, 50 Ω, female |
| Typical impedance: | 72 Ω |
| Input power for 10 V/m: | approx. 0.2 W (23 dBm), see graph |
| Distance between the plates: | 300 mm |
| L x W x H: | 3.0 m x 1.2 m x 1.65 m (including ground plane and table) |

Typical required input power for 10 V/m, — position left, — pos. centre, — pos. right

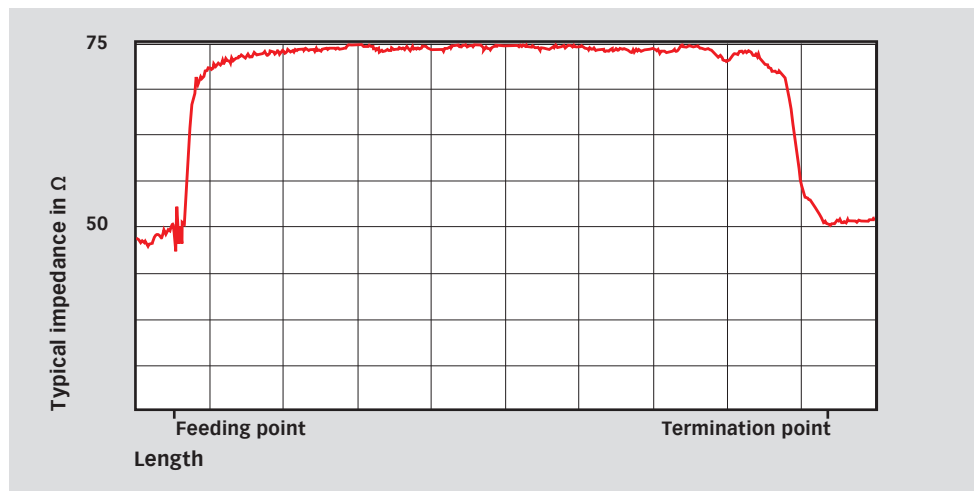


TPL 3000 TRI-PLATE LINE 10 KHZ TO 1 GHz

Typical return loss

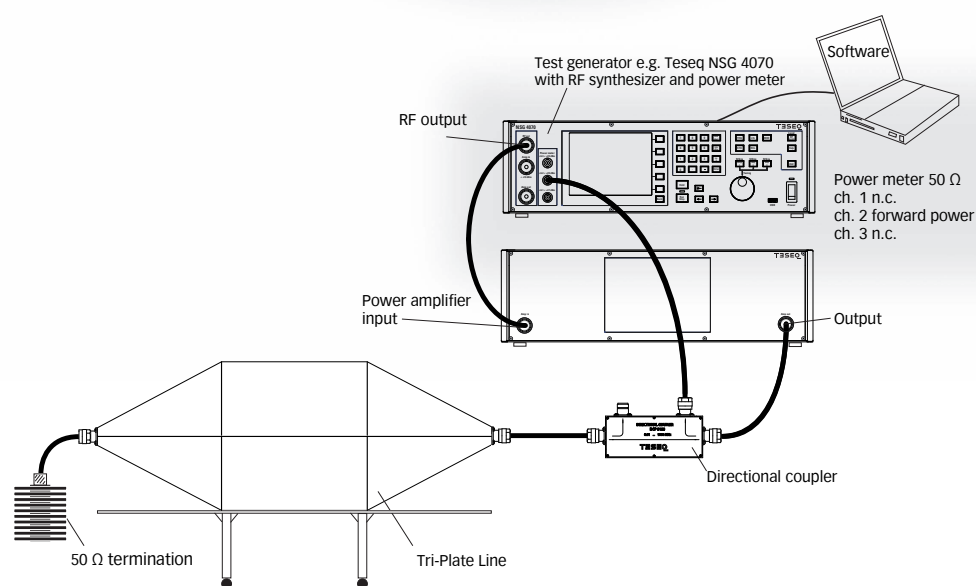


Typical impedance versus length



TPL 3000 TRI-PLATE LINE 10 KHZ TO 1 GHZ

Typical test setup



Model No. and options

| Part number | Description |
|-------------|--|
| 241001 | TPL 3000 Tri-Plate Line as specified in SAE J1113-25, 10 kHz to 1 GHz |

Teseq GmbH
Landsberger Str. 255 · 12623 Berlin · Germany
T +49 30 56 59 88 35 F +49 30 56 59 88 34
desales@teseq.com www.teseq.com

© June 2014 Teseq®
Specifications subject to change without notice.
Teseq® is an ISO-registered company. Its products are designed and manufactured under the strict quality and environmental requirements of the ISO 9001. This document has been carefully checked. However, Teseq® does not assume any liability for errors or inaccuracies.

82-241001 E01 June 2014