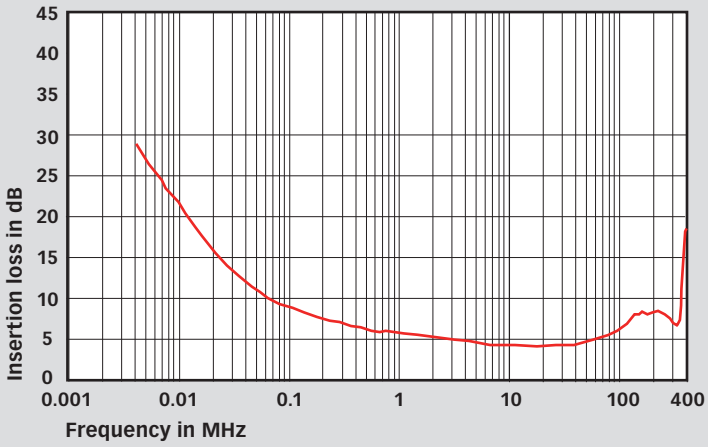
CIP 9138
CURRENT INJECTION PROBE 4 kHz - 230 MHz

The CIP 9138 probe has been designed for MIL-STD-461G CS114 with the extended range from 4 kHz to 1 MHz for EUTs intended to be installed on ships or submarines. The CIP 9138 core material is highly efficient and thermally rugged, thus allowing very high injection levels to be achieved with low RF input power. It can withstand far higher powers than conventional ferrite (up to 1000 W), without changes in the characteristics in relation to the temperature.

The probe material meets the requirements of MIL-STD-461 CS114, ISO 11452-4 and other standards. The probe performance can be measured using calibration jig PCJ 9202.

- **Frequency range from 4 kHz to 230 (400) MHz**
- **High power handling (up to 1 kW)**
- **Ideal for automotive BCI testing e.g. MIL-STD-461 CS114, ISO 11452-4 and other standards**

Typical insertion loss



CIP 9138 with PCJ 9202 calibration jig

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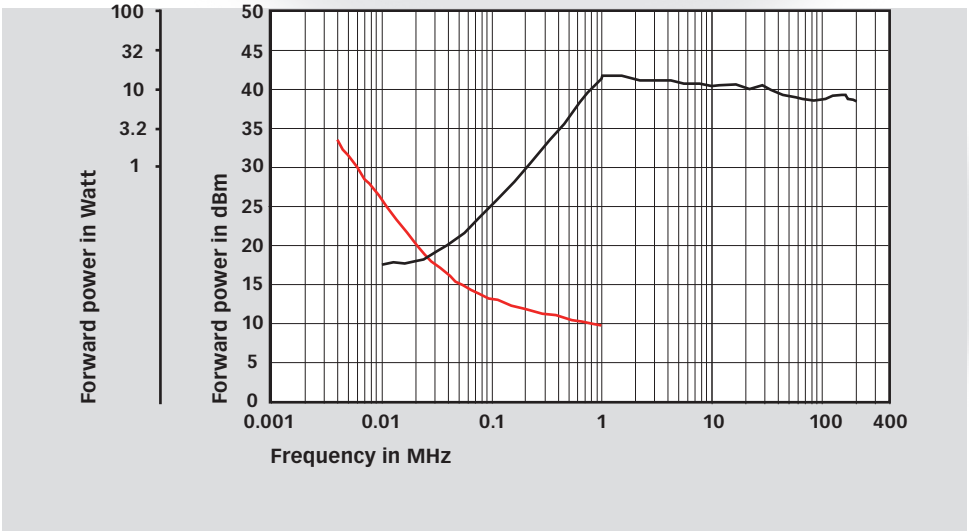
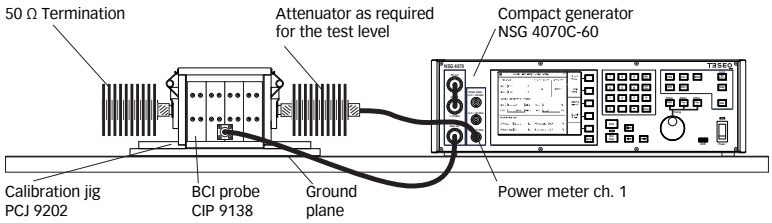
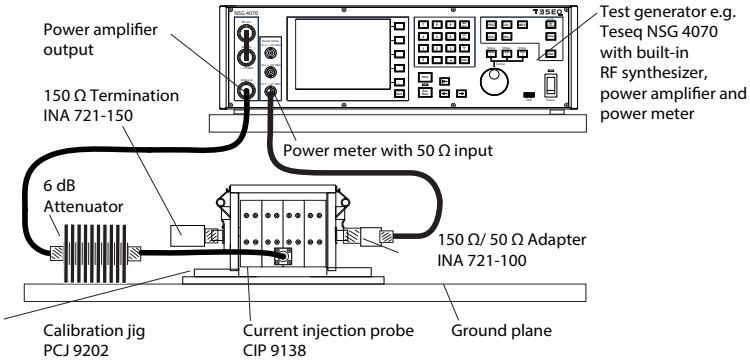
Typical required forward power to inject — 77 dBµA and — MIL-STD-461 CS114 curve #5



Example 1. Setup for test level setting



Example 2. Setup for level setting , e.g., IEC / EN 61000-4-6 current clamp injection



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Technical specifications

Frequency range:	4 kHz - 230 (400) MHz
Window diameter:	43 mm
Outside diameter:	113 mm
Width:	110 mm
Weight:	approx. 3.7 kg
Input connector:	Type N
Max. input power:	1000 W
Max. time for continuous operation:	related to the core temperature
Rating at 10 kHz / 1000 W:	approx. 10 min*
Rating at 100 kHz / 500 W:	approx. 7 min*
Rating at 150 kHz / 500 W:	approx. 5 min*
Rating at 1 MHz to 400 MHz / 400 W:	approx. 3 min*
Max core temperature:	90 °C
Turns ratio:	1:1

*) Time based on a core temperature rise from 23°C to max. 90°C

Model no. and options

Part number	Description
255714	CIP 9138 Current injection probe (BCI) 4 kHz-230 MHz
97-342-300	CIP-TC Traceable calibration (ISO17025), order only with CIP xxxx
252053	PCJ 9202 Calibration jig for CIP 9138

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