

Measurement Condition

S-parameter is measured by using Network Analyzer, Agilent ENA E5071B/C. We use TRL calibration method to remove the fixture effect.

Frequency Range (MHz)	Number of Points	Sweep Type	Product	Page	Ref.
0.3 ~ 8500	201	Log	<u>Ferrite Beads</u> <u>Ferrite Inductors</u>	3	E5071B
10~ 10,000	201	Log	Ceramic Inductor	4	E5071C
1 ~ 3,000	801	Log	Common mode choke/filter-1	5	E5071C
10~ 10,000	801	Log	Common mode choke/filter-2	6	E5071C
Examples				7	E5071C

WARNING:

THE DATA CONTAINED IN THIS "INPAQ S-parameter Data Library" IS BEING PROVIDED SOLELY FOR INFORMATIONAL PURPOSES. IN NO WAY SHALL THIS DATA BE CONSTRUED AS A WARRANTY BY INPAQ OF ANY PRODUCT CHARACTERISTICS AND/OR SPECIFICATIONS. WITHOUT LIMITING THE FOREGOING, INPAQ MAKES NO WARRANTIES OF ANY KIND, EXPRESS OR IMPLIED, RELATING TO THIS DATA, INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

Please refer to INPAQ's catalog or specifications for actual product characteristics. Any simulation results obtained through the use of this data will not reflect the effects of room temperature or other environmental conditions. Accordingly, actual use of INPAQ's products is recommended as the only accurate means of conducting verification testing.

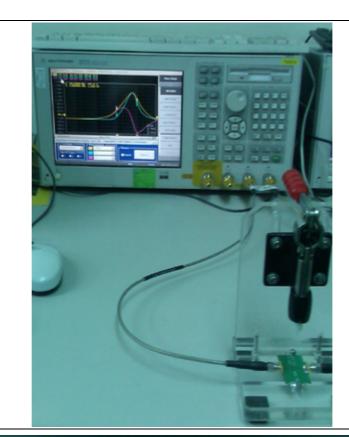
IN NO EVENT SHALL INPAQ BE LIABLE FOR ANY LOSS OR DAMAGE ARISING OUT OF THE USE OF THIS DATA, INCLUDING BUT NOT LIMITED TO ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES.



2-terminal for Beads · Inductor :



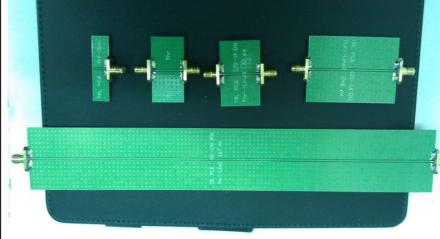
Micro-strip line with 50 ohm characteristic impedance (FR4 0.8mm thickness)



Calibration:

TRL method

T : Thru kit
R : Reflect kit
L : Line Kit





4-terminal for Common mode choke/filter:

Test Board:

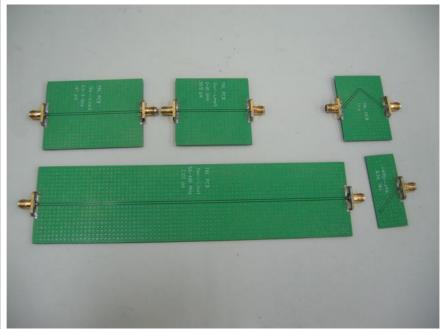
Micro-strip line with 50 ohm characteristic impedance (FR4 0.8mm thickness)



Calibration:

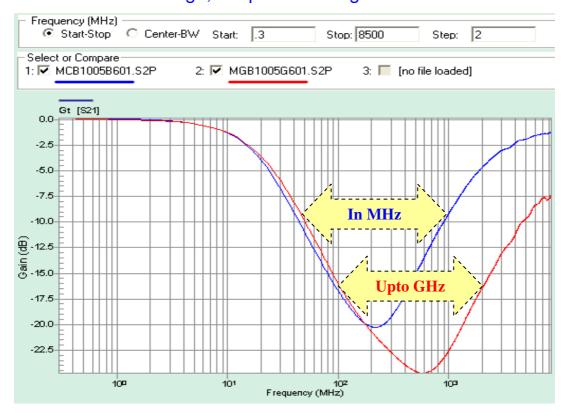
TRL method

T : Thru kit
R : Reflect kit
L : Line Kit

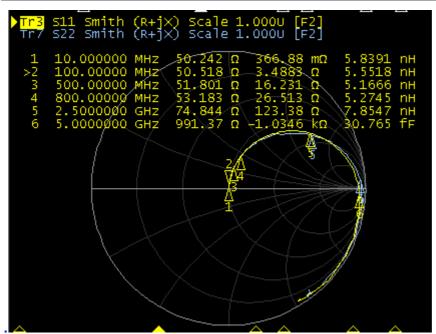




Example for using the Ferrite Bead (MGB or MCB) to suppress the noise in MHz range, or upto GHz range.



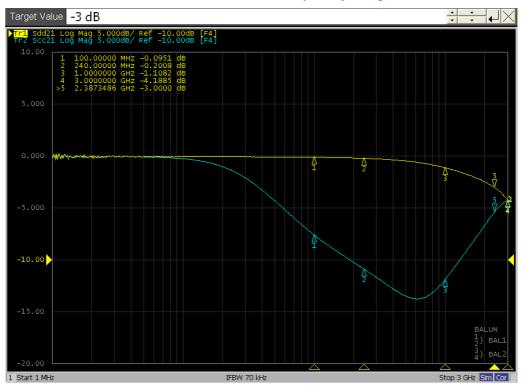
Example for using the Ceramic Inductor (MCI) to conjugate matching the impedance in Smith-chart.





Example for using the common mode filter (MCM or HCM) to suppress the common noise.

MCM1012B900 : Sdd21 and Scc21 at frequency range 1 ~ 3,000MHz



HCM1012GD900 : Sdd21 and Scc21 at frequency 10 ~ 10,000MHz

