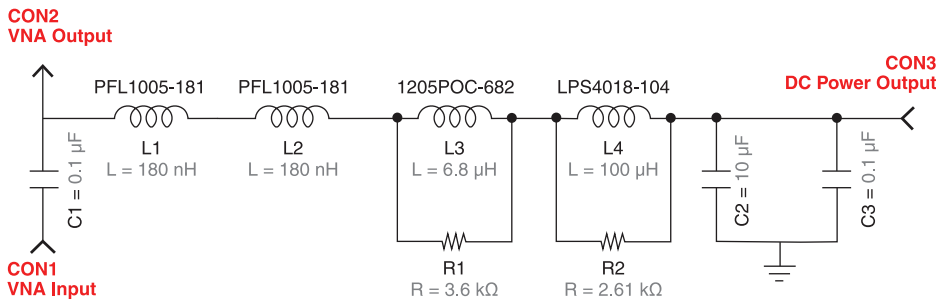


# PoC Filter Solution – SMD-POC-001

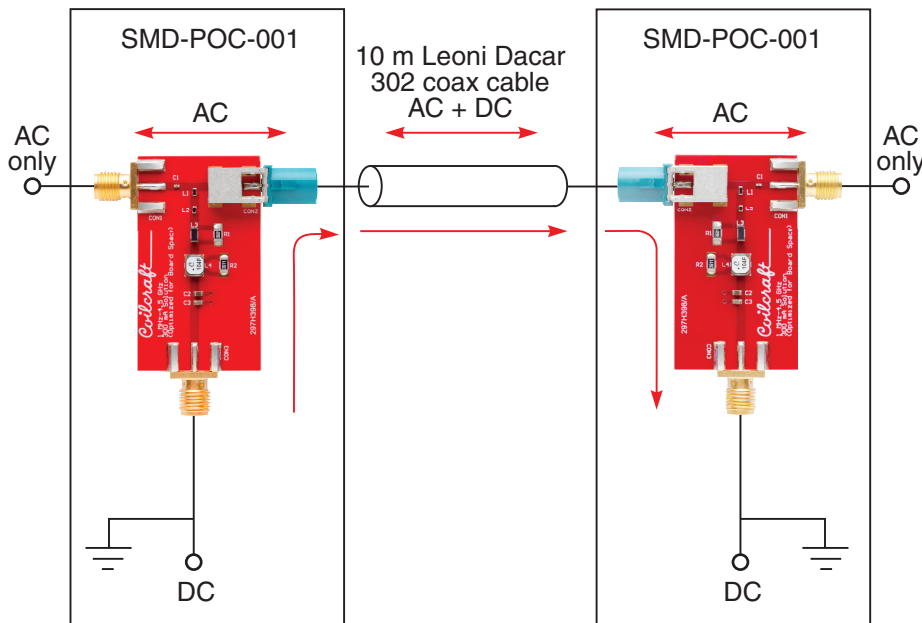
- PoC solution for 1 MHz – 4.2 GHz applications
- Designed specifically for 8.4 Gbps chipsets with backwards capabilities.
- 125°C ambient applications: 300 mA
- 105°C ambient applications: 300 mA
- 85°C ambient applications: 300 mA

Inductors	DCR max. (Ohms)	Max. Area (mm <sup>2</sup> )	Isat (A) 30%				Irms (A)			
			25°C	85°C	105°C	125°C	25°C	85°C	105°C	125°C
PFL1005-181 (0.18 uH)	0.21	0.72	1.2	1.15	0.88	0.66	1.1	0.8	0.71	0.61
PFL1005-181 (0.18 uH)	0.21	0.72	1.2	1.15	0.88	0.66	1.1	0.8	0.71	0.61
1205POC-682 (6.8 uH)	0.51	4.48	0.88	0.8	0.61	0.46	0.67	0.64	0.58	0.52
LPS4018-104 (100 uH)	1.4	15.8	0.50	0.45	0.44	0.43	0.37	0.31	0.3	0.28
<b>Totals:</b>	<b>2.33</b>	<b>22.93</b>								

## Schematic



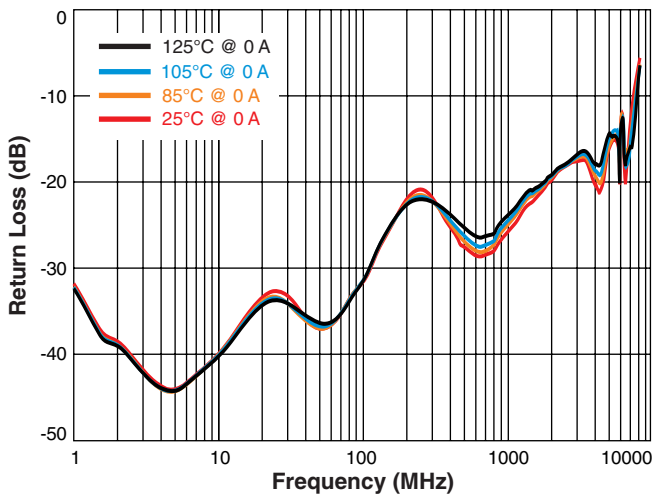
## Total Channel Test Setup



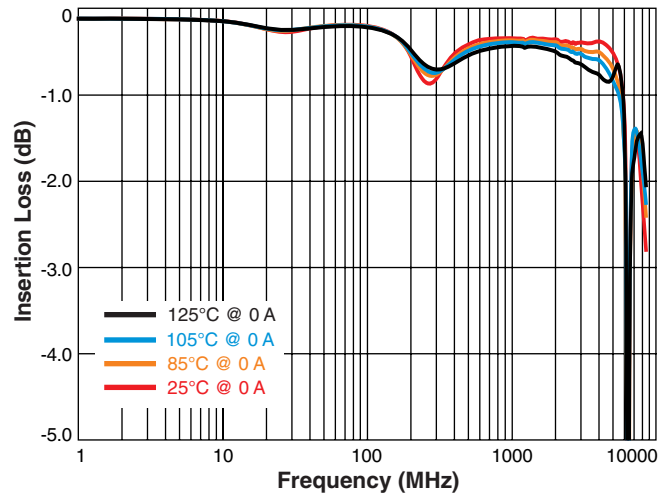
\* Solutions measured in a total channel configuration. 2 PCB's with PoC filters on each with a 10 m Leoni Dacar 302 cable interconnect.

# PoC Filter Solution – SMD-POC-001

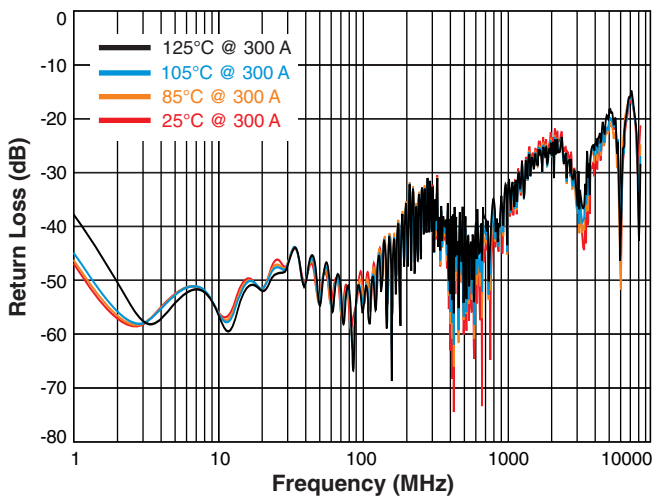
**Return Loss (S11, Single board no current)**



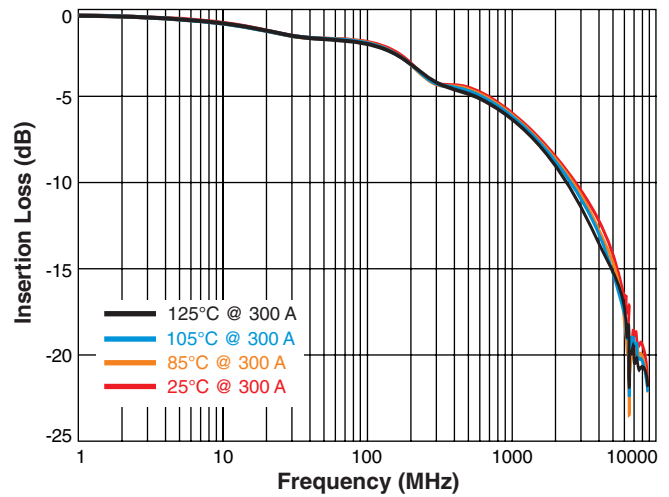
**Insertion Loss (S21, Single board no current)**



**Return Loss (S11, Total Channel Measurements\*)**



**Insertion Loss (S21, Total Channel Measurements\*)**



\* Solutions measured in a total channel configuration. 2 PCB's with PoC filters on each with a 10 m Leoni Dacar 302 cable interconnect.