

ALT系列与共模滤波器/扼流圈的推荐组合

在IoT市场背景下，第5代移动通信系统(5G)无线通信得到普及的同时，对有线通信也提出了高速传输化(1Gbps ~ 10Gbps)的要求，在安全摄像头等领域，将电力线集成到以太网中的电源供应系统得到进一步普及，对于与此相应的脉冲变压器也提出了越来越高的要求。同时，由于当前趋于在1块基板上搭载多个脉冲变压器，因此还存在小尺寸的需求。

脉冲变压器ALT系列通过TDK独特的结构设计，实现了在SMD型中进行自动贴装。

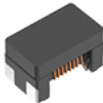
此外，搭载于LAN接口的脉冲变压器、共模扼流圈均具备了分立型产品，与以往的模块一体型产品相比，进一步扩大了元件布局的自由度。(例如通过在基板正反面贴装等节省了空间)

另外，由于支持自动绕线工艺，因此与难以在制造工序中进行配线处理的磁环线圈相比，可确保高质量及高可靠性，是一款最适合用于通信质量重要性不断提高的信息设备中的脉冲变压器。

此处针对各Ethernet标准，刊载了TDK推荐的脉冲变压器与共模扼流圈组合的S参数。

适用标准

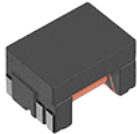
10GBASE-T

脉冲变压器	推荐共模滤波器
ALT4532H-121-T10G  LxWxT (mm) 4. 5x3. 2x2. 9 (Max) [1812 inch]	ACM2012H-900-2P-T05  LxWxT (mm) 2. 00x1. 20x1. 30 (Max) [0804 inch]

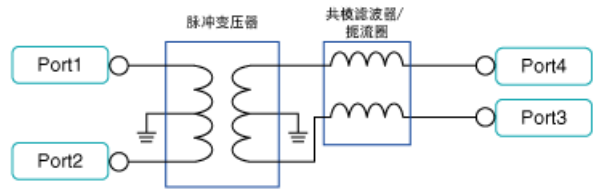
1000BASE-T/2. 5GBASE-T/5GBASE-T, PoE+[600mA]

脉冲变压器	推荐共模滤波器
ALT4532P-181-T05G  LxWxT (mm) 4. 5x3. 2x2. 9 (Max) [1812 inch]	ACM2012H-381-2P-T05  LxWxT (mm) 2. 00x1. 20x1. 30 (Max) [0804 inch]

100/1000BASE-T

脉冲变压器	推荐共模滤波器
ALT4532M-201-T001  LxWxT (mm) 4. 5x3. 2x2. 9 (Max) [1812 inch]	ACM2012-900-2P-T002 ACM2012-361-2P-T002  LxWxT (mm) 2. 00x1. 20x1. 30 (Max) [0804 inch]
ALT3232M-151-T001  LxWxT (mm) 3. 2x3. 2x2. 9 (Max) [1212 inch]	MCZ1210AH900L2TA0G  LxWxT (mm) 1. 25x1. 00x0. 6 (Max) [0504 inch]

代表性电路结构及测量条件



连接图

KEYSIGHT ENA Series
Network Analyzer E5071C 300kHz - 20GHz

推荐组合一览

10GBASE-T

脉冲变压器	推荐共模滤波器	S参数	评估板
ALT4532H-121-T10G	ACM2012H-900-2P-T05	浏览	

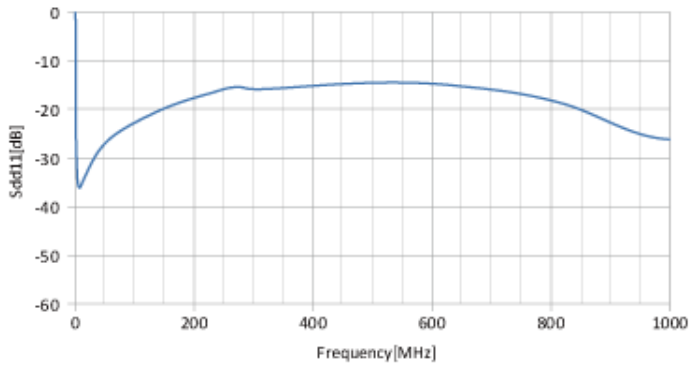
1000BASE-T/2. 5GBASE-T/5GBASE-T, PoE[600mA]

脉冲变压器	推荐共模滤波器	S参数	评估板
ALT4532P-181-T05G	ACM2012H-900-2P-T05	浏览	

100/1000BASE-T

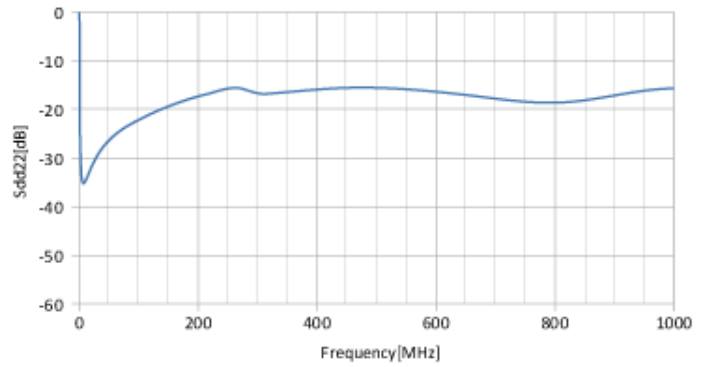
脉冲变压器	推荐共模滤波器	S参数	评估板
ALT4532M-201-T001	ACM2012-900-2P-T002	浏览	ALT4532-EVA-01A
	ACM2012-361-2P-T002	浏览	
	MCZ1210AH900L2TA0G	浏览	
ALT3232M-151-T001	ACM2012-900-2P-T002	浏览	
	ACM2012-361-2P-T002	浏览	
	MCZ1210AH900L2TA0G	浏览	

Return Loss Sdd11(PHY side)



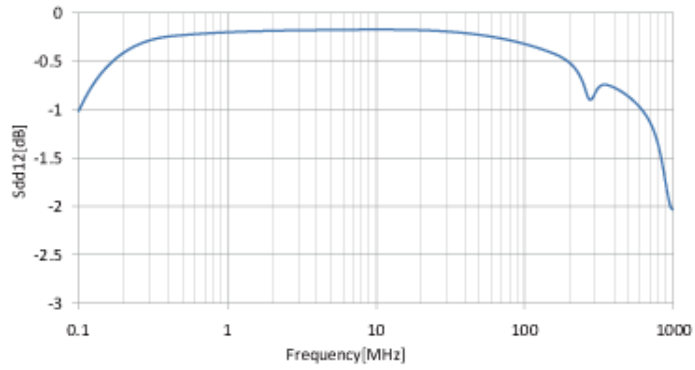
Sdd11
(PHY Side)

Return Loss Sdd22(Connector side)



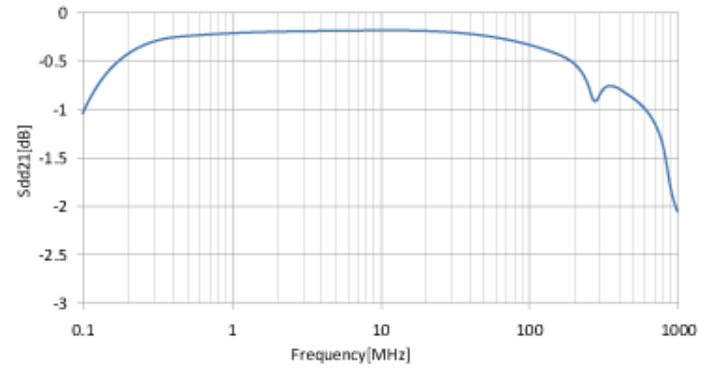
Sdd22
(Connector Side)

Insertion Loss Sdd12(Connector to PHY)



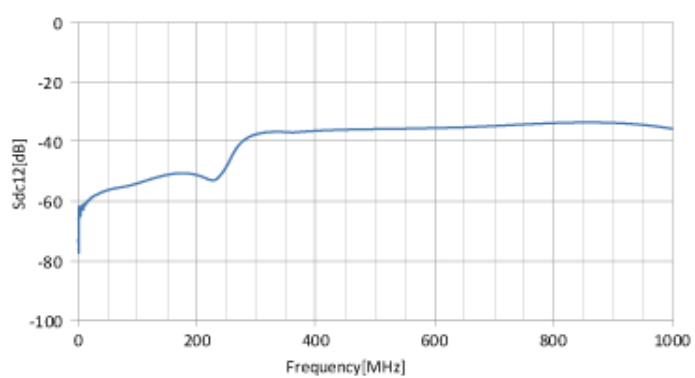
Sdd12
(Connector to PHY)

Insertion Loss Sdd21(PHY to Connector)



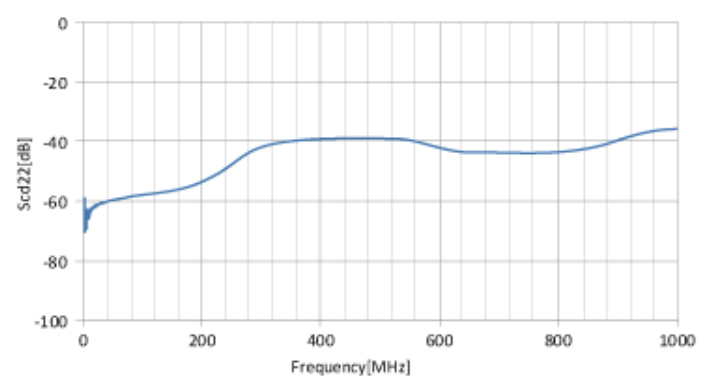
Sdd21
(PHY to Connector)

Sdc12



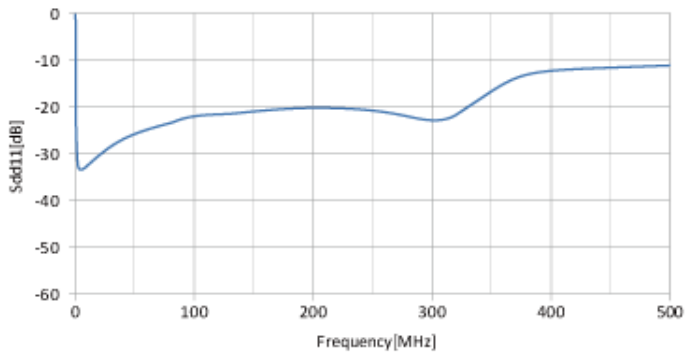
Sdc12

Sdc22

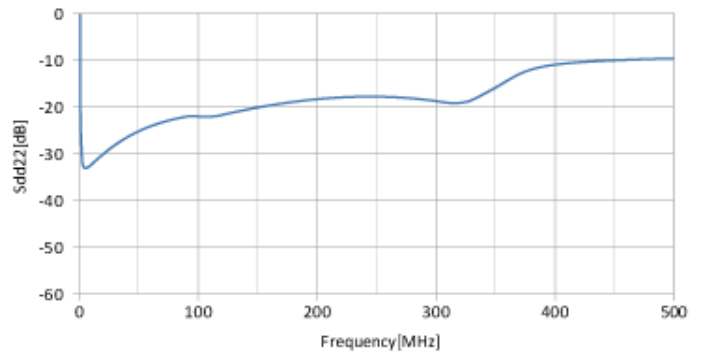


Sdc22

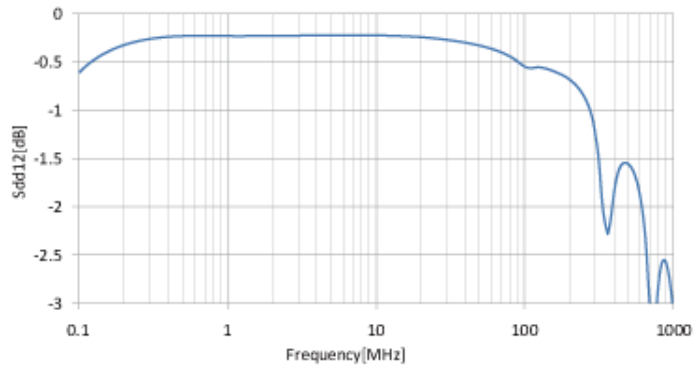
Return Loss Sdd11(PHY side)


Sdd11
(PHY Side)

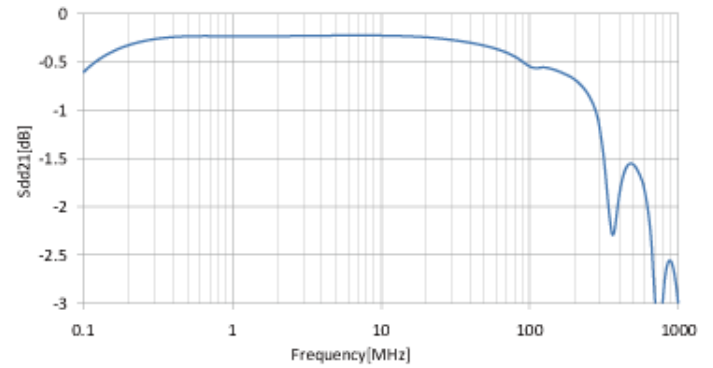
Return Loss Sdd22(Connector side)


Sdd22
(Connector Side)

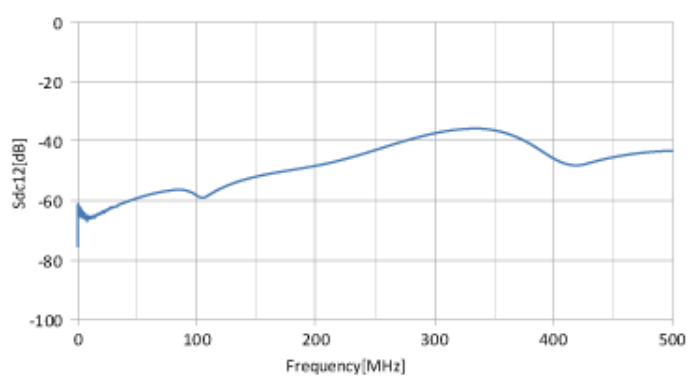
Insertion Loss Sdd12(Connector to PHY)


Sdd12
(Connector to PHY)

Insertion Loss Sdd21(PHY to Connector)

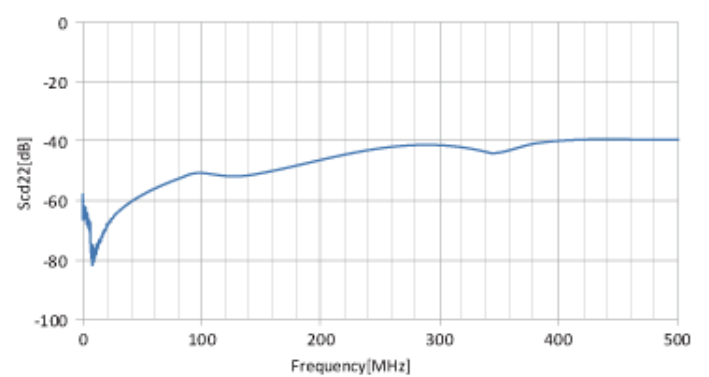

Sdd21
(PHY to Connector)

Sdc12



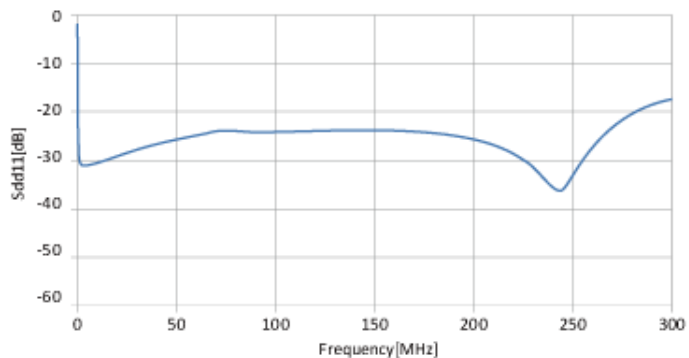
Sdc12

Sdc22

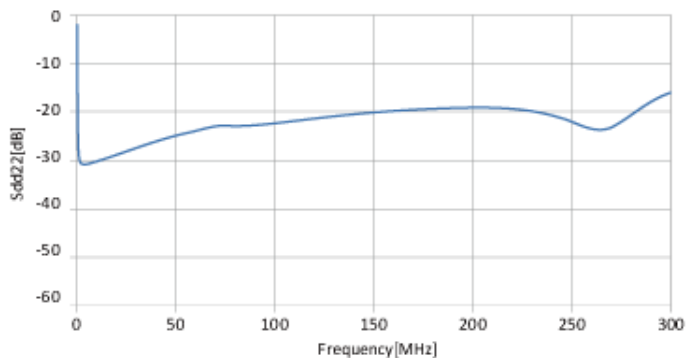


Sdc22

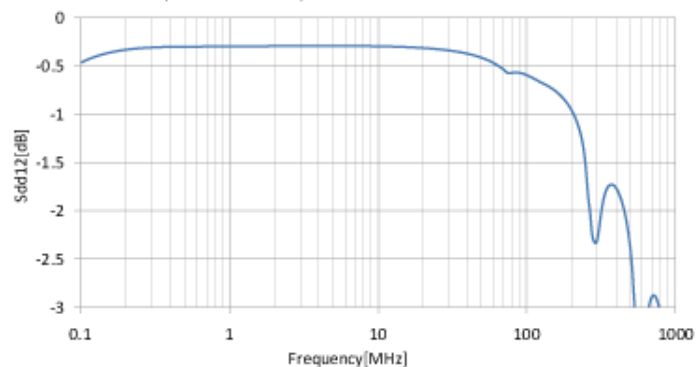
Return Loss Sdd11(PHY side)


Sdd11
(PHY Side)

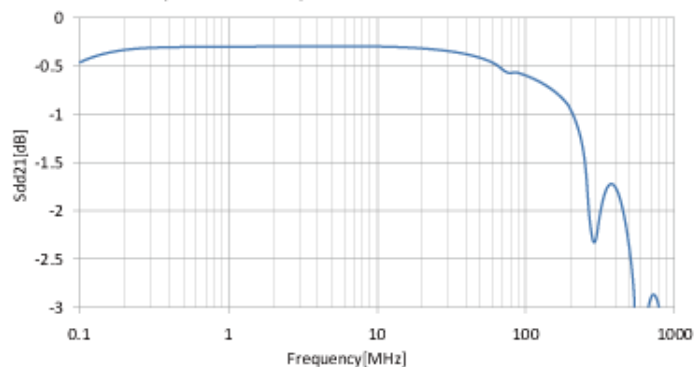
Return Loss Sdd22(Connector side)


Sdd22
(Connector Side)

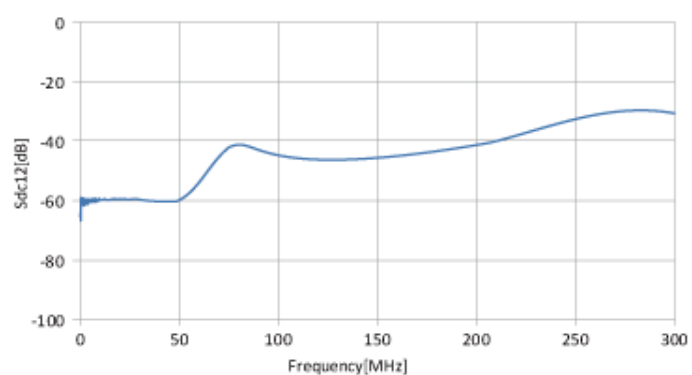
Insertion Loss Sdd12(Connector to PHY)


Sdd12
(Connector to PHY)

Insertion Loss Sdd21(PHY to Connector)

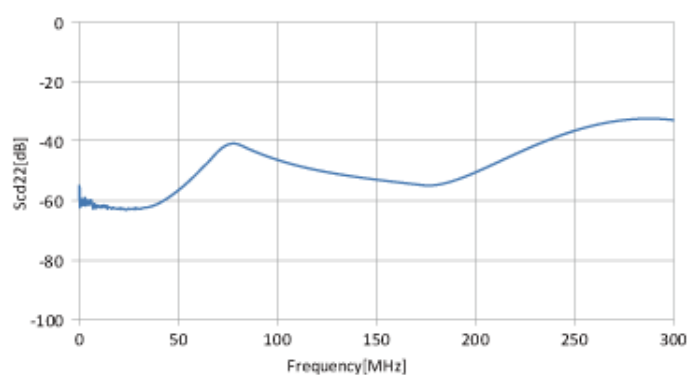

Sdd21
(PHY to Connector)

Sdc12



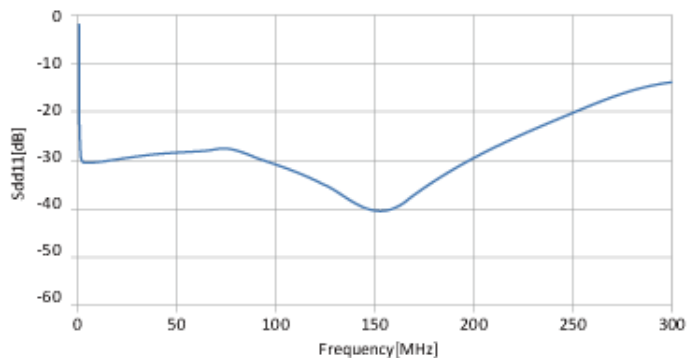
Sdc12

Sdc22

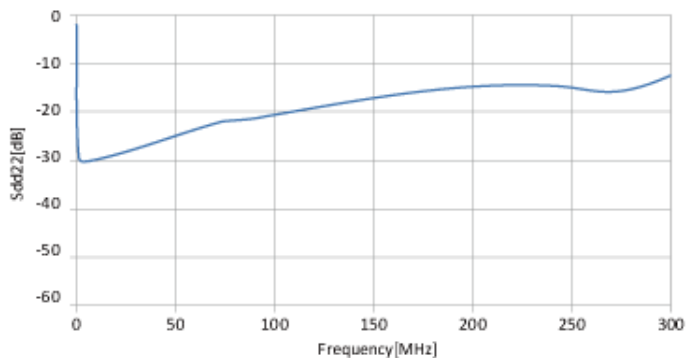


Sdc22

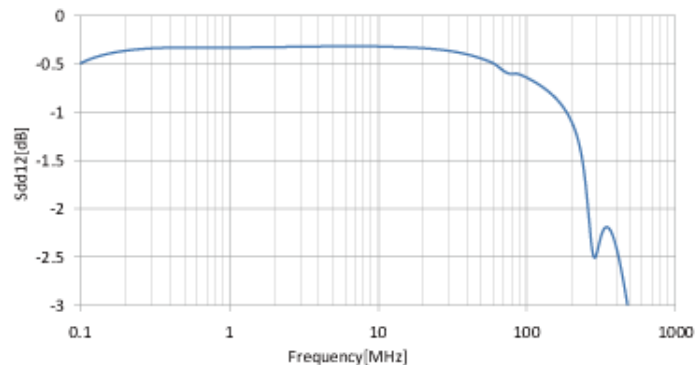
Return Loss Sdd11(PHY side)


Sdd11
(PHY Side)

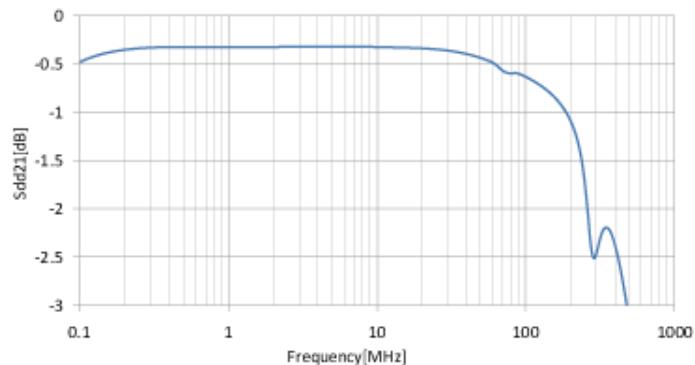
Return Loss Sdd22(Connector side)


Sdd22
(Connector Side)

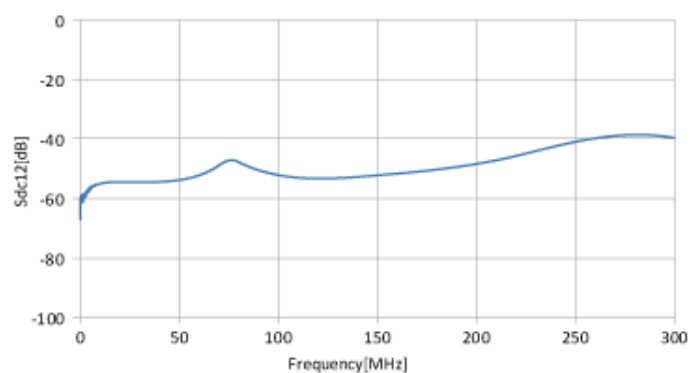
Insertion Loss Sdd12(Connector to PHY)


Sdd12
(Connector to PHY)

Insertion Loss Sdd21(PHY to Connector)

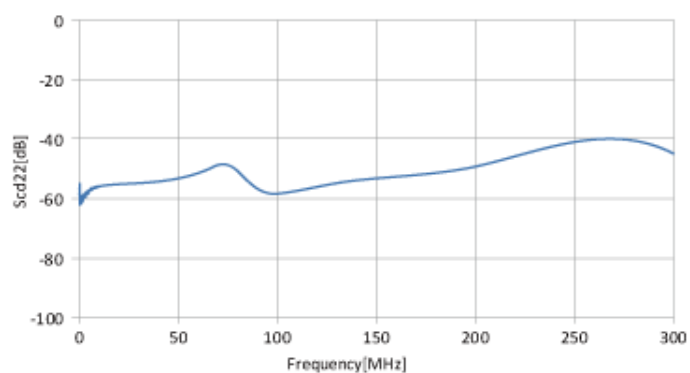

Sdd21
(PHY to Connector)

Sdc12



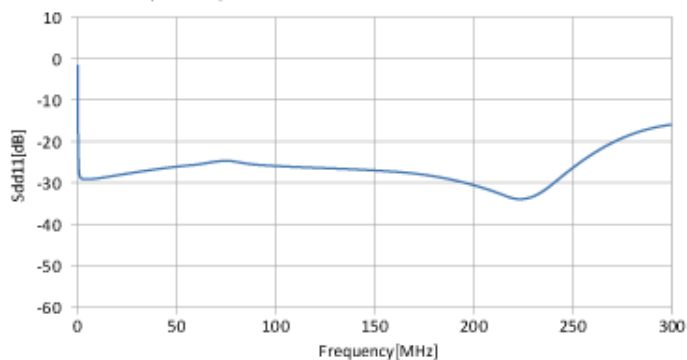
Sdc12

Sdc22

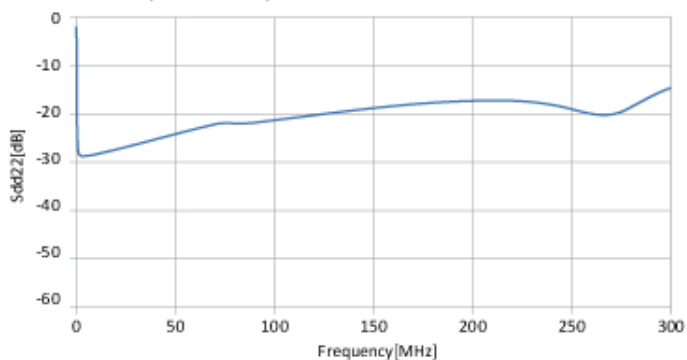


Sdc22

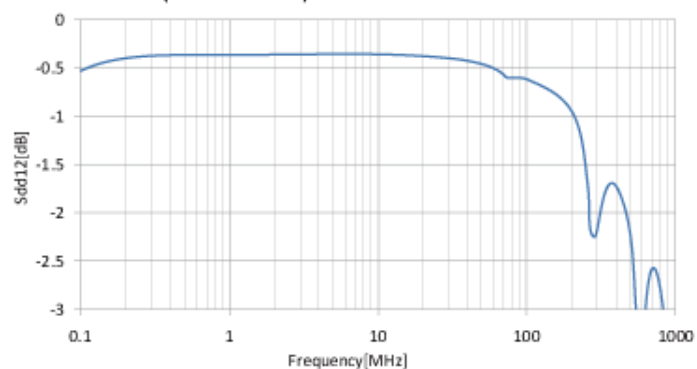
Return Loss Sdd11(PHY side)


Sdd11
(PHY Side)

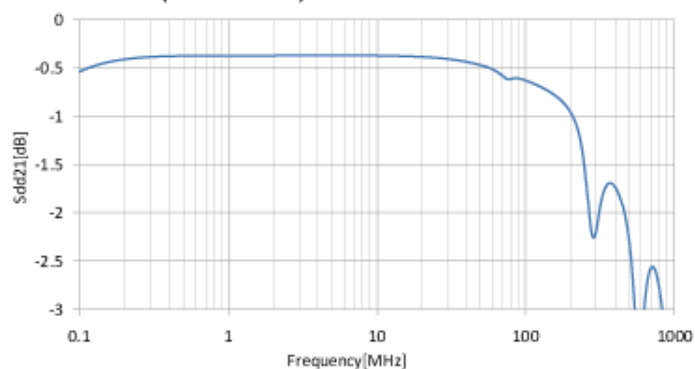
Return Loss Sdd22(Connector side)


Sdd22
(Connector Side)

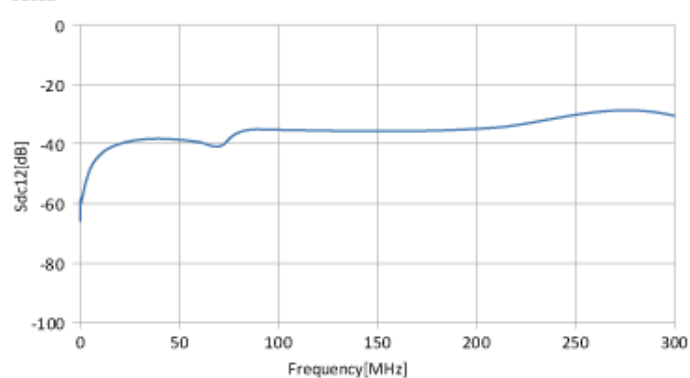
Insertion Loss Sdd12(Connector to PHY)


Sdd12
(Connector to PHY)

Insertion Loss Sdd21(PHY to Connector)

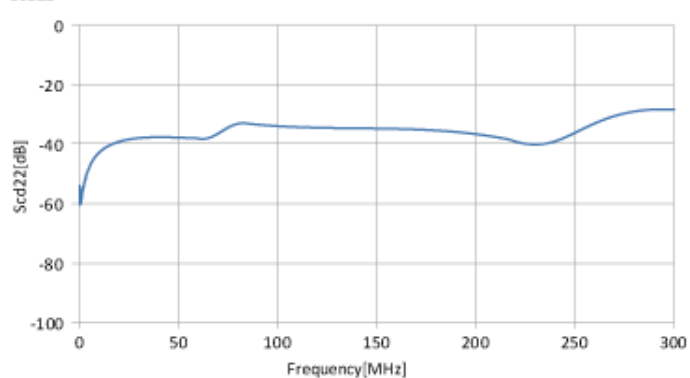

Sdd21
(PHY to Connector)

Sdc12



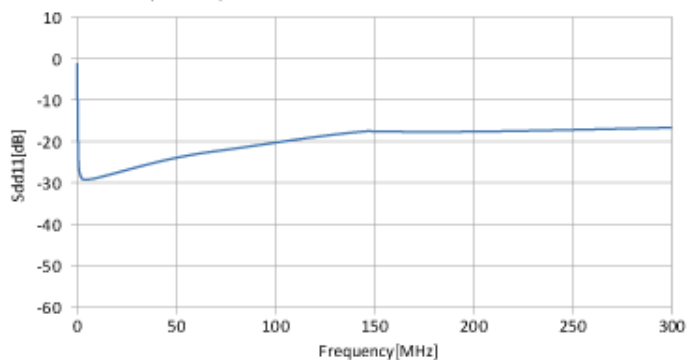
Sdc12

Sdc22

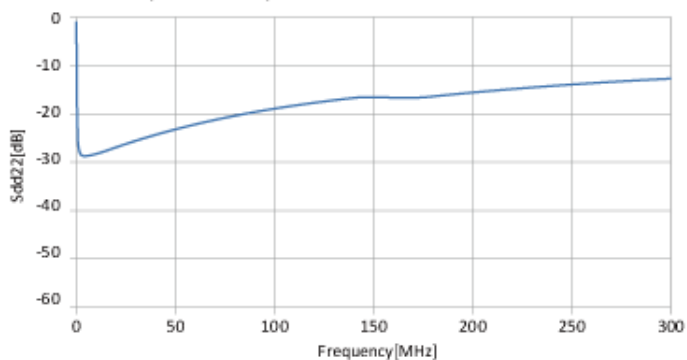


Sdc22

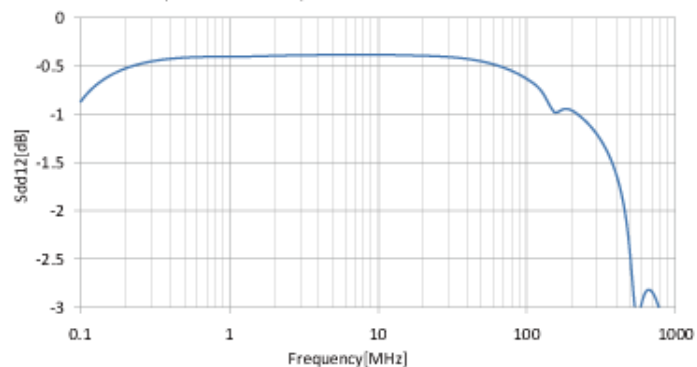
Return Loss Sdd11(PHY side)


Sdd11
(PHY Side)

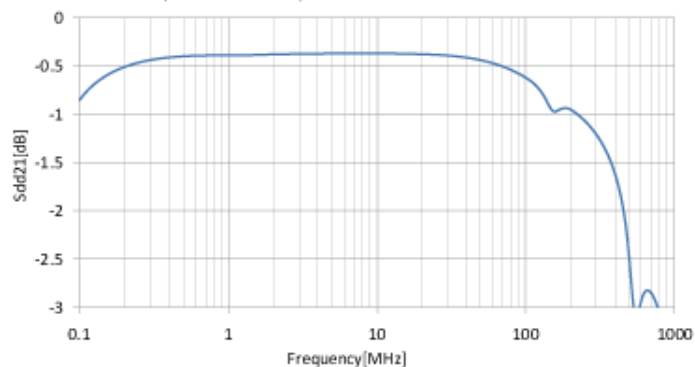
Return Loss Sdd22(Connector side)


Sdd22
(Connector Side)

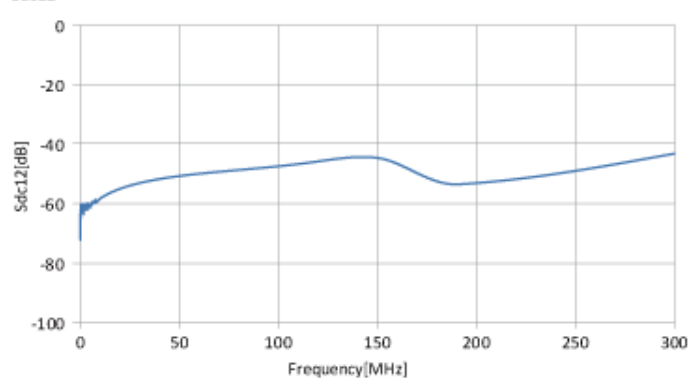
Insertion Loss Sdd12(Connector to PHY)


Sdd12
(Connector to PHY)

Insertion Loss Sdd21(PHY to Connector)

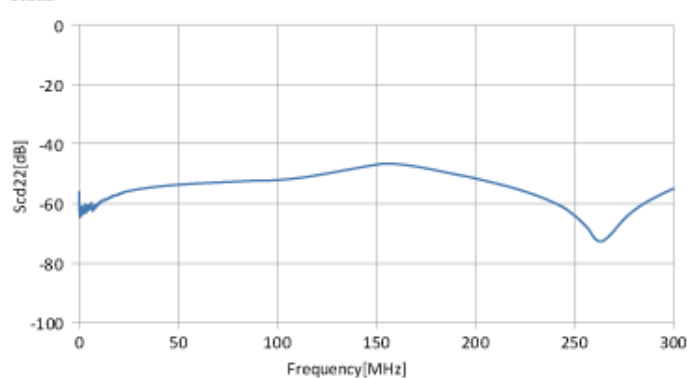

Sdd21
(PHY to Connector)

Sdc12



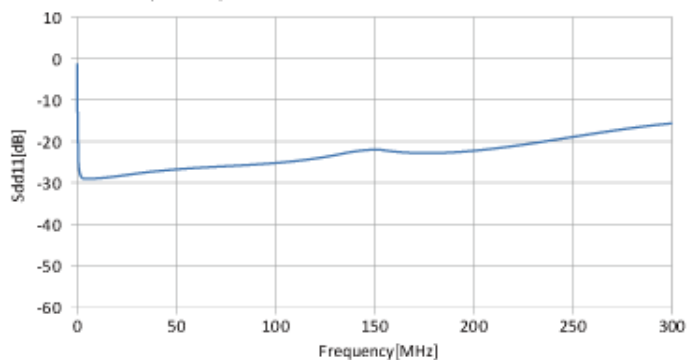
Sdc12

Sdc22

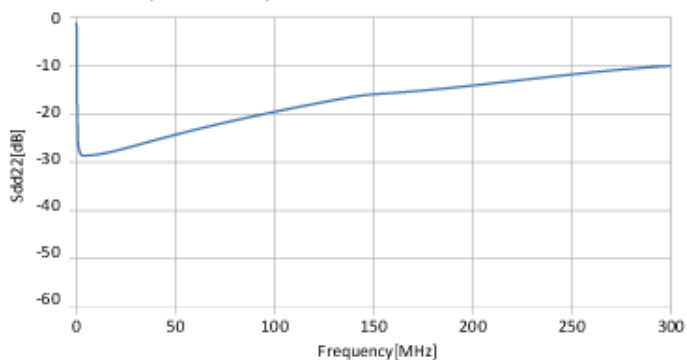


Sdc22

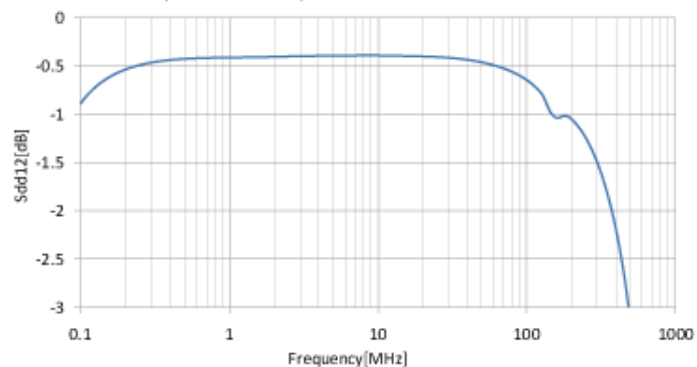
Return Loss Sdd11(PHY side)


Sdd11
(PHY Side)

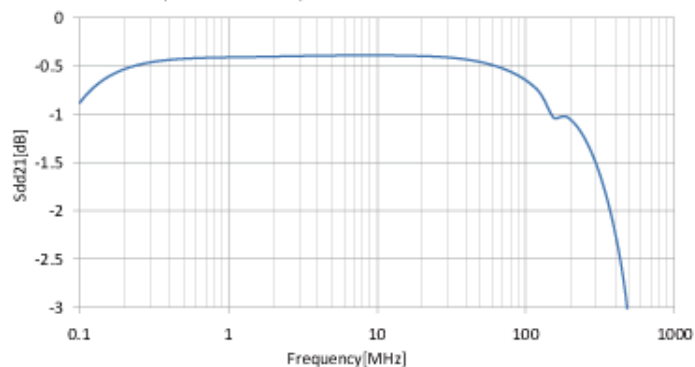
Return Loss Sdd22(Connector side)


Sdd22
(Connector Side)

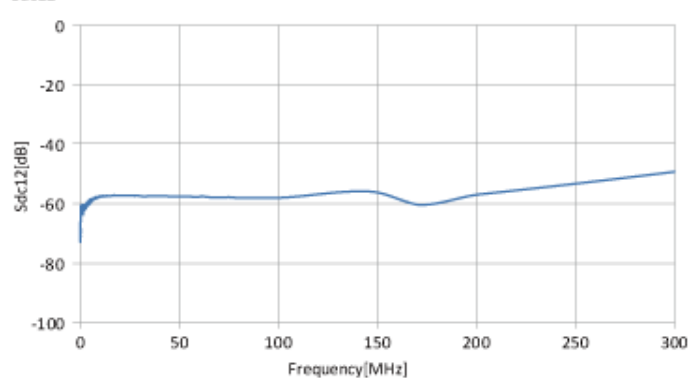
Insertion Loss Sdd12(Connector to PHY)


Sdd12
(Connector to PHY)

Insertion Loss Sdd21(PHY to Connector)

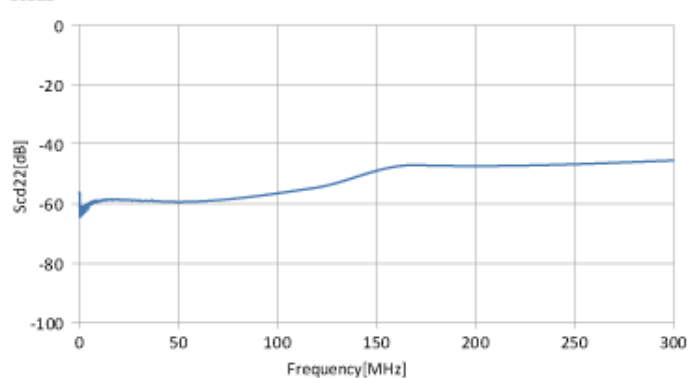

Sdd21
(PHY to Connector)

Sdc12



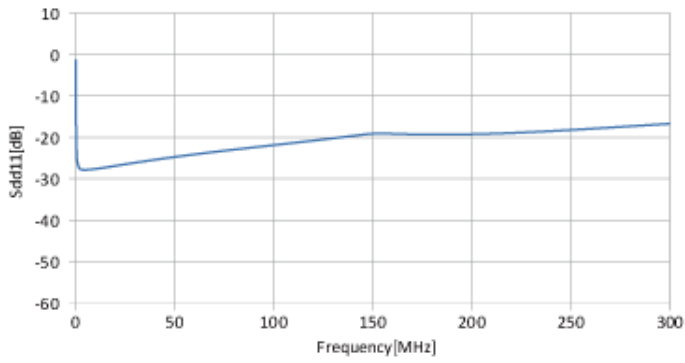
Sdc12

Sdc22

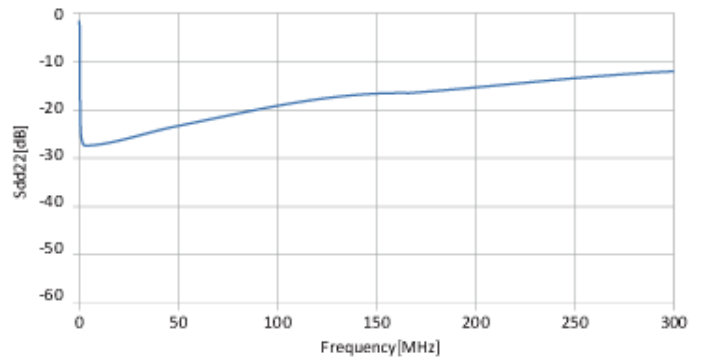


Sdc22

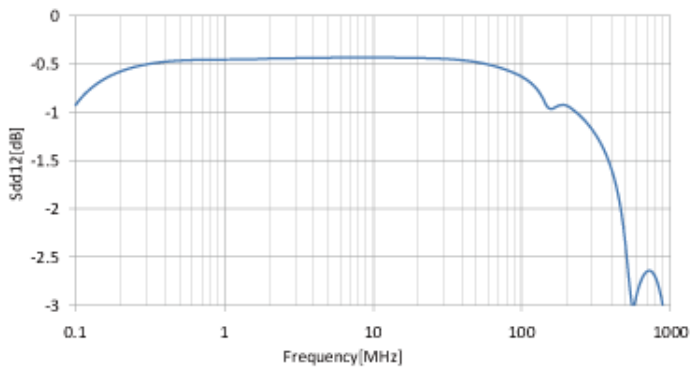
Return Loss Sdd11(PHY side)


Sdd11
(PHY Side)

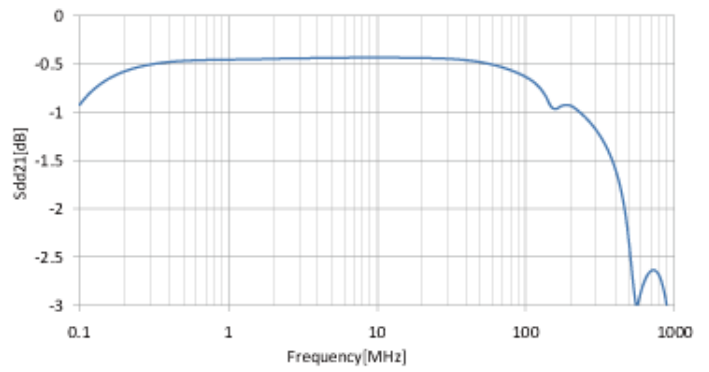
Return Loss Sdd22(Connector side)


Sdd22
(Connector Side)

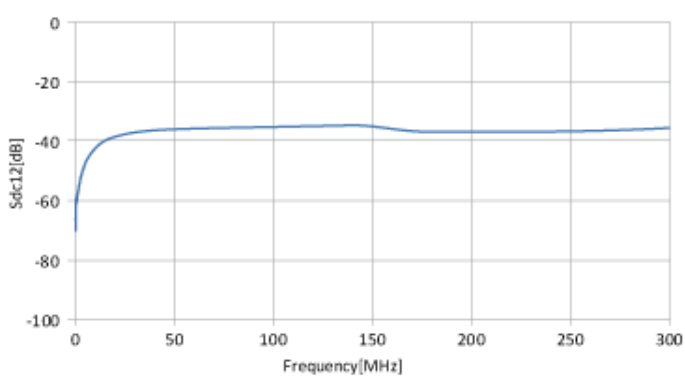
Insertion Loss Sdd12(Connector to PHY)


Sdd12
(Connector to PHY)

Insertion Loss Sdd21(PHY to Connector)

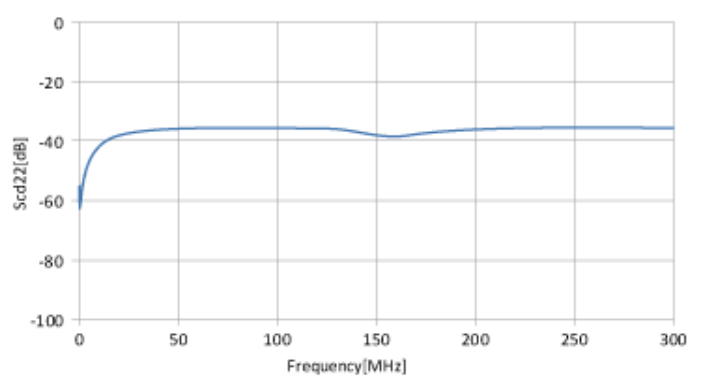

Sdd21
(PHY to Connector)

Sdc12



Sdc12

Sdc22

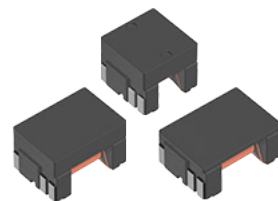


Sdc22

■ LAN用脉冲变压器和模块产品信息

关于TDK集团LAN用脉冲变压器和模块将综合介绍各类信息。

 [产品、销售、技术问题咨询](#)



■ 共模滤波器/扼流圈产品信息

关于TDK集团的共模滤波器/扼流圈将综合介绍各类信息。

 [产品、销售、技术问题咨询](#)

