



40GBASE-T ARJ45 ICM

IEEE 802.3bq San Diego 2014

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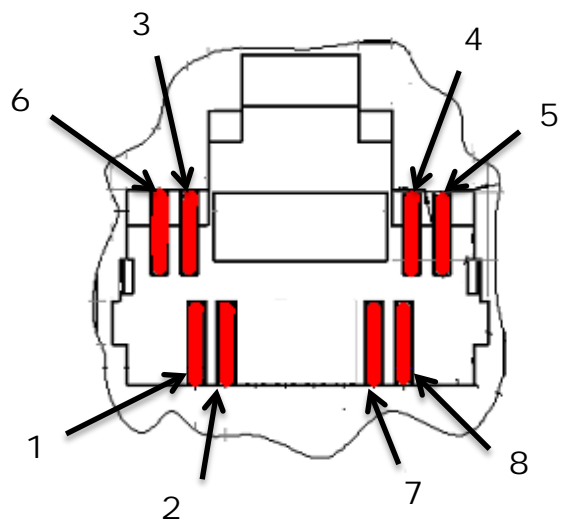
ICM (INTEGRATED CONNECTOR MODULE)



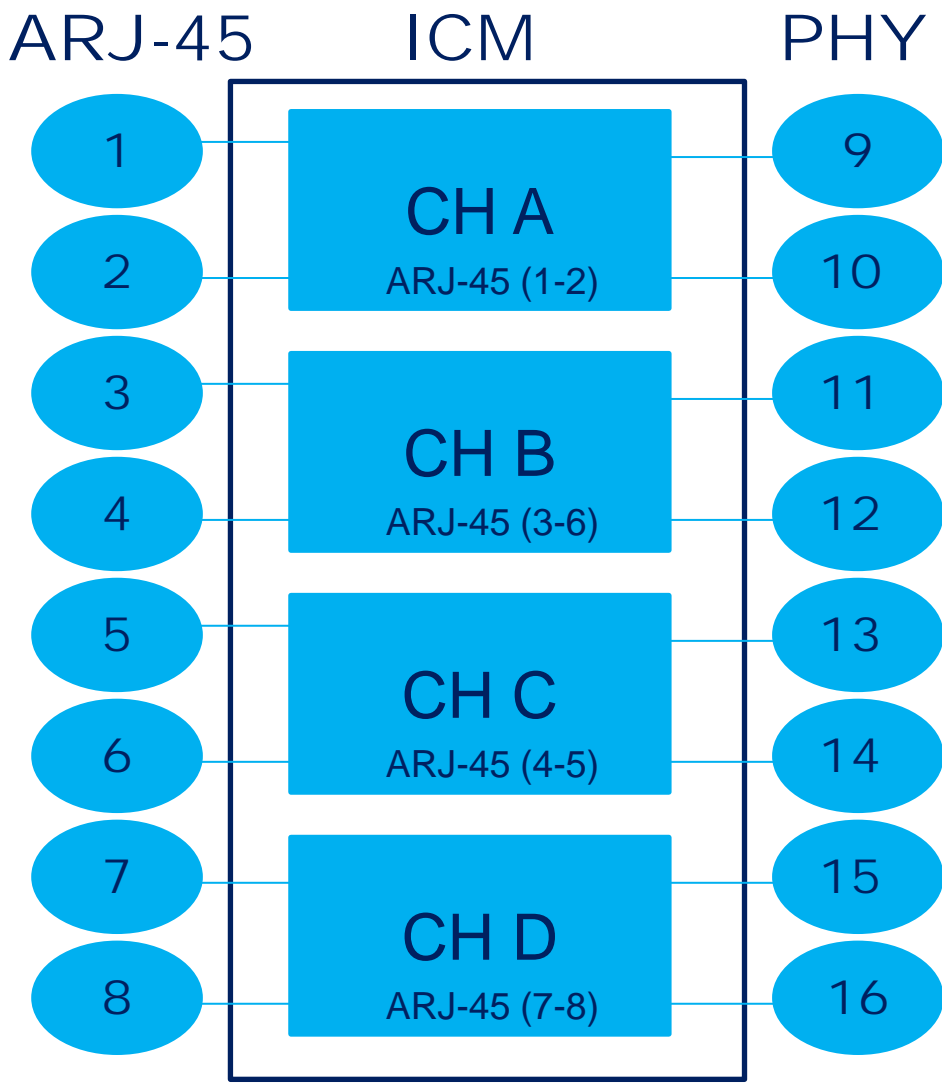
ARJ45 8-CONTACTS
Category 7A and 8.2

40GBASE-T ICM

Sixteen port model



- VNA ports 1 and 2 are ARJ-45 side
- VNA ports 3 AND 4 are PHY side
- E5071C ENA used
- Measurements made @ 50 Ohms single ended
- Swept 1MHz TO 2GHz
- 1601 points used, maximum allowed by E5071C
- Current testing done on standard ARJ-45
- 3rd generation of 40G magnetic components to improve IL & RL

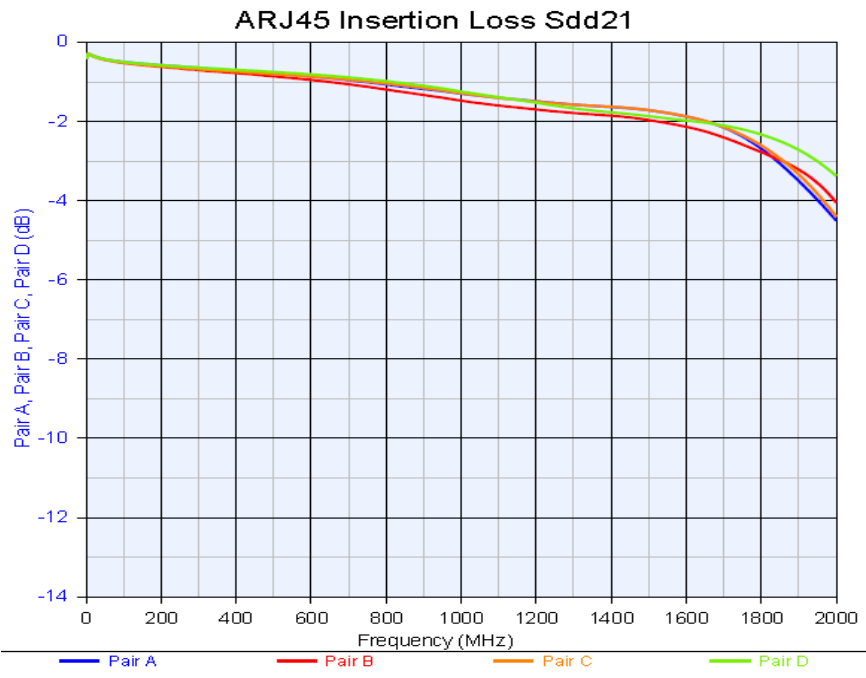


PORT NUMBERING PER ADHOC MODEL

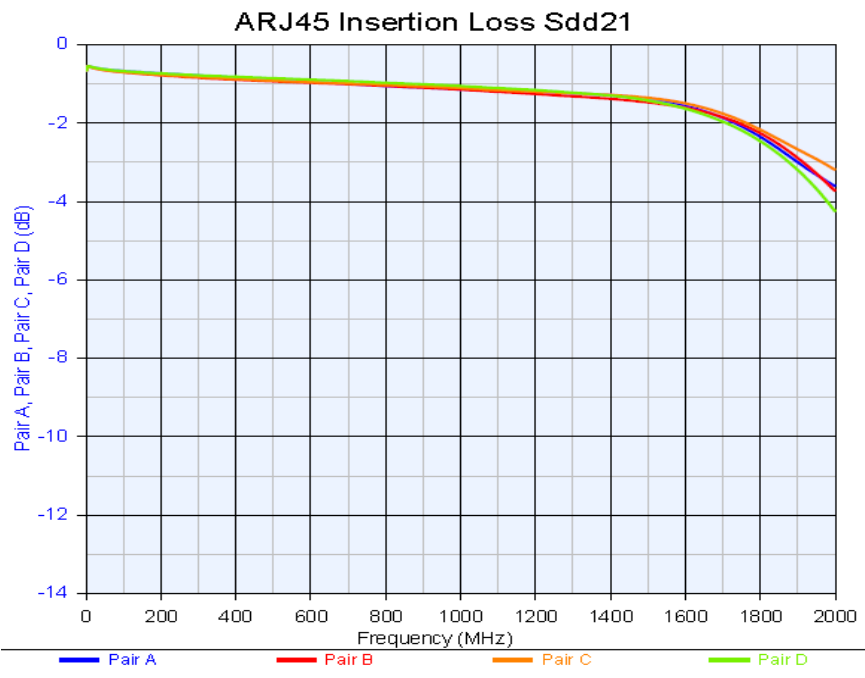
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Typical insertion loss

Revision 1



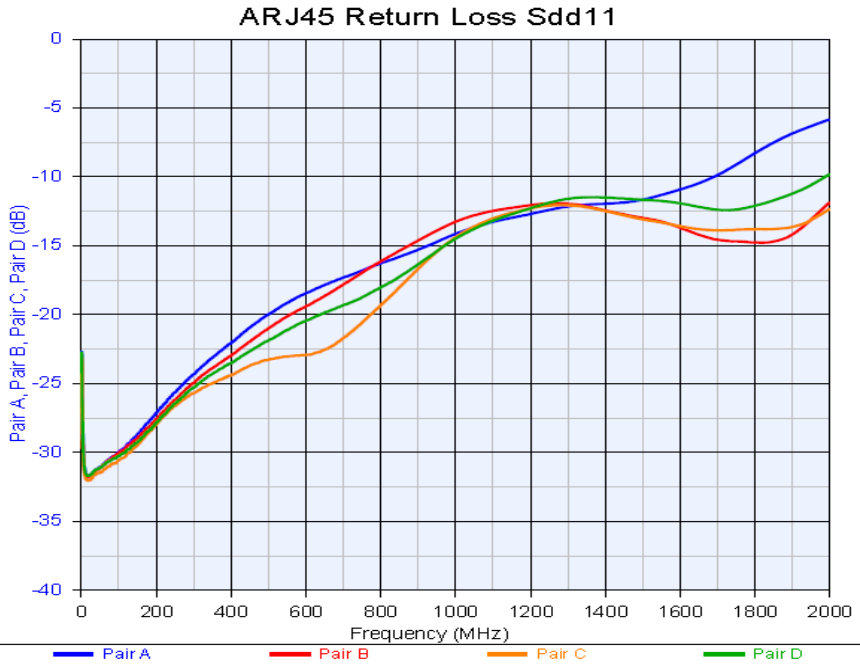
Revision 2



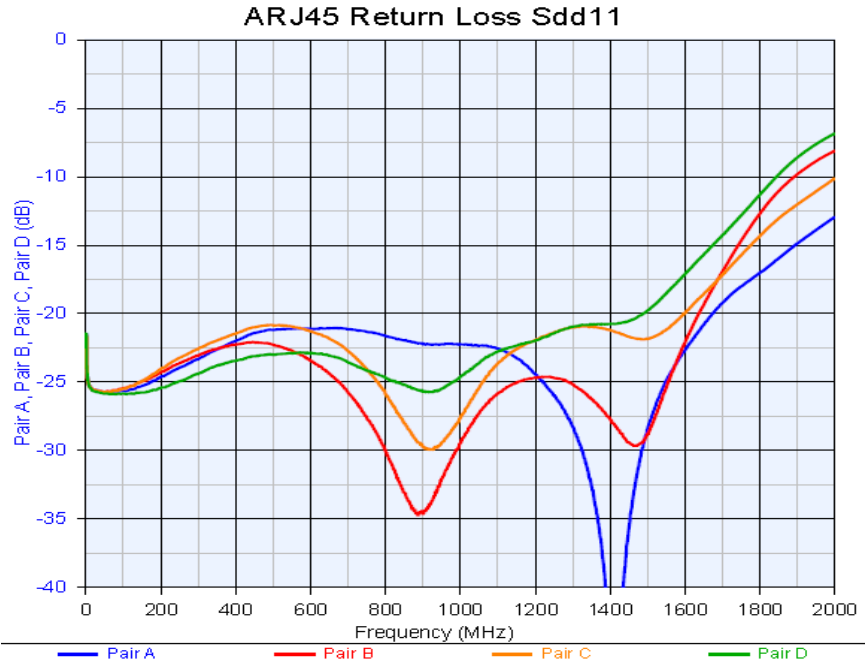
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Typical return loss

Revision 1



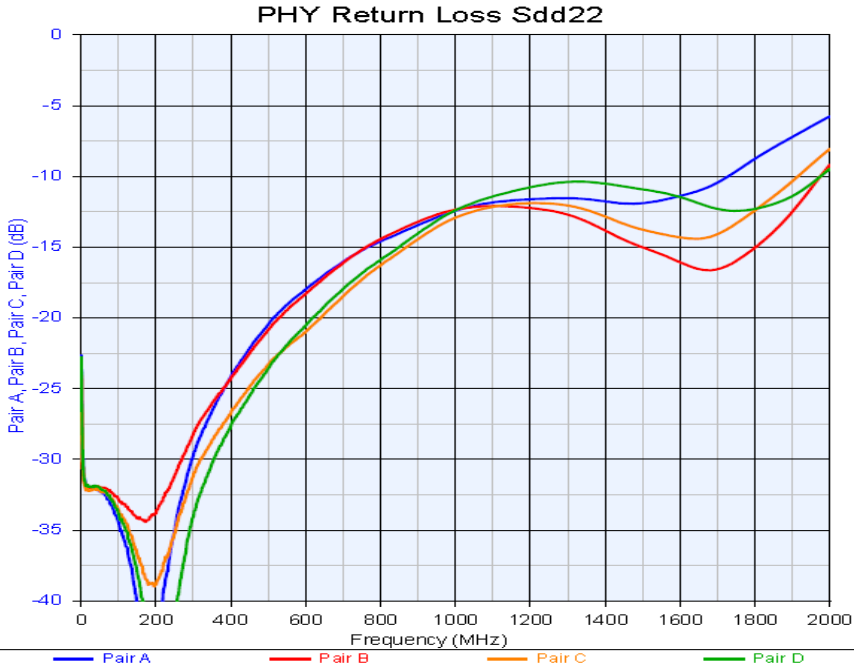
Revision 2



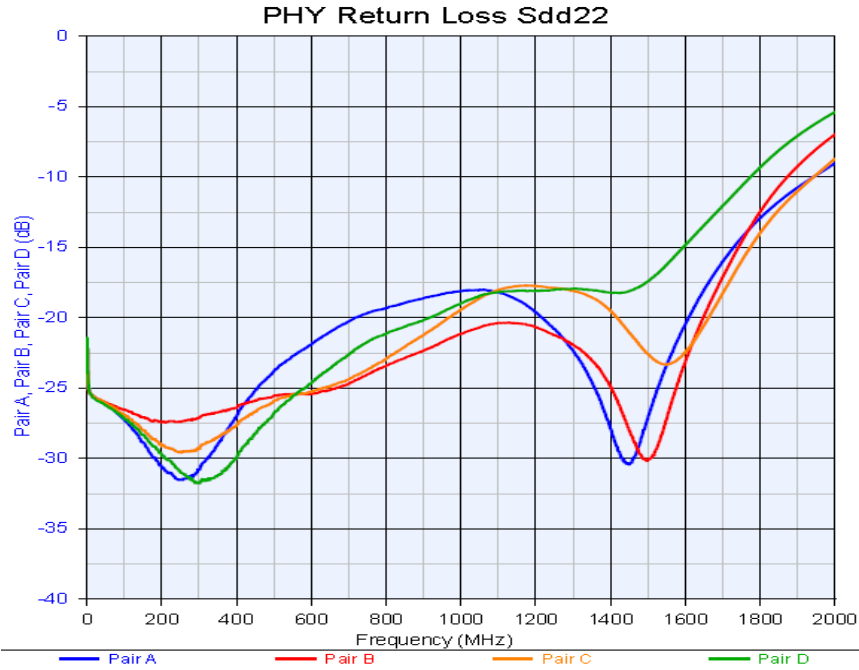
40GBASE-T ICM

Typical return loss

Revision 1



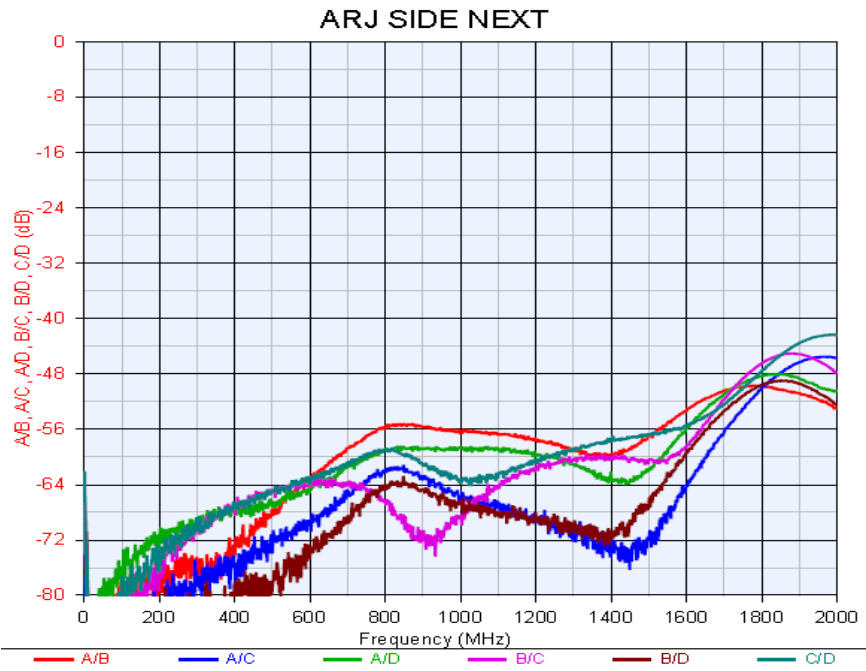
Revision 2



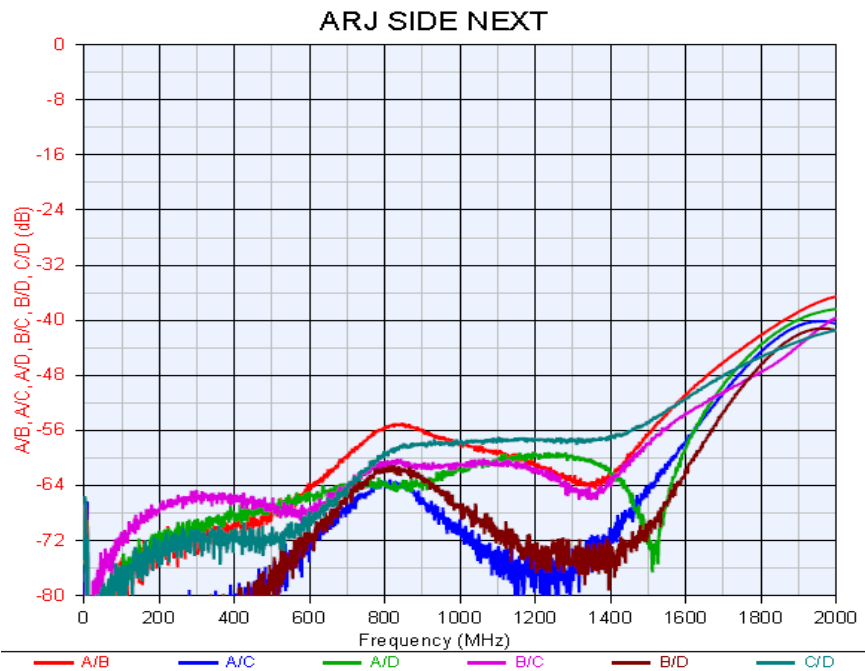
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Typical NEXT

Revision 1



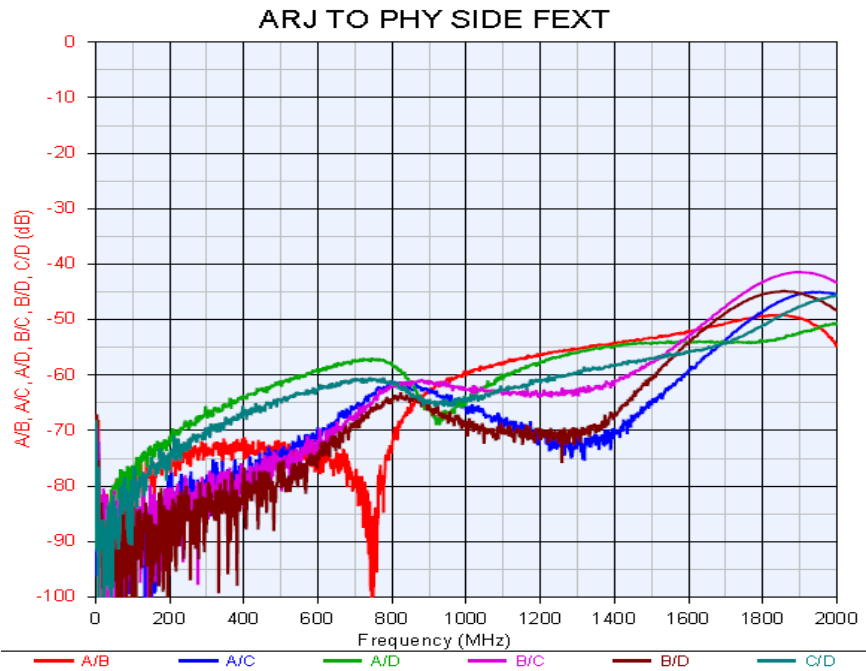
Revision 2



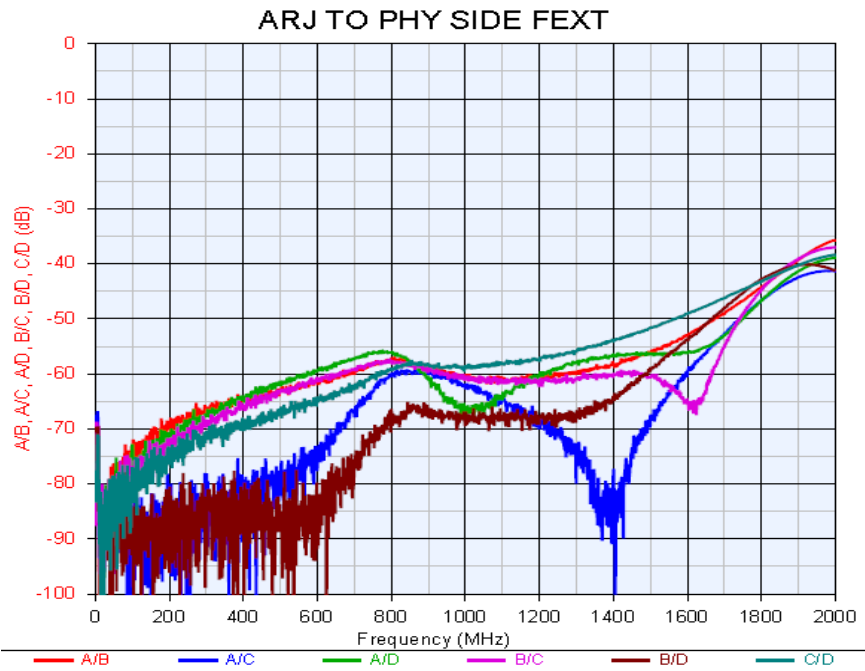
40GBASE-T ICM

Typical FEXT

Revision 1



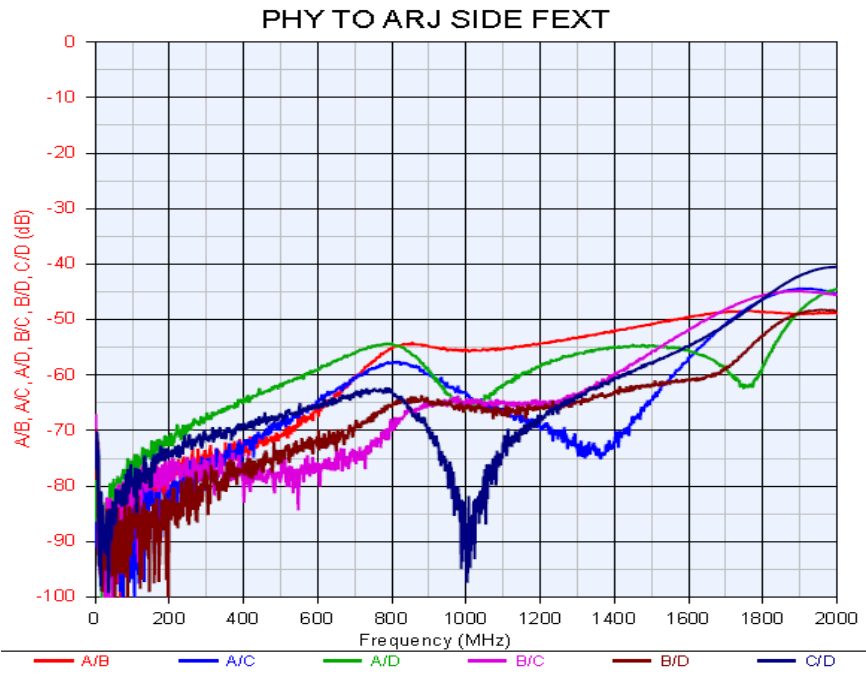
Revision 2



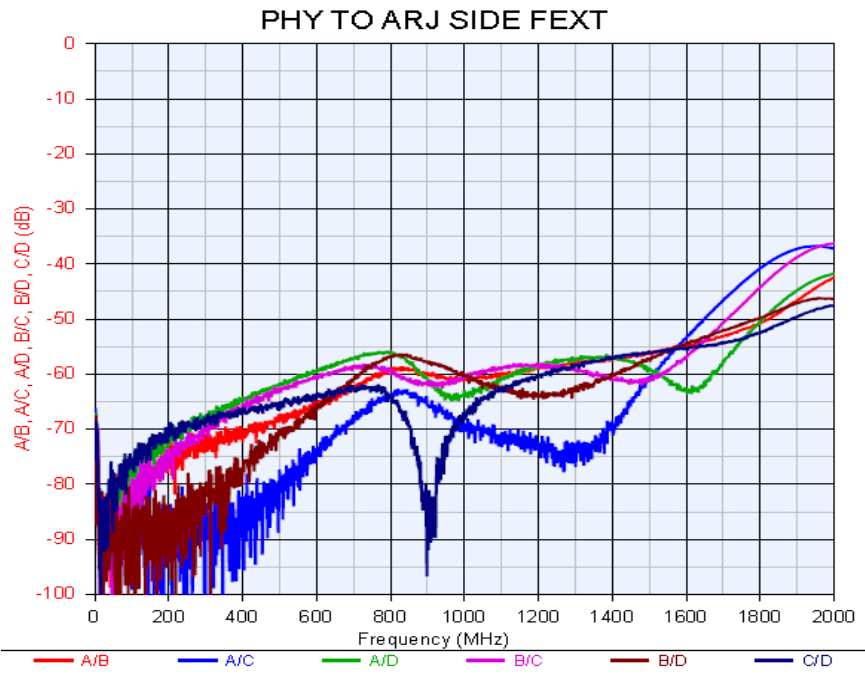
40GBASE-T ICM

Typical FEXT

Revision 1



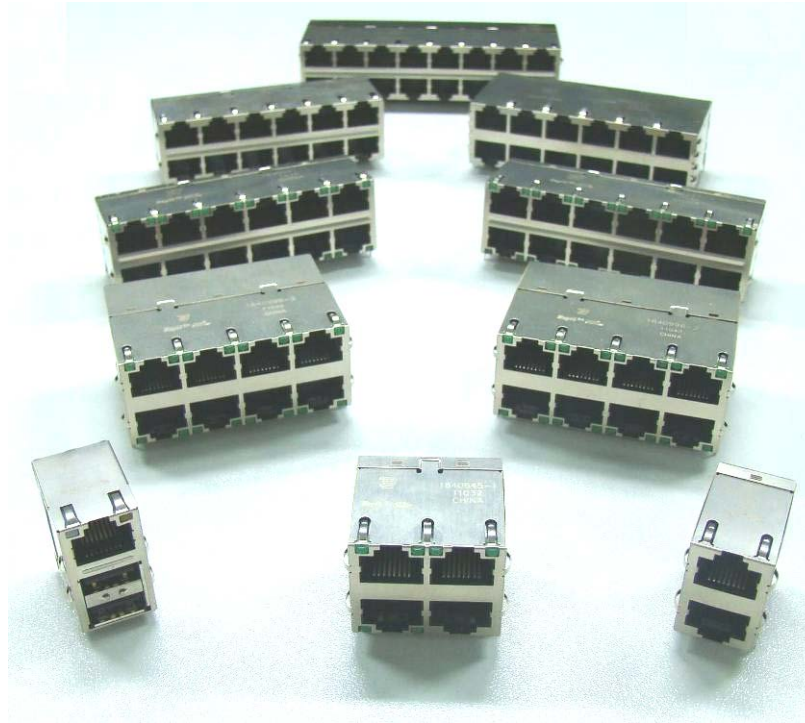
Revision 2



40GBASE-T ICM

Other parameters

- OCL > 160uH
- Meets IEEE HIPOT specification
- Backward compatible to 10G with an ARJ45 to RJ45 converter
- Compatible with 2XN high density port connectors
- Backward compatible 1G/10GBASE-T with patch cable
- Compatible to category 8.2 (Class II)



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THANK YOU!

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