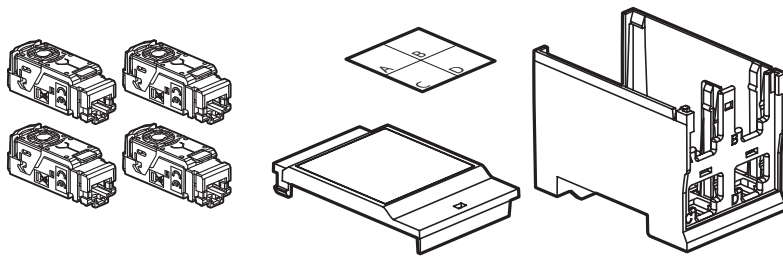


RJ 45 LCS³ connectors and connector supports

Cat. No(s): 4 131 79/80/81/82/83/84



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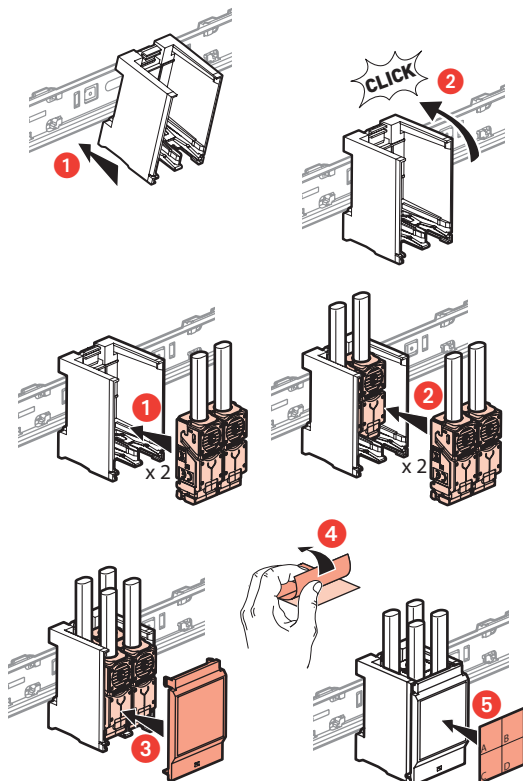
1. PRESENTATION

LCS3 RJ 45 connectors and supports for use in residential communication networks. For Double Play Basic cabinets and Basic cabinets with patching.
Toolless connectors certified PoE++ by an independent laboratory. Clip into the supports of 4 connectors. The supports fix onto a DIN rail. Supplied in packs of 4.

2. SELECTION CHART

			Connector support
Cat. 6 connectors	UTP	4 131 81	U/UTP 4 131 79
	FTP	4 131 82	F/UTP
	STP	4 131 83	F/FTP SF/UTP S/FTP Grade 2 TV
Cat. 6A connectors		4 131 84	Grade 3 TV

3. POSITIONING



4. TECHNICAL CHARACTERISTICS

4.1 Material characteristics:

Connector support
Plastic casing: PC ral 7035 (grey)

Connectors

- Contacts: gold/nickel, thickness of gold > 0.8 µm minimum
- Metal parts: bronze, nickel, platinum, gold
- PBT polycarbonate

4.2 Electrical characteristics:

Breakdown voltage: ≥ 1000 V
Contact resistance: ≤ 20 mΩ
Insulation resistance: ≥ 500 mΩ at 100 VDC
Compatible with "PoE" power supply up to 100 W (IEEE 802.3af, IEEE 802.3at, IEEE 802.3bt)

4.3 Mechanical characteristics:

Connector support

Tensile resistance on DIN rail: 100 N

IP20 - IK04

Connectors

Maximum number of connections and disconnections: 5 without replacing the wire

Endurance: 2500 operations (plug-in/pull-out)

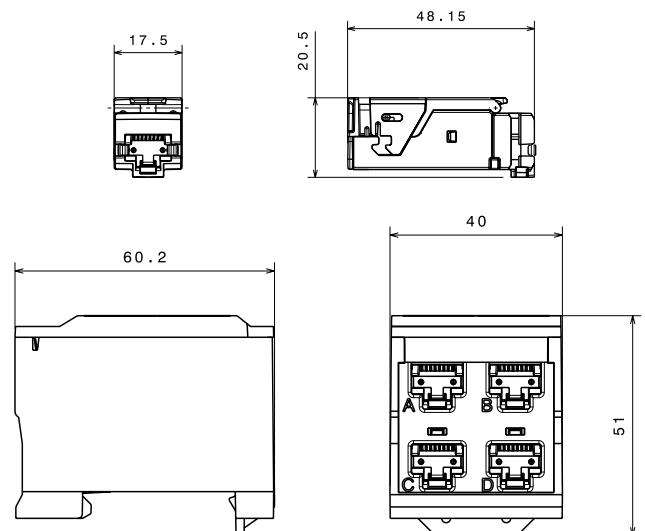
IK03

4.4 Climate characteristics

Operating temperature: -10°C to +60°C

Humidity: 5% to 85% (non-condensing)

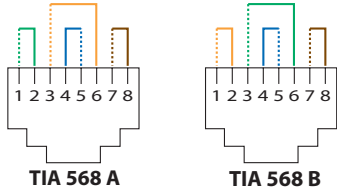
5. DIMENSIONS



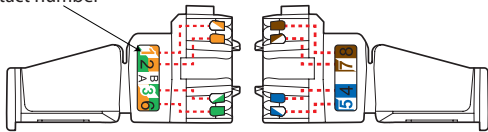
6. TYPICAL RJ45 CONNECTION

TIA 568 A and B dual colour code:

- UTP (8 contacts)
- UTP/STP (9 contacts)
- STP (9 contacts)



Colour code and contact number

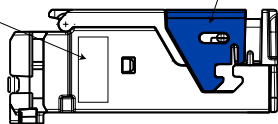


Identification number

- UTP: HD 51
- FTP: HD 52
- STP: HD 53

Colour code category:

Cat. 6 blue

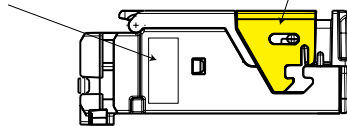


Identification number

STP: HD 63

Colour code category:

Cat. 6 yellow

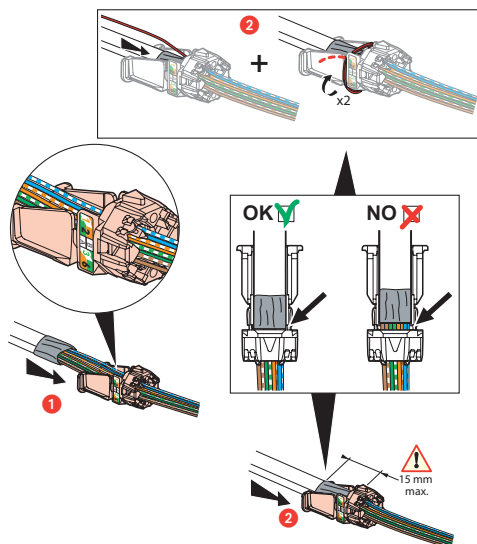


Permissible conductors:

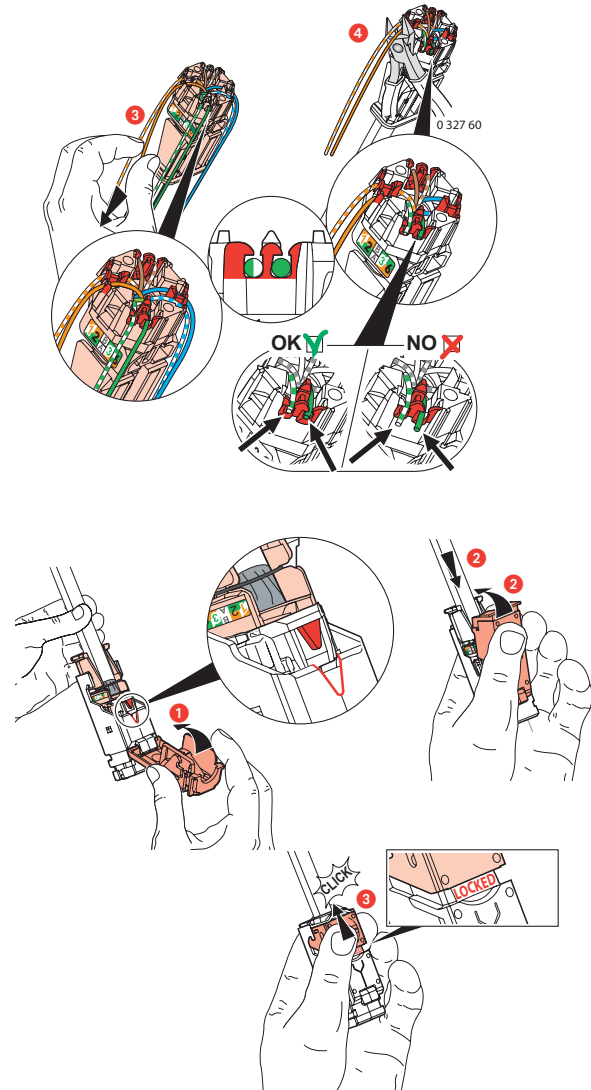
- Single-core/Multicore: 0.4 to 0.65 mm, AWG 26 to 22
- Polyethylene conductor insulation: Ø 0.85 to 1.7 mm on insulation

Number of wires to be connected per connection:

RJ45 connectors are equipped with a locking nut. They do not require a special tool and can be re-wired if a mistake is made.



This system makes it easy to spread pairs before fitting them onto the connector.



Spreading the cables and positioning the sleeve firmly in the spreader ensures that a pair-breakage distance of 13 mm is kept between pairs, as required by the standard.

Spreading pairs at 90° to the cable ensures the best possible performance.

7. COMPLIANCE AND APPROVALS

Conforming to standards:

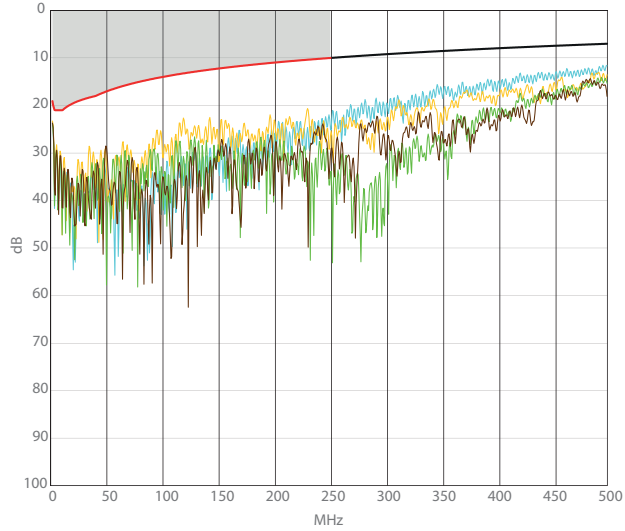
- ISO/IEC 11801 Ed3.0
- IEC 60512-99-002
- ANSI/TIA 568.2-D

8. Cat. 6 PERFORMANCE

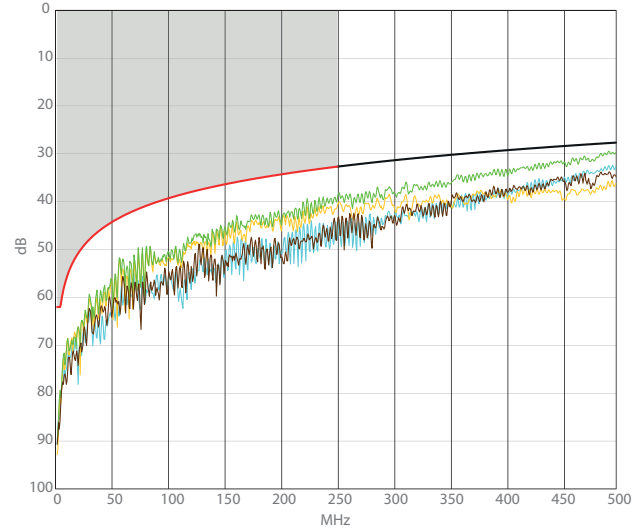
■ Performance of permanent link with U/UTP cable

The red line represents the limit of the standard, the black line represents extension of the limit of the standard

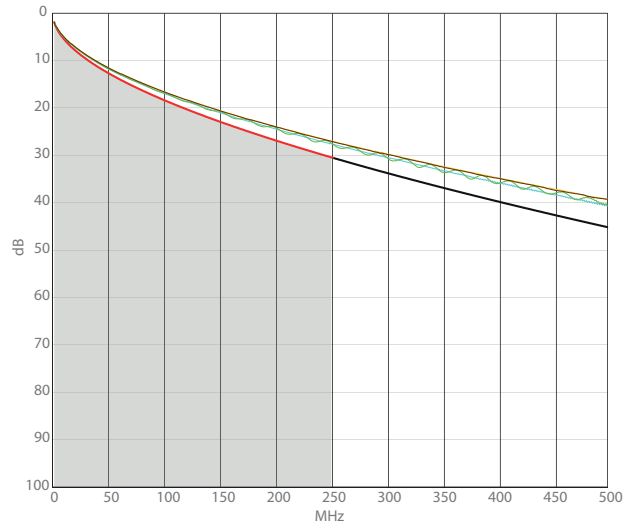
Return loss



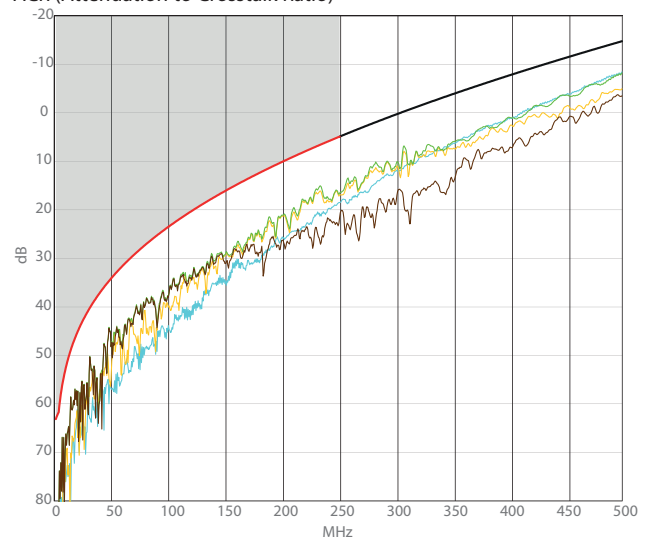
PS NEXT (Power Sum NEXT)



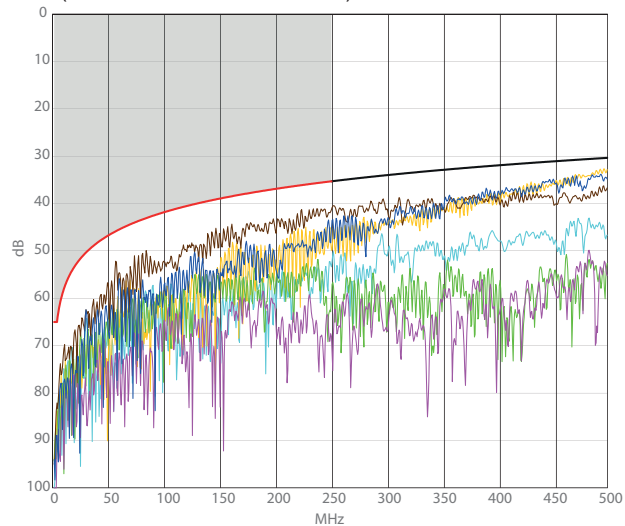
Attenuation



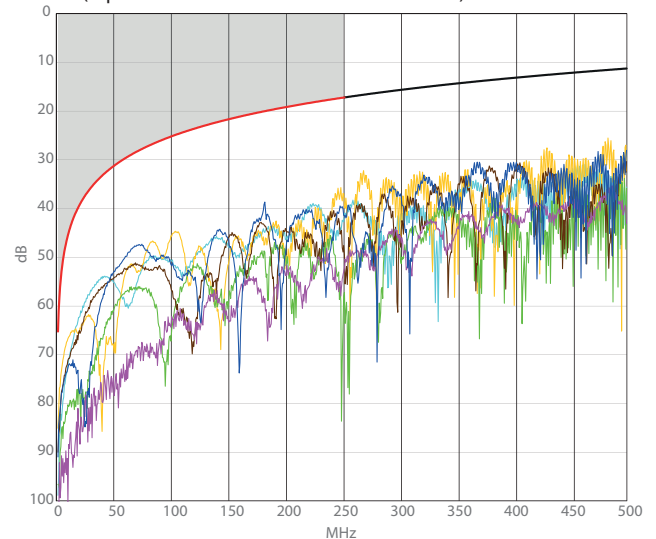
ACR (Attenuation to Crosstalk Ratio)



NEXT (Near End Crosstalk Attenuation)

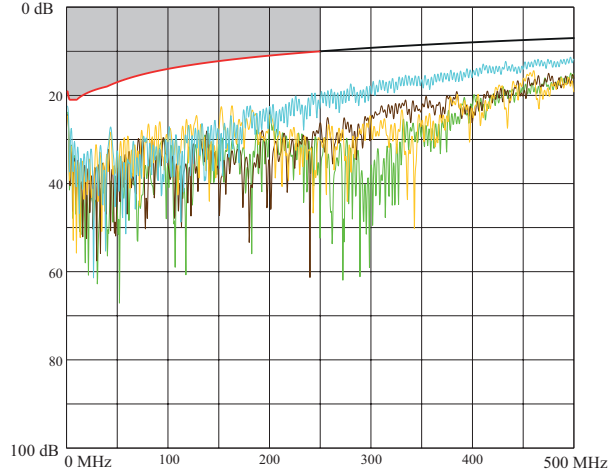


ELFEXT (Equal Level Far End Crosstalk Attenuation)

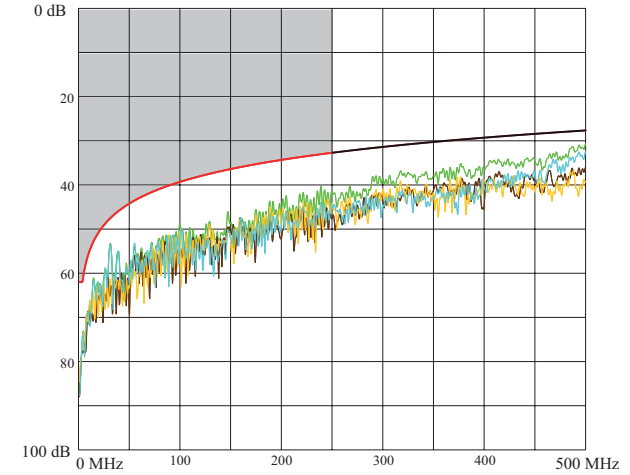


■ Performance of permanent link with F/UTP cable

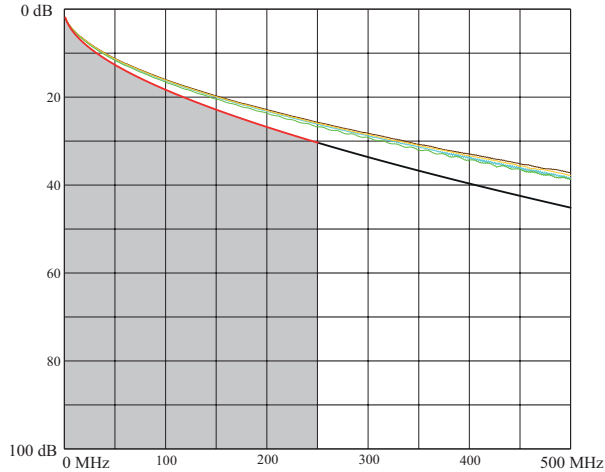
Return loss



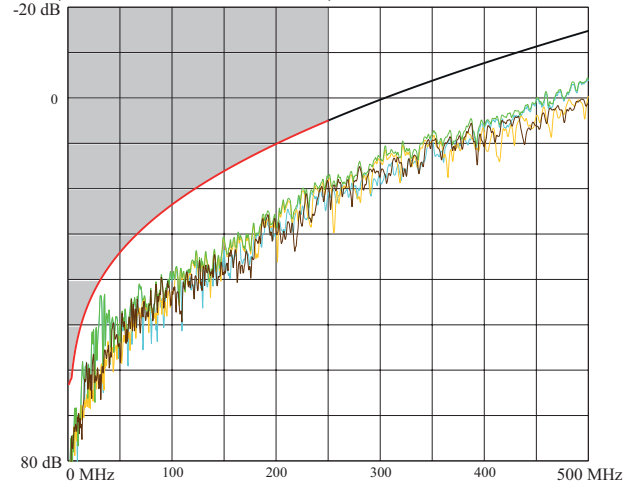
PS NEXT (Power Sum NEXT)



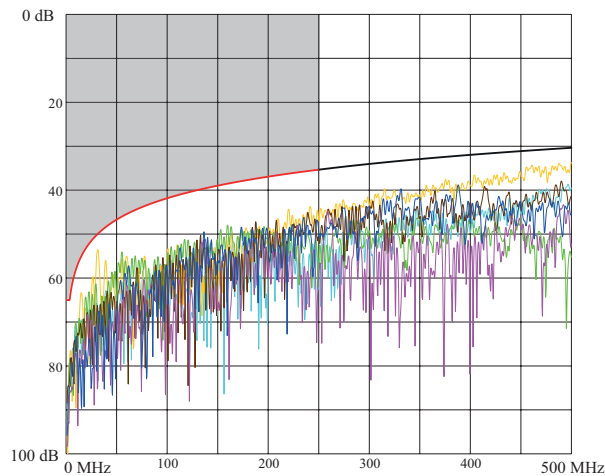
Attenuation



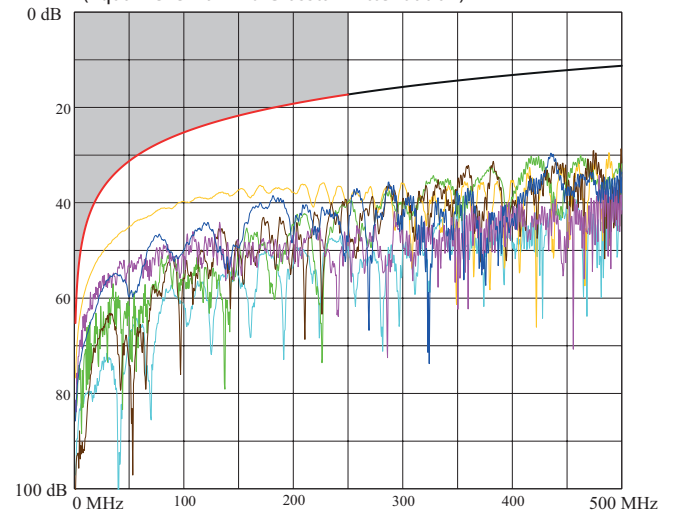
ACR (Attenuation to Crosstalk Ratio)



NEXT (Near End Crosstalk Attenuation)

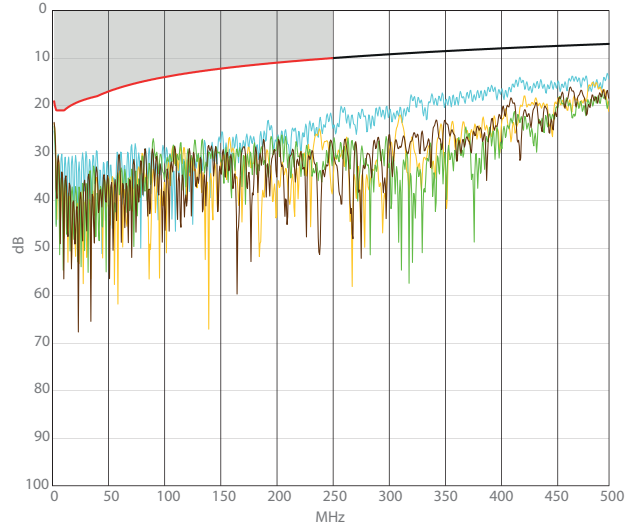


ELFEXT (Equal Level Far End Crosstalk Attenuation)

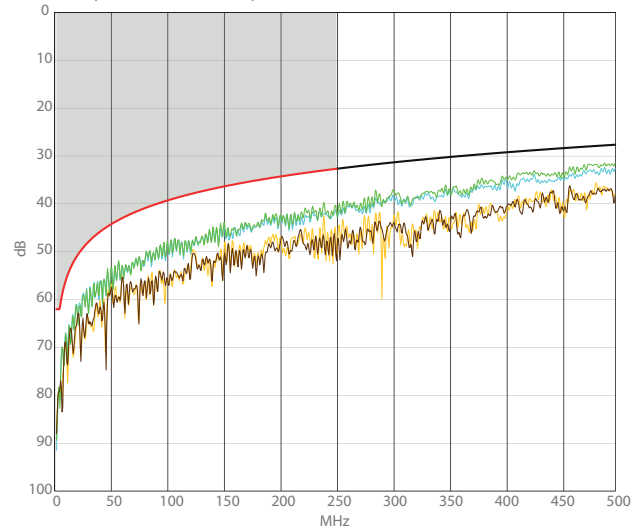


■ Performance of permanent link with SF/UTP cable

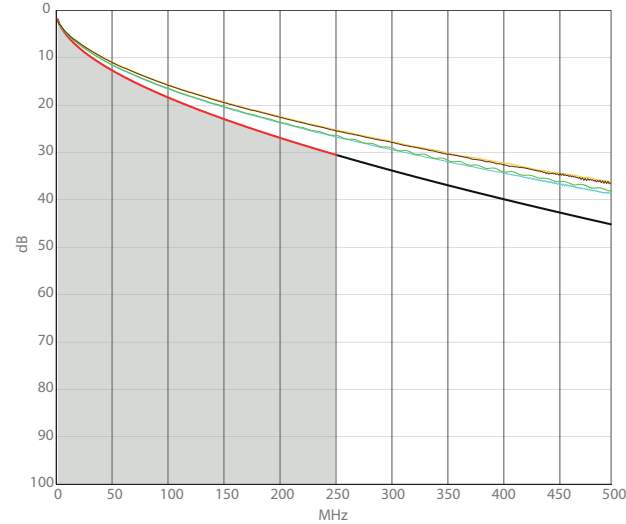
Return loss



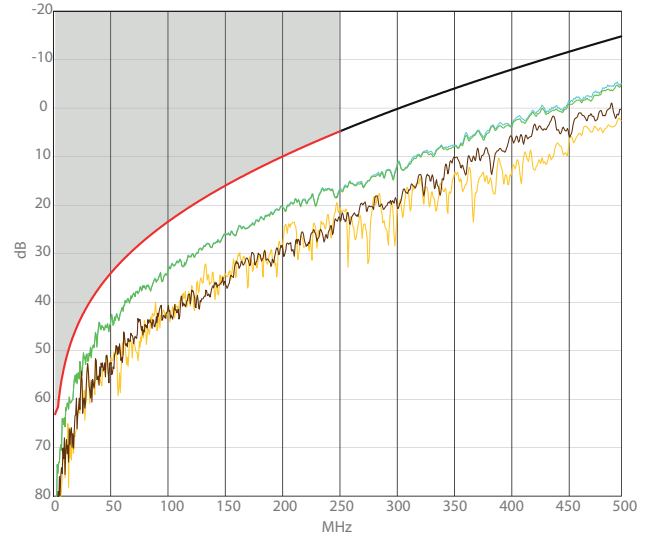
PS NEXT (Power Sum NEXT)



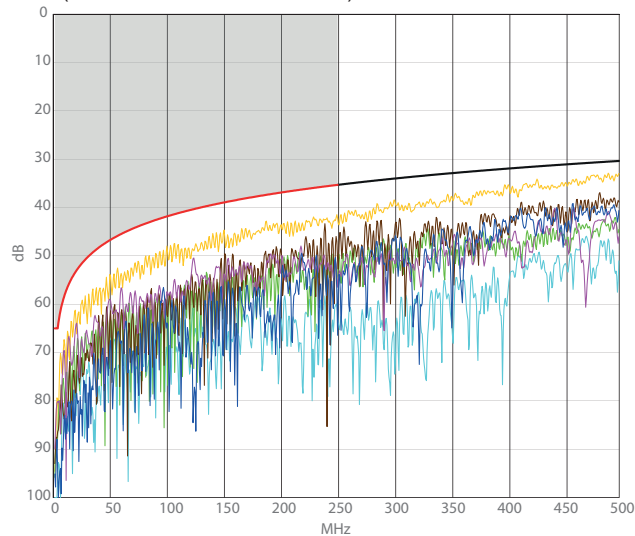
Attenuation



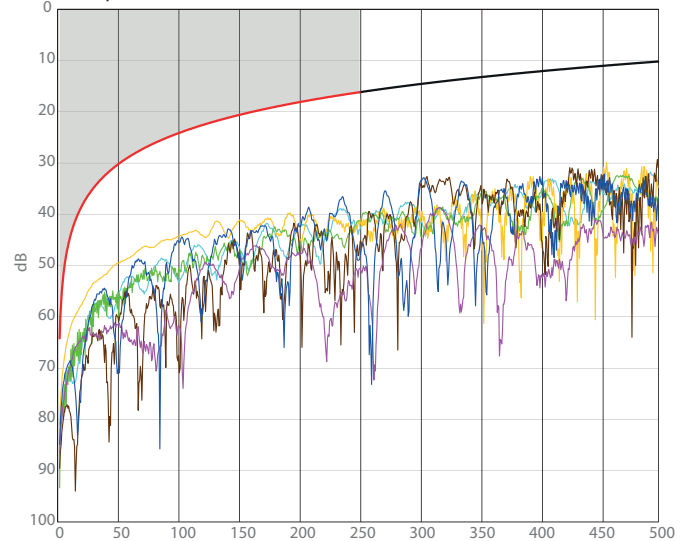
ACR (Attenuation to Crosstalk Ratio)



NEXT (Near End Crosstalk Attenuation)



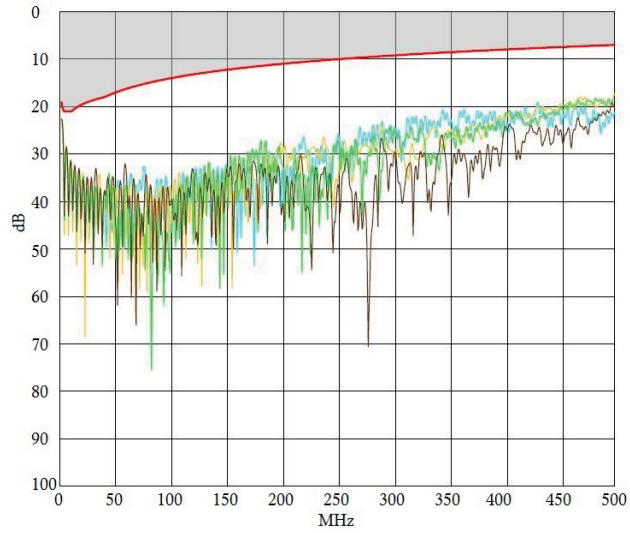
ELFEXT (Equal Level Far End Crosstalk Attenuation)



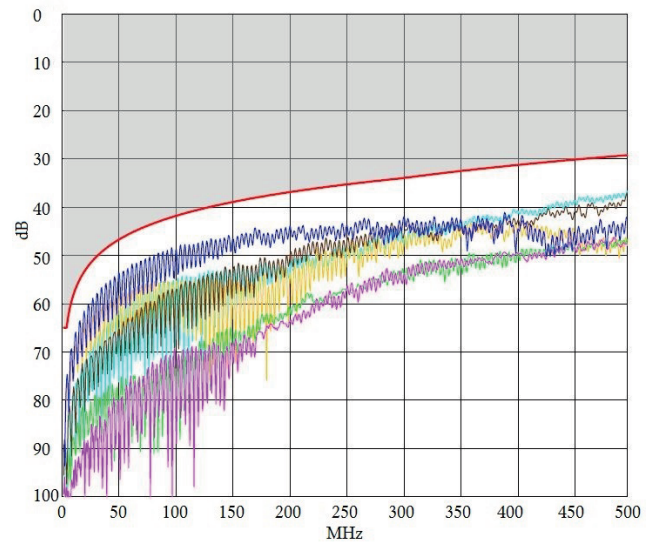
9. Cat. 6A PERFORMANCE

■ Performance of permanent link with F/FTP cable

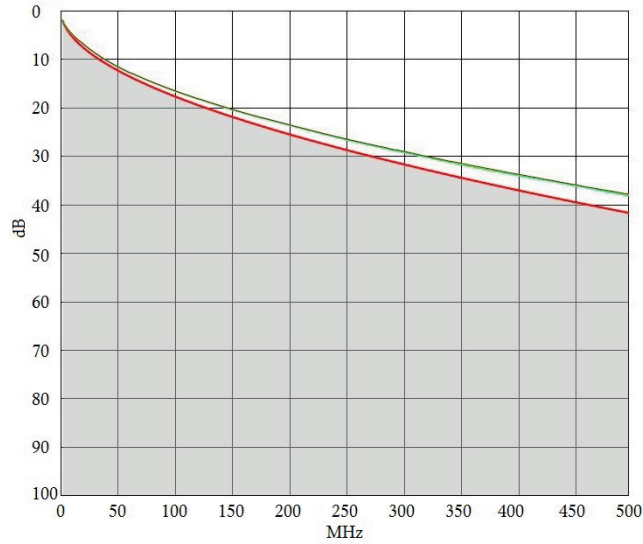
Return loss



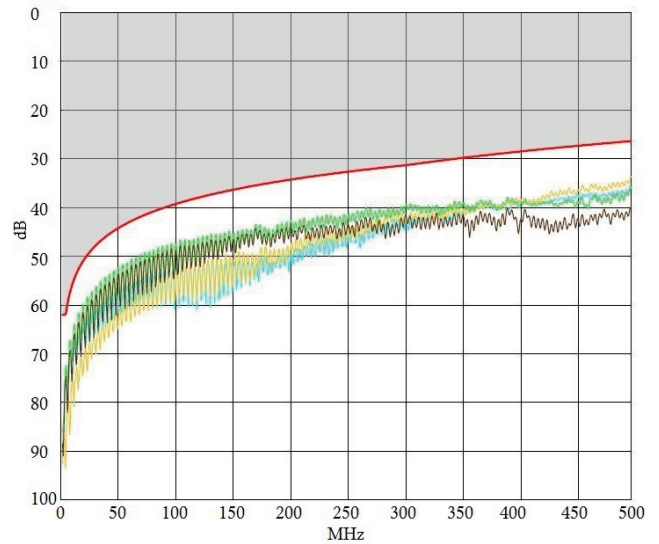
NEXT (Near End Crosstalk Attenuation)



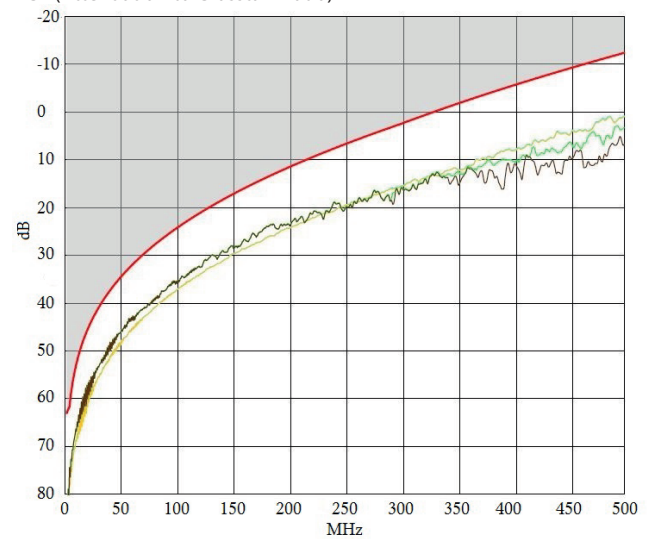
Attenuation



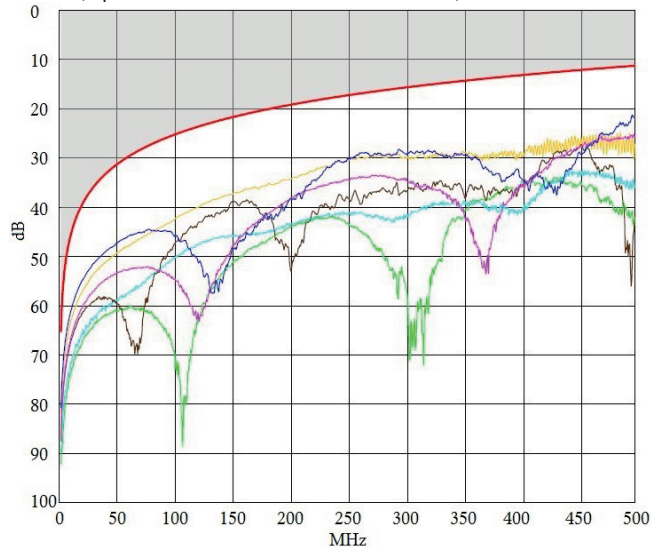
PS NEXT (Power Sum NEXT)



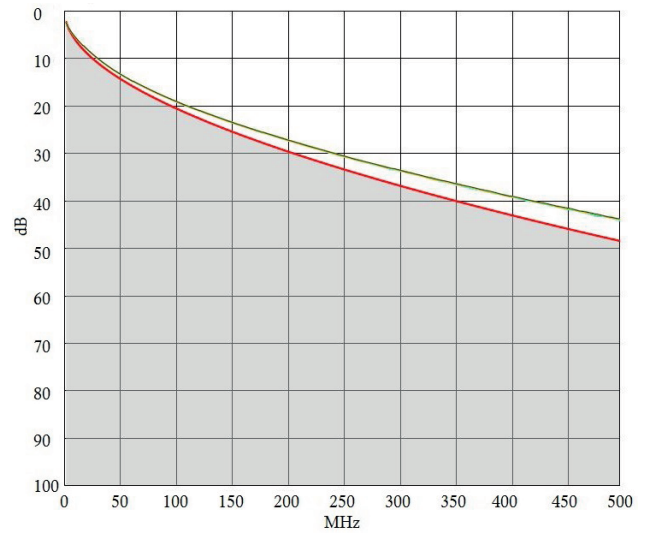
ACR (Attenuation to Crosstalk Ratio)



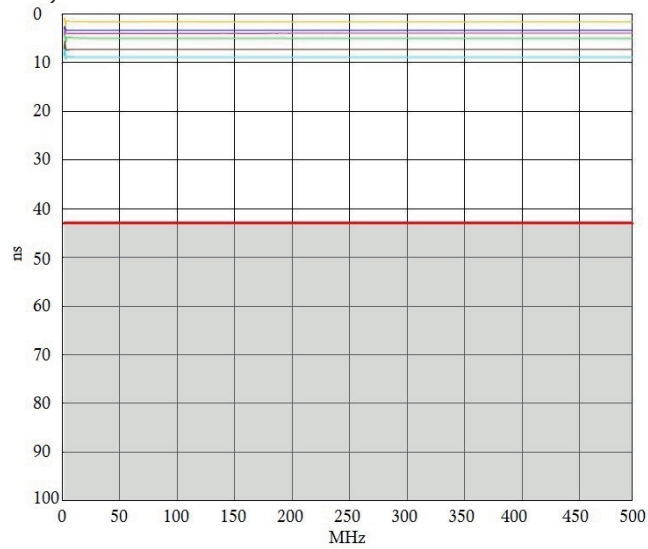
ELFEXT (Equal Level Far End Crosstalk Attenuation)



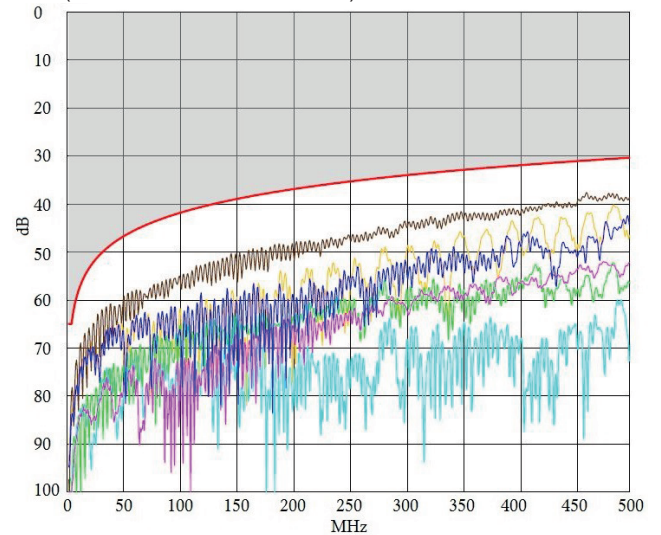
Attenuation



Delay skew

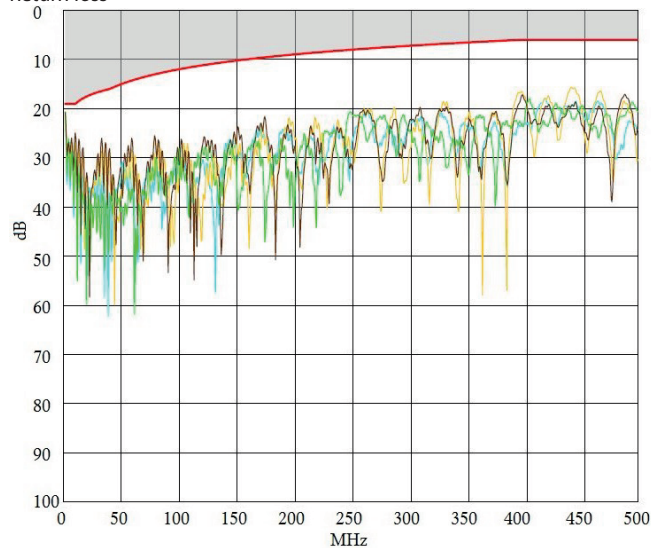


NEXT (Near End Crosstalk Attenuation)

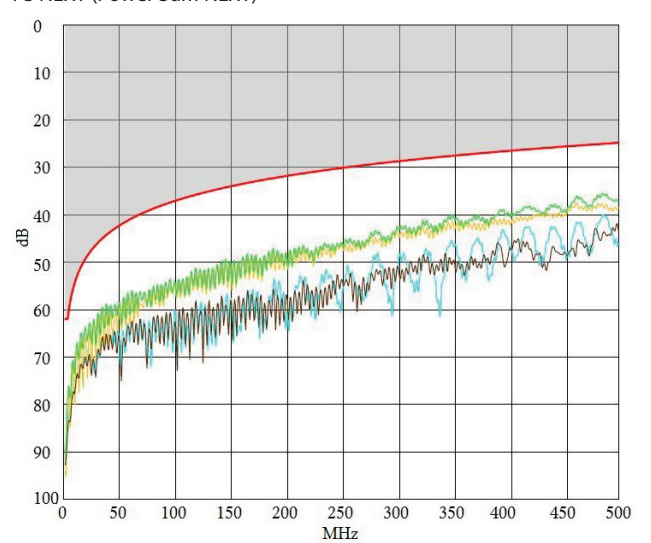


■ Channel performance

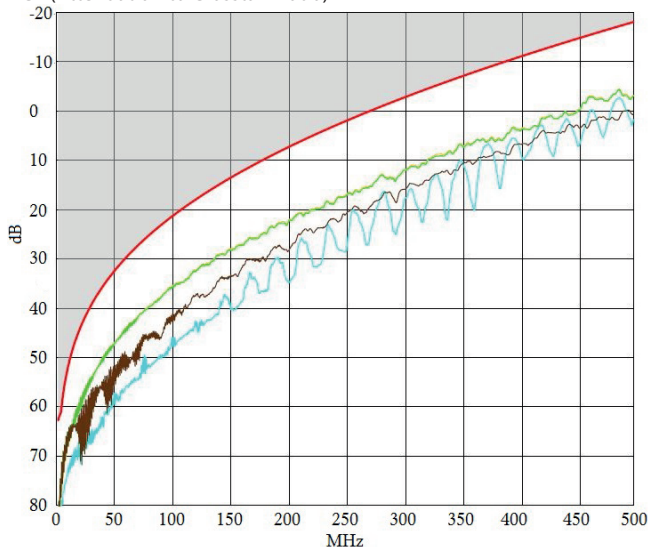
Return loss



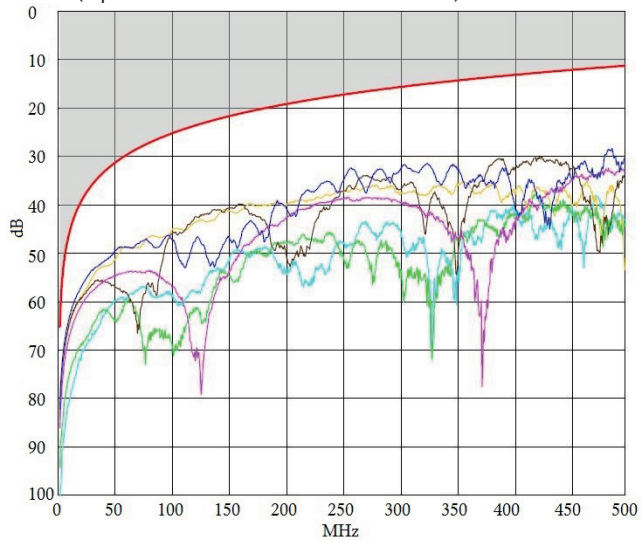
PS NEXT (Power Sum NEXT)



ACR (Attenuation to Crosstalk Ratio)



ELFEXT (Equal Level Far End Crosstalk Attenuation)



Delay skew

