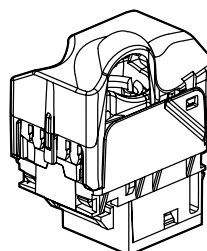


UTP



STP

1. GENERAL CHARACTERISTICS

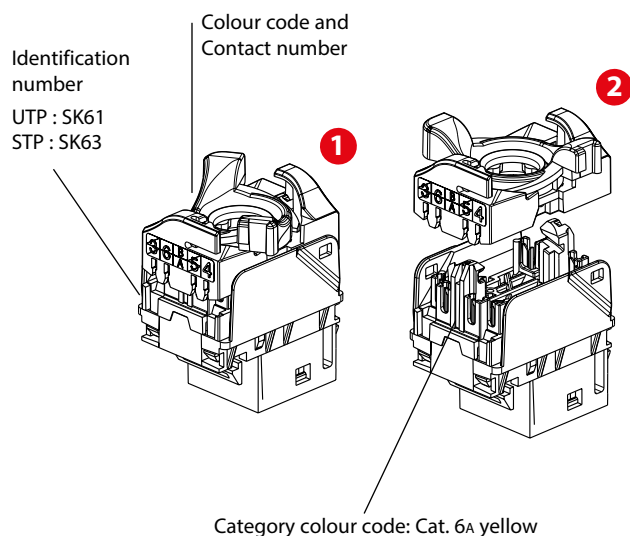
Cat. 6A RJ 45 terminal socket for high speed connection to a network.
Enables data transmission at 10 Gbit/s.

Socket is used with F/UTP or S/FTP cables.

The connectors are compliant to all performance, mechanical, climatic and electromagnetic requirements of the ISO/IEC 11801-1.

2. PRESENTATION

Reference	Designation	UTP 	STP 
0 331 55	Keystone RJ45 UTP socket cat.6A	SK61	
0 331 54	Keystone RJ45 STP socket cat.6A		SK63



3. TECHNICAL CHARACTERISTICS

3.1 Material characteristics

Contacts: gold/nickel, minimum thickness of gold > 0.8 µm

Metal parts: bronze, nickel, platinum, gold

PBT polycarbonate

For STP products the body and the spreader are made of metal alloy with a copper-nickel coating.

3.2 Electrical characteristics

Breakdown voltage ≥ 1000 V

Contact resistance ≤ 20 mΩ

Insulation resistance ≥ 500 MΩ at 100 V DC

Tested and independently certified to comply with IEC 60512-99-001 and IEC 60512-99-002 for PoE support up to 90w (Type 4).

Maximum 20 cable re-termination according to following options:

Test Method	Cable AWG
IEC 60352-3	22 to 24 ⁽¹⁾
IEC 60352-3	24 to 26 ⁽¹⁾
Single AWG	22 or 23 or 24 or 25 or 26 ⁽²⁾

(1) Re-termination of any mix of conductor sizes within that range.

(2) Re-termination on only 1 conductor size. No mix allowed.

Endurance: 2500 movements (plug insertion/withdrawal) according to ISO/IEC 11801-1 PL2.

- Axial retention of the connector in the adapter: minimum 70N
- Transverse retention of the connector in the adapter (4 directions): minimum 50N
- Shock resistance of the connector in the adapter: IK03 or IK04(1) according to IEC 62262
- Retention of the adapter in the 45x45 Legrand support frame: minimum 100N
- Retention of the adapter in the 45mm Legrand trunking: minimum 50N

3.3 Climatic characteristics

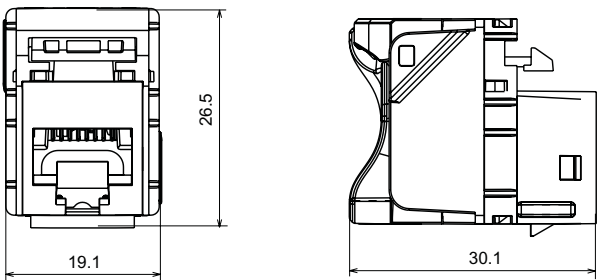
Storage temperature: -40°C to +70°C

Operating temperature: -10°C to +60°C

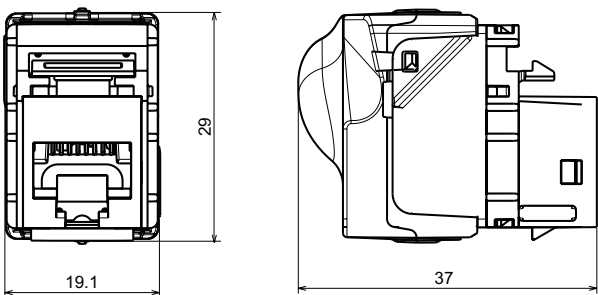
Humid heat cycle 21 days

4. OVERALL DIMENSIONS (mm)

0 331 55



0 331 54



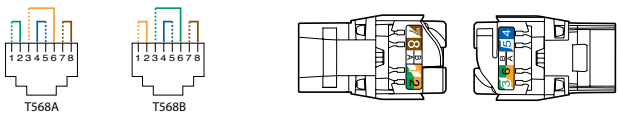
5. USUAL CONNECTION OF RJ 45S

Connectors accept the following plug types:
RJ11 (4 contacts), RJ12 (6 contacts), RJ45 (9 contacts).

Connectors accept the following cable types:

Connector type	Cable type
UTP	UTP, U/UTP
FTP	FTP, STP, F/UTP, U/FTP, F/FTP, S/FTP, SF/UTP, SF/FTP
STP	

Double colour code T568A and T568B on terminals:
- STP 9 contacts 360° screen

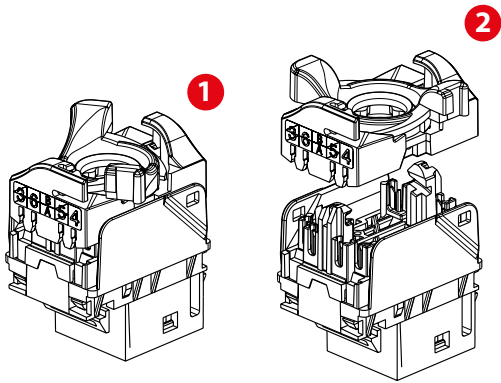


Conductors supported:

- Solid/stranded: 0.4 to 0.65 mm, AWG 26 to 22
- Polyethylene conductor insulation: Ø 0.85 to 1.7 mm on insulation

RJ 45 connectors are equipped with a locking nut that does not require the use of a specific tool and which enables re-cabling in the event of error.

5. USUAL CONNECTION OF RJ 45S (continued)



This system allows the wire pairs to be spread easily before mounting them on the connector.

Spreading cables ensures that each pair is separated by the specified 13 mm.

Spreading pairs by 90° in relation to the cable ensures optimum performance.

6. STANDARDS AND APPROVALS

ISO/IEC 11801 series : International standard for generic cabling for customer premises

ANSI/TIA 568 series : North American standard for generic cabling for customer premises

EN 50173 series : European standard for generic cabling for customer premises

IEC 60603-7 series : International standard for connector specifications

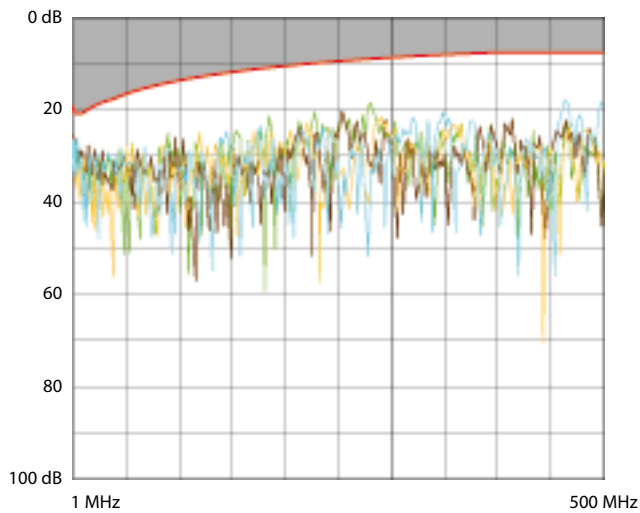
Connectors are compliant to requirements for the following remote powering applications

IEEE 802.3af , IEEE 802.3at , IEEE 802.3bt : “Power over Ethernet”, Types 1 to 4, up to 90W.

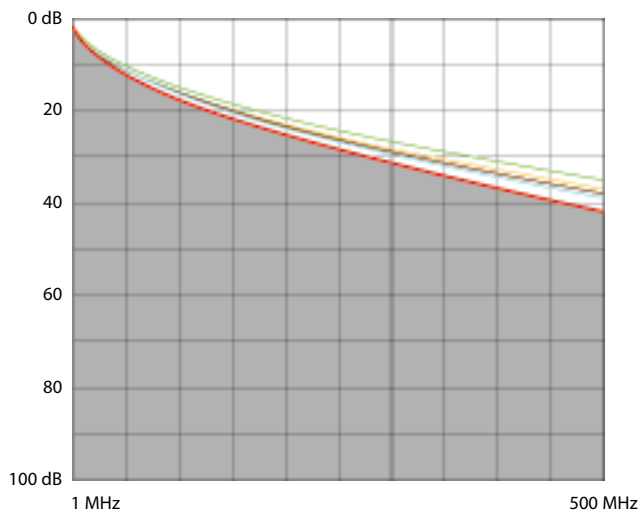
The connectors are compliant NF C90 483.

7. PERFORMANCE AT 20°C

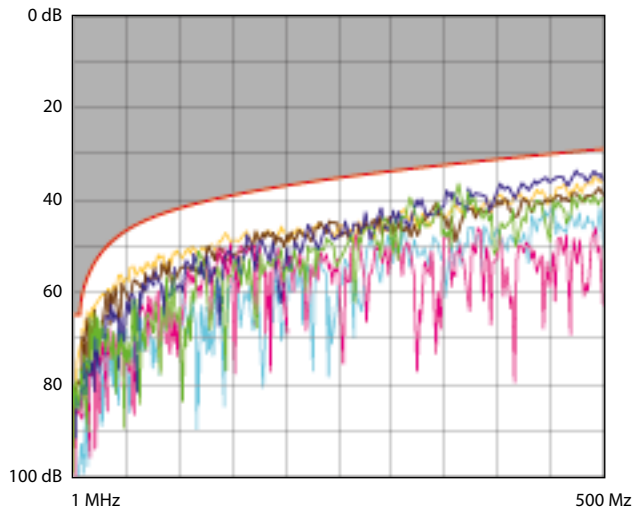
■ 7.1 Performance of permanent link with F/UTP cable
Return loss



Attenuation

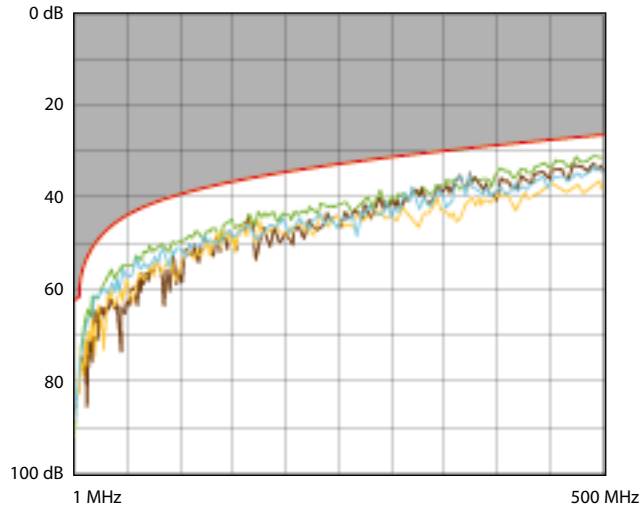


NEXT (Near end Crosstalk Attenuation)

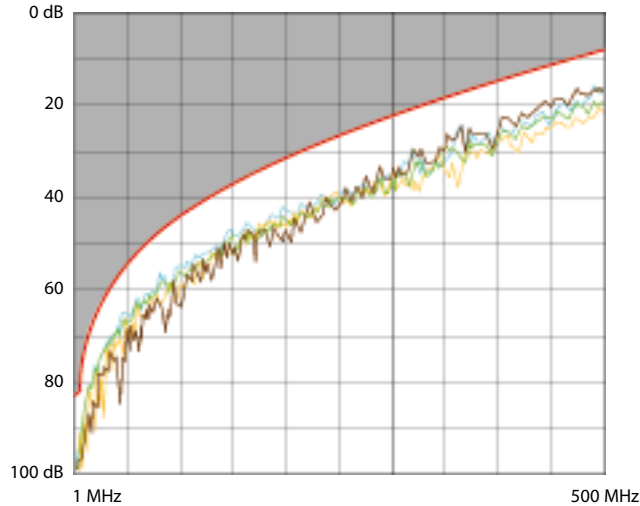


7. PERFORMANCE AT 20°C (continued)

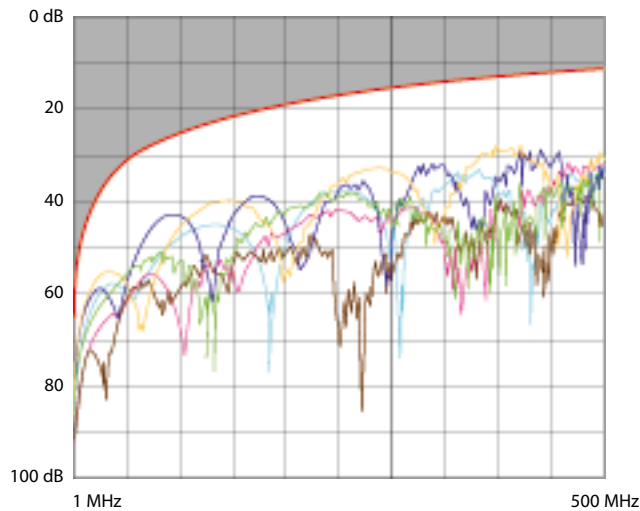
■ 7.1 Performance of permanent link with F/UTP cable (continued)
PS NEXT (Power Sum NEXT)



ACR (Attenuation to Crosstalk Ratio)

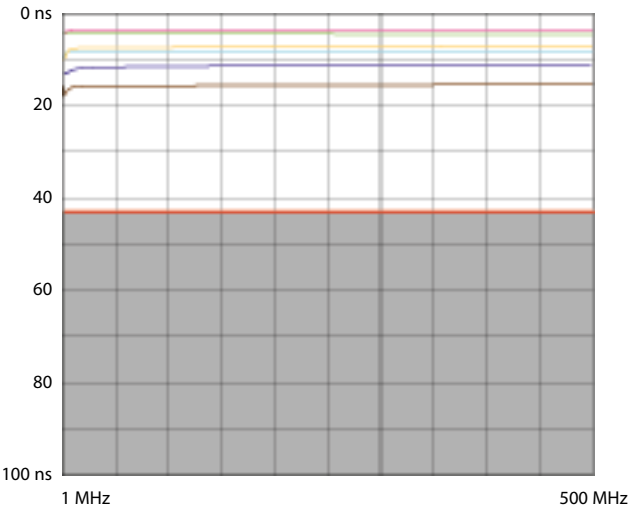


ELFEXT (Equal Level End Crosstalk Attenuation)

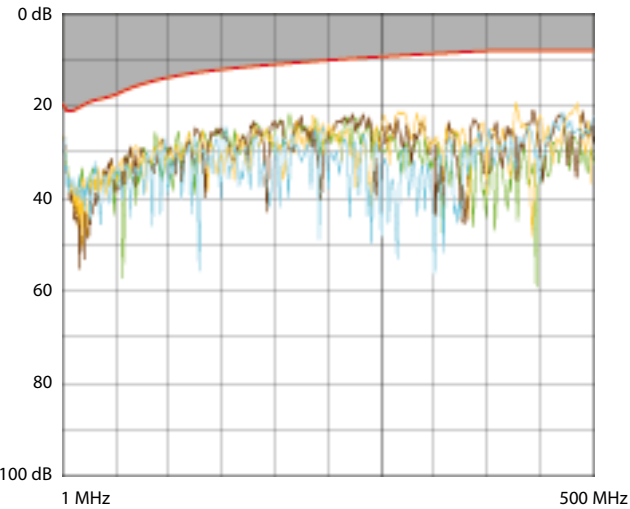


7. PERFORMANCE AT 20°C (continued)

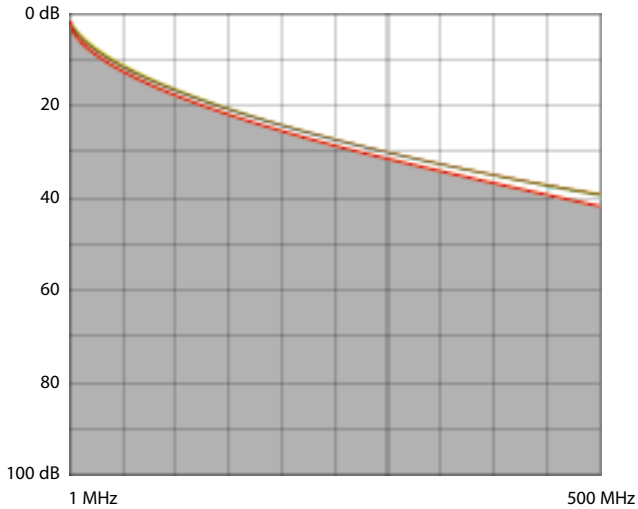
7.1 Performance of permanent link with F/UTP cable (continued)
Delay skew



7.2 Performance of permanent link with S/FTP cable
Return loss

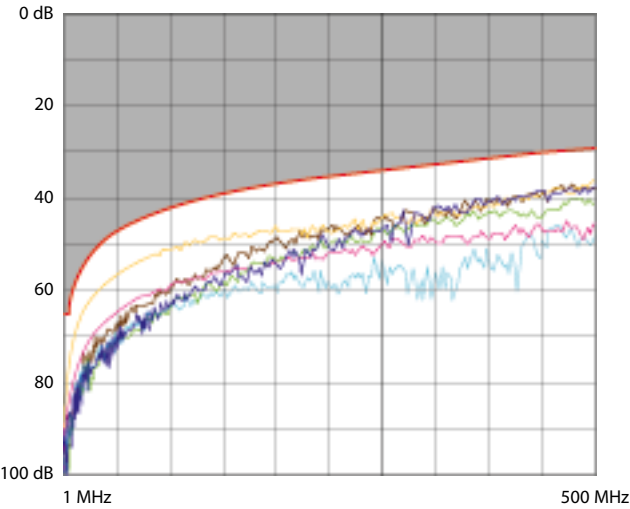


Attenuation

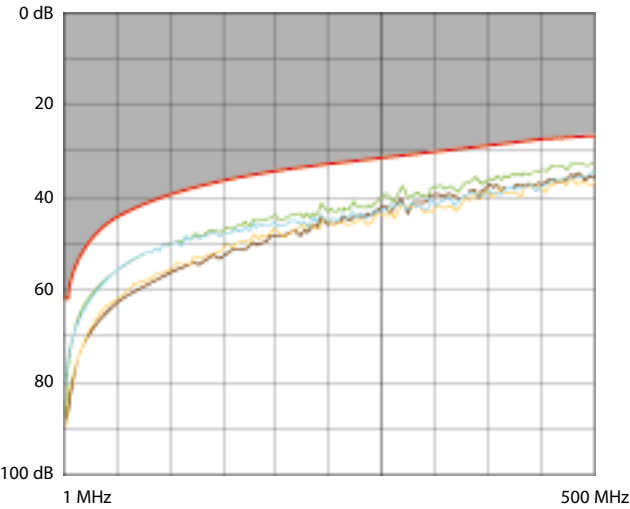


7. PERFORMANCE AT 20°C (continued)

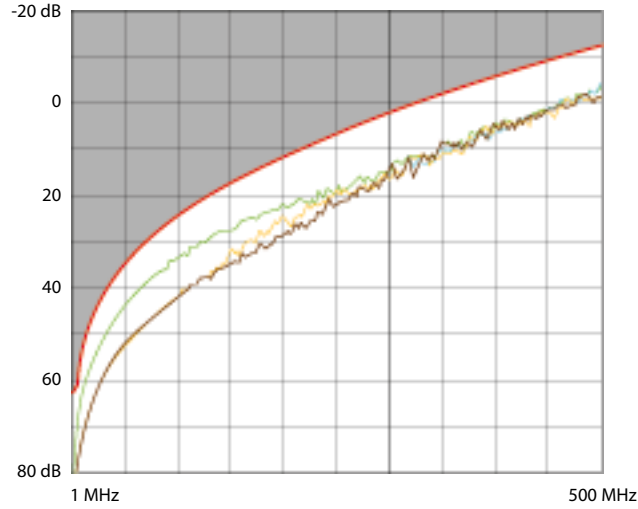
7.2 Performance of permanent link with S/FTP cable (continued)
NEXT (Near end Crosstalk Attenuation)



PS NEXT (Power Sum NEXT)

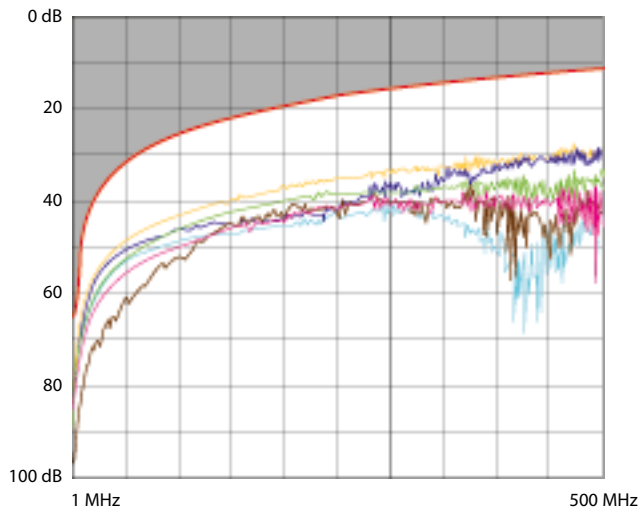


ACR (Attenuation to Crosstalk Ratio)

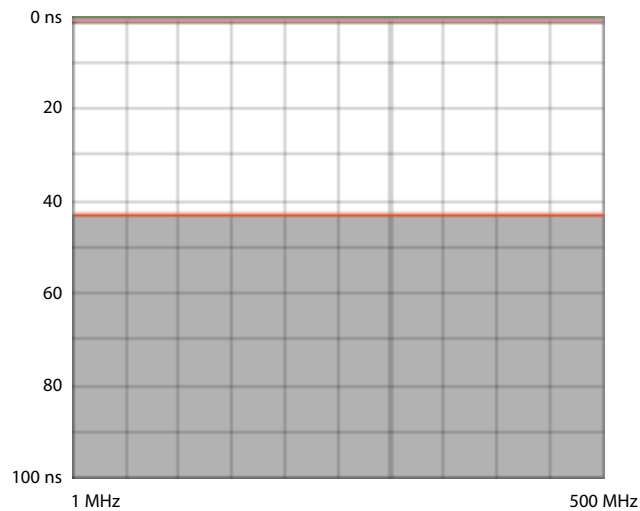


7. PERFORMANCE AT 20°C (continued)

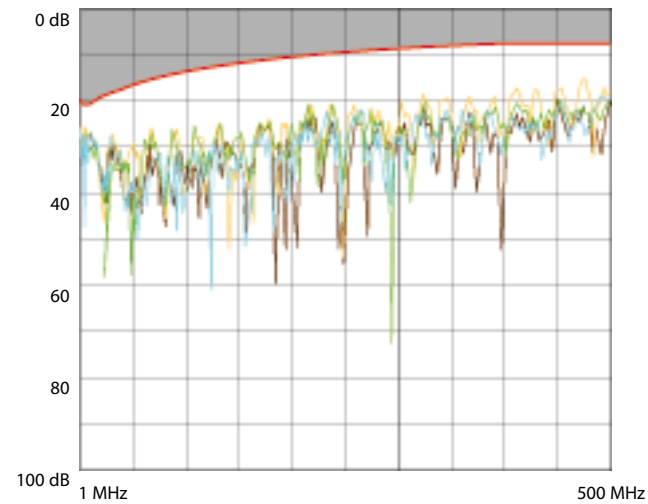
■ 7.2 Performance of permanent link with S/FTP cable (continued)
ELFEXT (Equal Level End Crosstalk Attenuation)



Delay skew

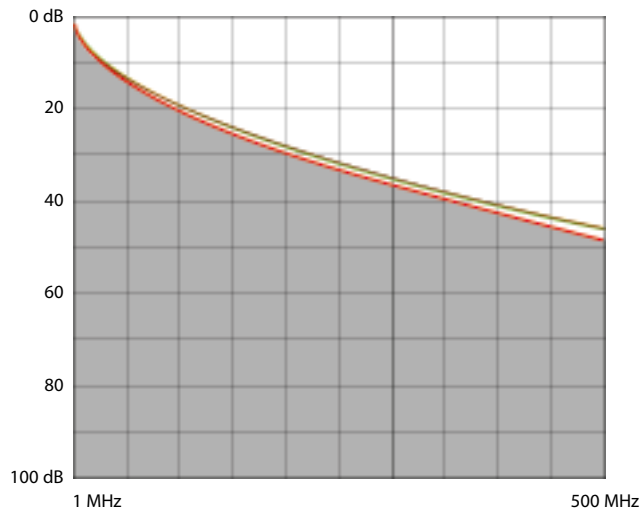


■ 7.3 Performances canal (Channel)
Return loss

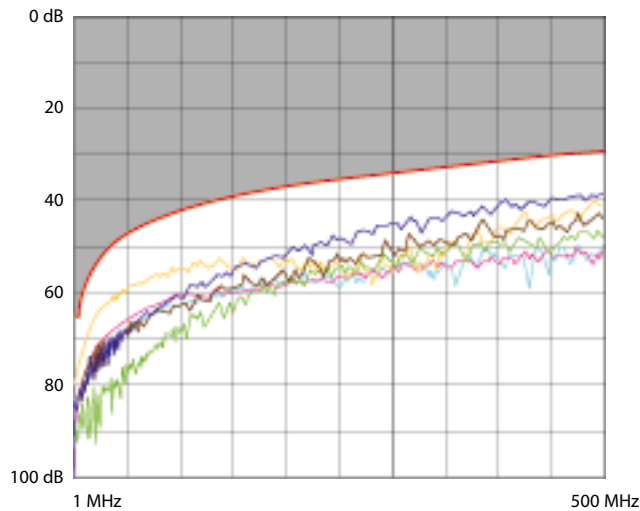


7. PERFORMANCE AT 20°C (continued)

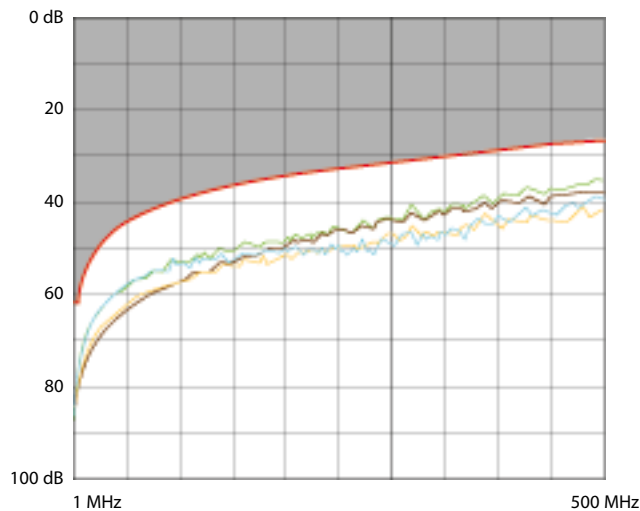
■ 7.3 Performances canal (Channel) (continued)
Attenuation



NEXT (Near end Crosstalk Attenuation)



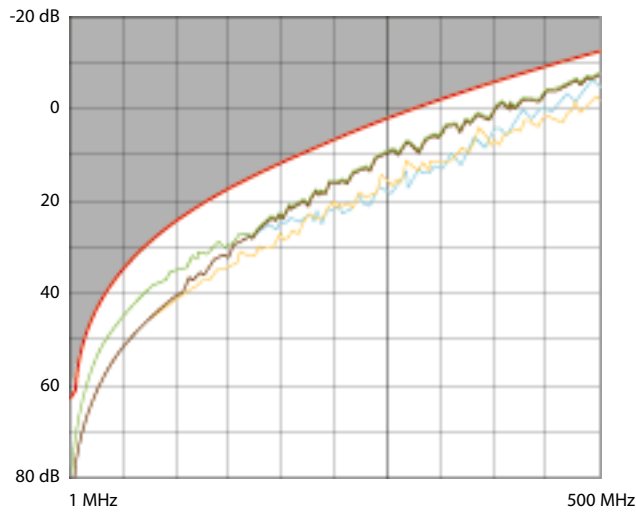
PS NEXT (Power Sum NEXT)



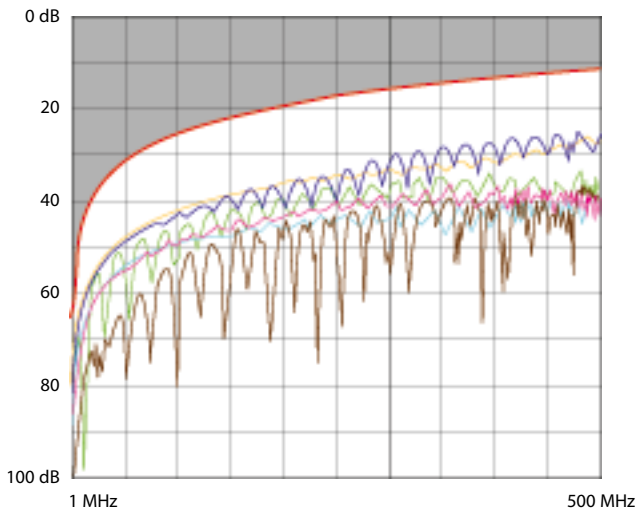
7. PERFORMANCE AT 20°C (continued)

■ 7.3 Performances canal (Channel) (continued)

ACR (Attenuation to Crosstalk Ratio)



ELFEXT (Equal Level End Crosstalk Attenuation)



Delay skew

