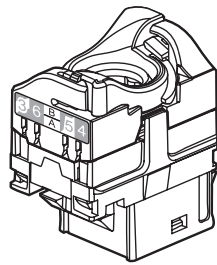


Keystone RJ45 socket cat. 6

Cat. No(s): 0 331 81



UTP

CONTENTS

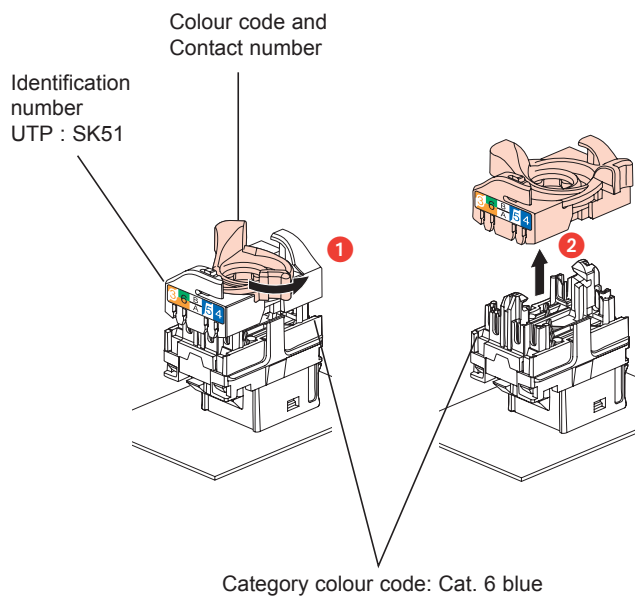
Page

1. General characteristics	1
2. Presentation	1
3. Technical characteristics	1
4. Overall dimensions	1
5. Usual connection of RJ45 sockets	2
6. Standards and approvals	2
7. Performance	3-4

1. GENERAL CHARACTERISTICS

Category 6 RJ45 socket.
Enables high speed data transmission (Gigabit Ethernet).

2. PRESENTATION



3. TECHNICAL CHARACTERISTICS

3.1 Material characteristics

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

3.2 Electrical characteristics

Breakdown voltage ≥ 1000 V.
Contact resistance ≤ 20 m.
Insulation resistance ≥ 500 M at 100 V DC.
Connector tested and guaranteed to support POE signals, standard IEEE 802.3af and POE+, draft standards 802.3at, up to 2500 connections and disconnections with load.
Tests are carried out with 2 simultaneous POE+ circuits producing a minimum total power of 50W.

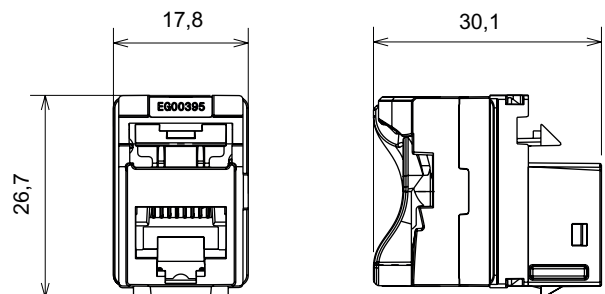
3.3 Mechanical characteristics

Max. number of connections and disconnections: 5 without refreshing the cable
Endurance: 2500 movements (plug insertion/withdrawal)
IK03

3.4 Climatic characteristics

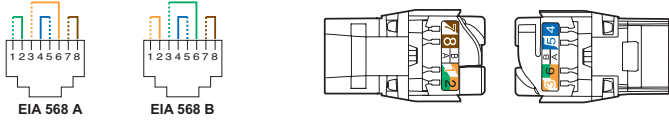
Operating temperature: - 40°C to + 70°C
Humid heat cycle 21 days

4. OVERALL DIMENSIONS



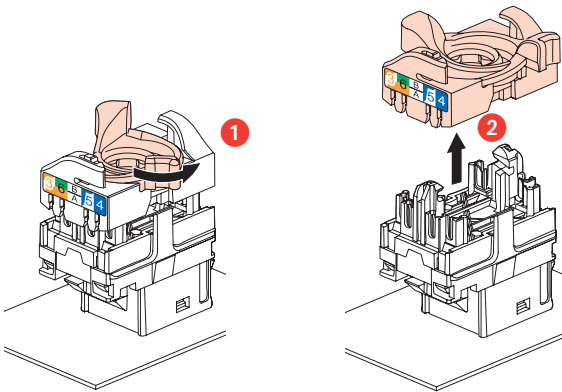
5. USUAL CONNECTION OF RJ45 SOCKETS

Accepts the following cable connectors:
 RJ11 (4 contacts), RJ12 (6 contacts), RJ45 (9 contacts).
 Double colour code EIA - TIA 568 A and B on terminals:
 - UTP 8 contacts



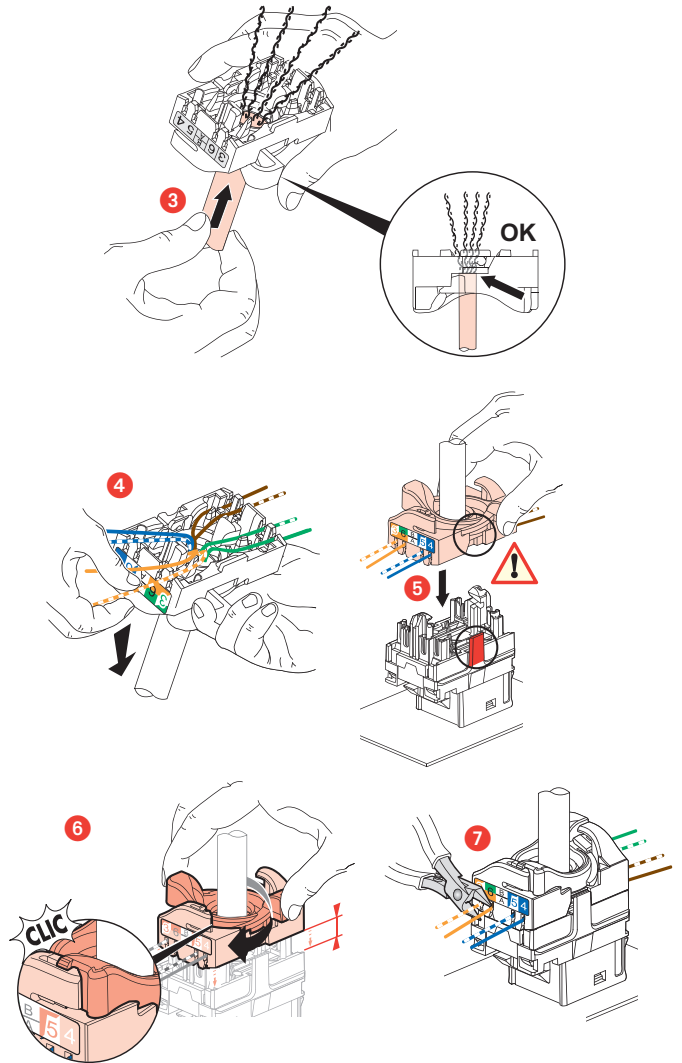
Conductors supported:
 - Single-strand: 0.5 to 0.65 mm, AWG 22 to 25
 - Multi-strand: AWG 26
 - Polyethylene conductor insulation: max. Ø with insulation 1.58 mm

The RJ45 connectors are equipped with a rotating locking system that does not require special tools and enables rewiring in the event of error.



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

Spreading the wires ensures that pairs are separated by the required 13 mm.
 Spreading the pairs at 90° in relation to the cable ensures the best performance levels.



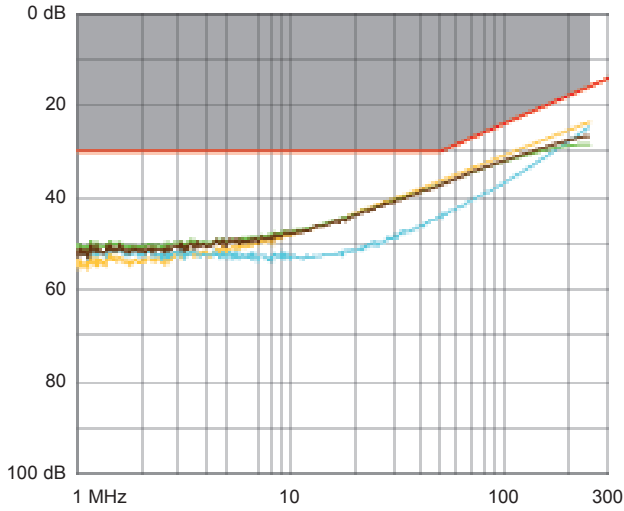
6. STANDARDS AND APPROVALS

Conforms to standards: ISO/IEC 11801 Edition 2
 CENELEC EN 50173-1 2007
 ANSI/EIA/TIA 568-B.2-1
 IEC series 60603-7

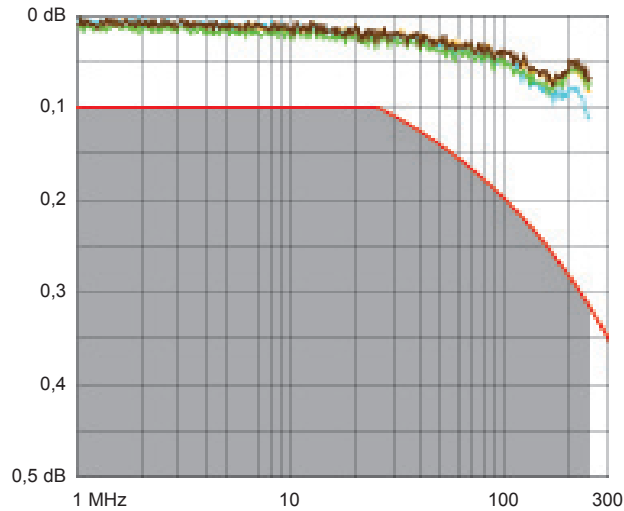
7. PERFORMANCE

7.1 Component performance (RJ45 connectors)

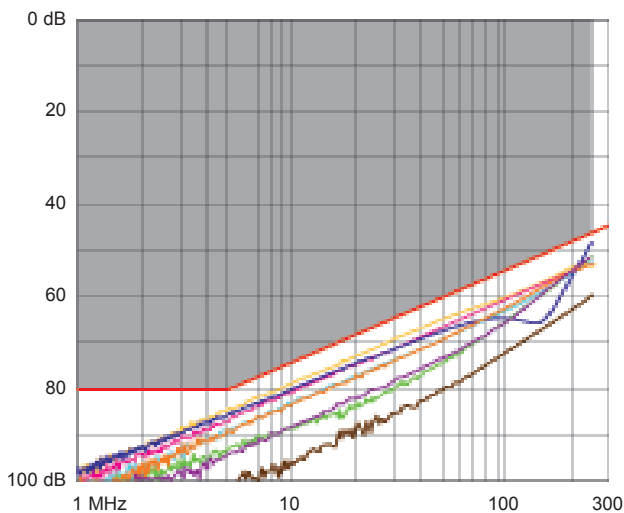
Return loss



Attenuation



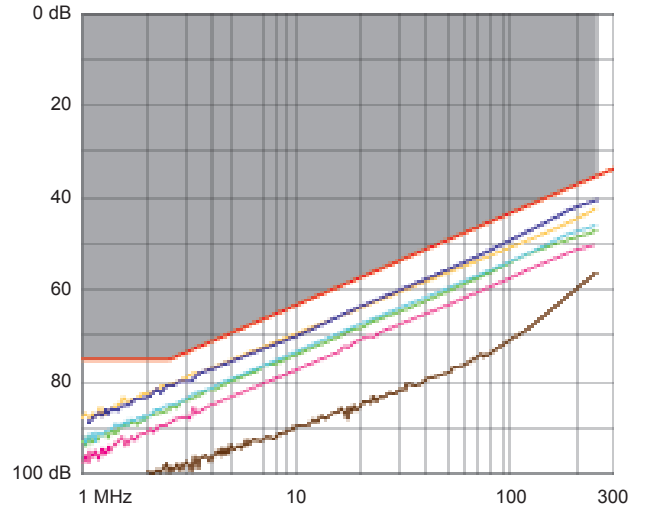
NEXT (Near end Crosstalk Attenuation)



7. PERFORMANCE (cont.)

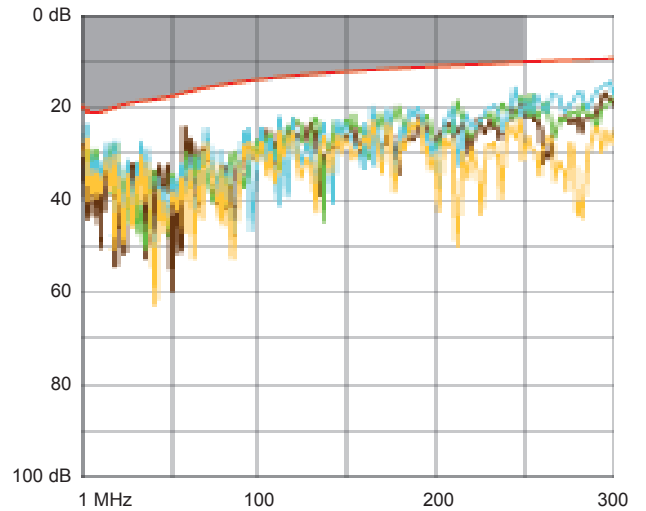
7.1 Component performance (RJ45 connectors) (cont.)

FEXT (Far end Crosstalk Attenuation)

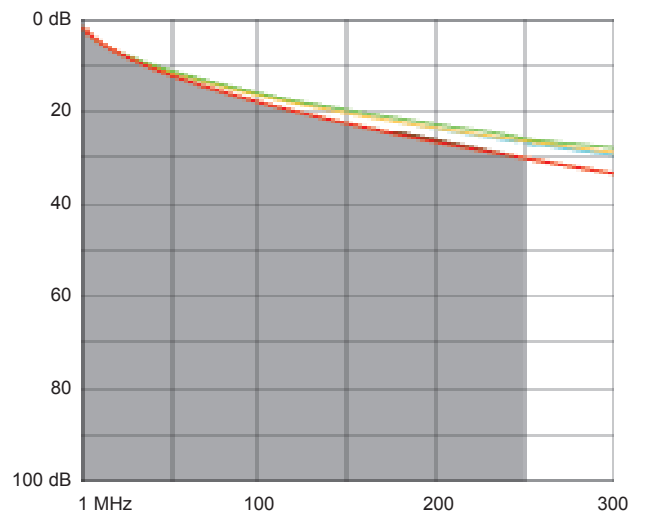


7.2 Permanent link performance with F/UTP cable

Return loss

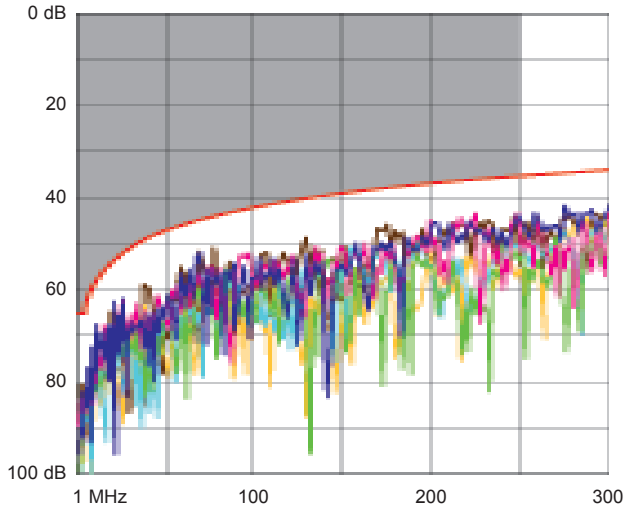


Attenuation

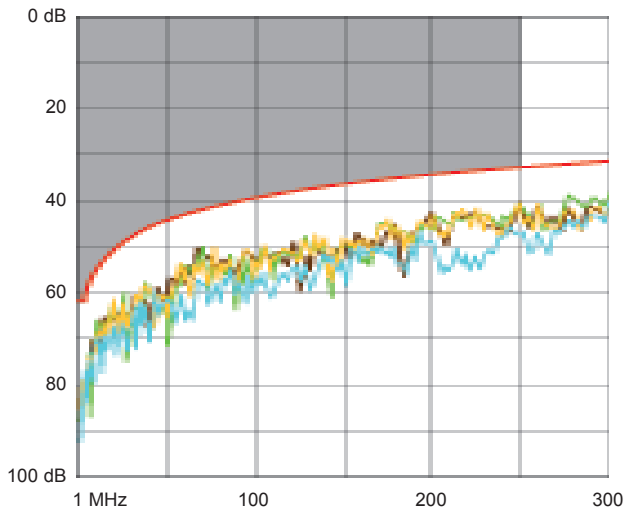


7. PERFORMANCE (cont.)

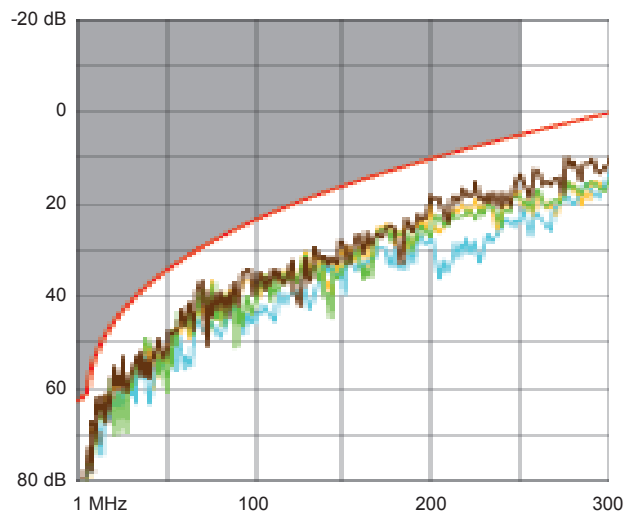
7.2 Permanent link performance with F/UTP cable (cont.)
NEXT (Near end Crosstalk Attenuation)



PS NEXT (Power Sum NEXT)

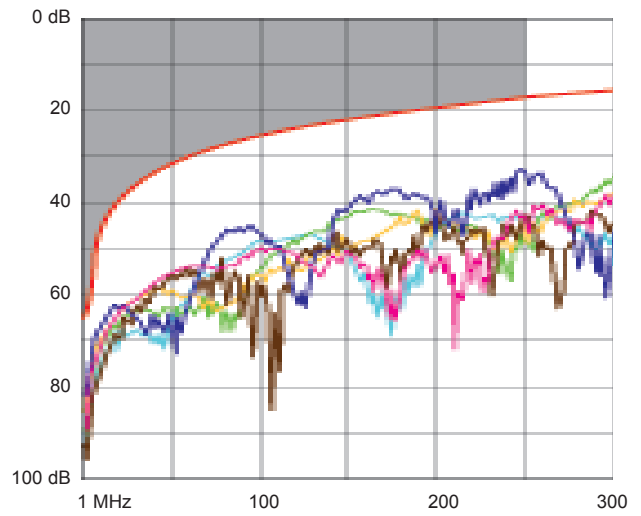


ACR (Attenuation to Crosstalk Ratio)



7. PERFORMANCE (cont.)

7.2 Permanent link performance with F/UTP cable (cont.)
ELFEXT (Equal Level End Crosstalk Attenuation)



Delay skew

