

μCom-10Gb +

Harsh Environment 10Gb
Ethernet Micro Connectors



μCom-Series is a new range of connectors designed to address the latest trends of the industry : **miniaturization** and **high speed**, with the highest resistance for use in the **harshest environments**.

μCom-10Gb + is the first product of this new range.

MAIN FEATURES

- 10Gb+ exceeds 10Gb/s Ethernet following IEEE 802.3an-2006 : **10GBase-T**
- Cat.6A connector according to TIA568C.2 and ISO/IEC11801 standard
- Environmental testing based on **MIL-DTL-38999 series III** military specifications (Thread version)
- Environmental testing based on **MIL-DTL-26482** military specifications (Push Pull version)
- Miniature : **15 mm(.59") max** external diameter
- Receptacle and in-line receptacle compatible with both thread and Push Pull plugs

FEATURES AND BENEFITS

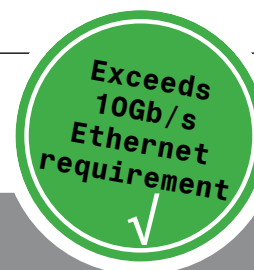
- 4 pairs totally insulated throughout the connector
 - ➔ minimum cross-talk between the four pairs
- Patent pending special interfacial shapes
 - ➔ minimum perturbation at the interface of each pair
- Thread coupling mechanism
 - ➔ 2000 mating cycles & high vibration resistance
- Machined Brass shells
 - ➔ Plating available:
 - Olive Drab Cadmium → not ROHS compliant
 - Black Nickel, and unplated brass → ROHS compliant
 - ➔ shell to shell continuity and 500h salt spray resistance
- Machined & gold plated Solder and Crimp contacts
 - ➔ design & performance according to the innercontact of M39029/77-429#16 M39029/76-425#16 38999 contact
- Solder contact : max AWG24
- Crimp contact : AWG 24 to 26
- IP68 sealing mated and unmated for PCB receptacles
- 1500 Vrms Dielectric Withstanding voltage
- Temperature range : - 55°C / + 125°C

MARKETS & APPLICATIONS

- **DEFENSE** : C4ISR, Battlefield Communications, Shipboard, Ground Vehicles Vetronics.
- **AERONAUTICAL** : In Flight Entertainment, Avionics, Communication Systems.
- **RAIL MASS TRANSIT** : Passenger Information Systems, Communication Systems.



TRANSMISSION DATA



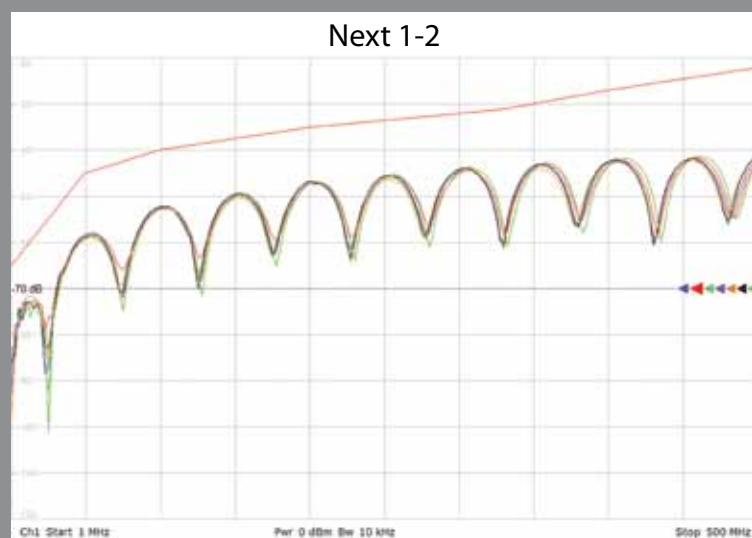
Insertion loss



← Amphenol performance

← IEEE 802.3an Standard requirement

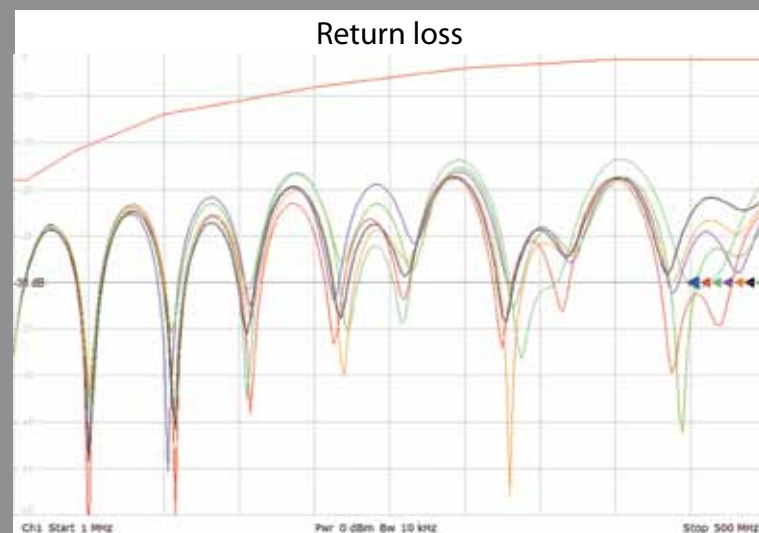
Next 1-2



← IEEE 802.3an Standard requirement

← Amphenol performance

Return loss



← IEEE 802.3an Standard requirement

← Amphenol performance

FEMALE RECEPTACLES

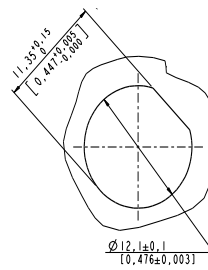
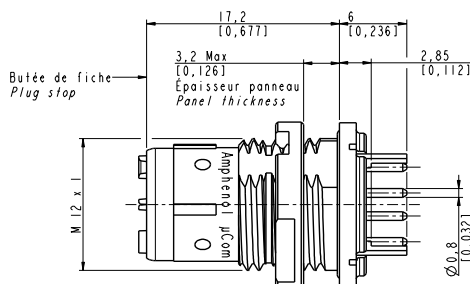


Female receptacle for printed circuit board

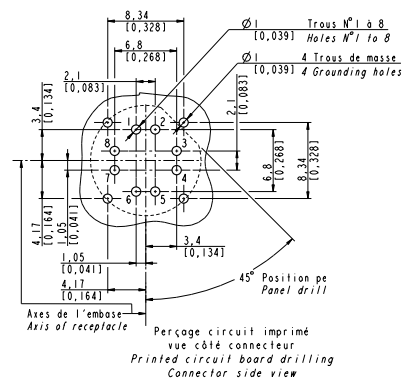
Compatible with both thread & push pull plugs

Part number: UCOM-10G+ R P x

x: see the 'How to order' below to complete your part number



Perçage panneau
Panel drilling



Perçage circuit imprimé
vue côté connecteur
Printed circuit board drilling
Connector side view

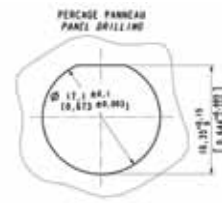
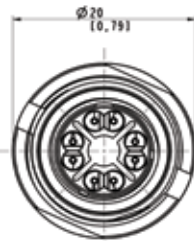
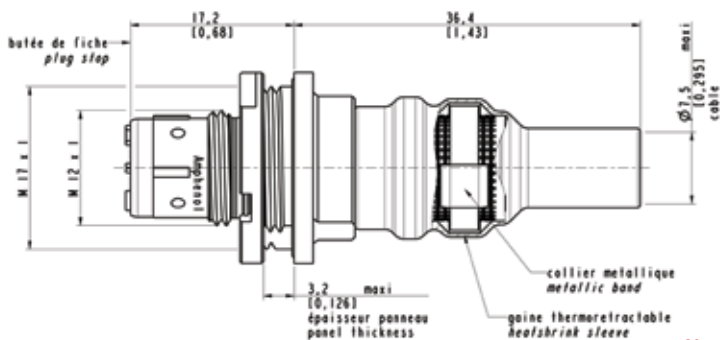


Panel mount female receptacle with metallic band backshell

Compatible with both thread & push pull plugs

Part number: UCOM-10G+ R x x

x: see the 'How to order' below to complete your part number



Nota: metallic band and heatshrink sleeve are provided with the connector

HOW TO ORDER Female receptacles

UCOM - 10G+ R P B

Shell

R: receptacle (push pull or thread)

Contacts termination

P: PCB

S: solder

C: crimp

Shell plating

B: black nickel

G: olive drab cadmium

U: unplated brass

NOTA:

- UCOM for order designation
- μCom for marking on connectors

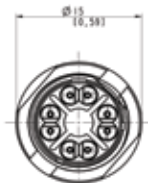
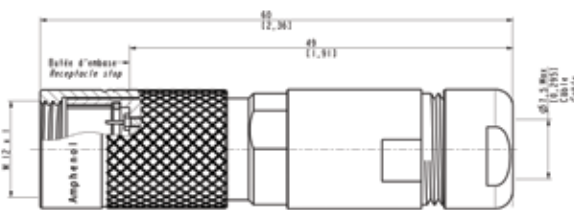
MALE PLUGS



Plug with cable gland backshell

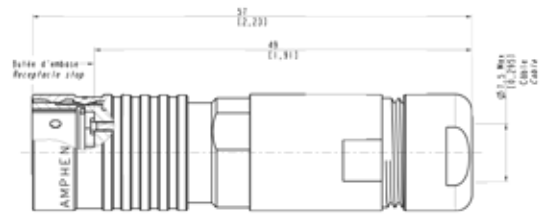
Part number: UCOM-10G+ P T x x G x

x: see the 'How to order' below to complete your part number



Part number: UCOM-10G+ P P x x G x

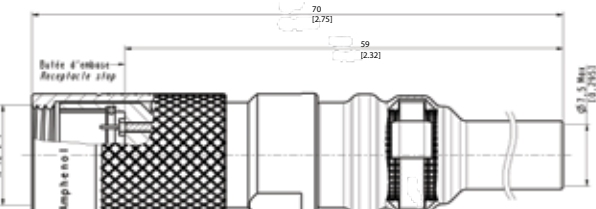
x: see the 'How to order' below to complete your part number



Plug with metallic band backshell

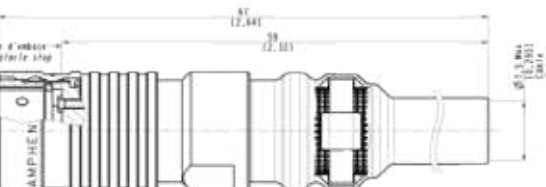
Part number: UCOM-10G+ P T x x B

x: see the 'How to order' below to complete your part number



Part number: UCOM-10G+ P P x x B

x: see the 'How to order' below to complete your part number



Nota: Metallic band and heatshrink sleeve are provided with the connector

HOW TO ORDER Male plugs

UCOM - 10G+ P T C B G A

Shell
P: plug

Mating (for plugs only)
T: thread
P: push-pull

Contacts termination
C: crimp
S: solder

Shell plating
B: black nickel
G: olive drab cadmium
U: unplated brass

Backshell type
G: gland
B: band

Cable diameter (for gland backshell only)
A: for cable diam 7.5mm
B: to be defined

NOTA:

- UCOM for order designation
- μCom for marking on connectors

FEMALE IN-LINE RECEPTACLES

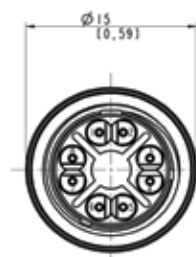
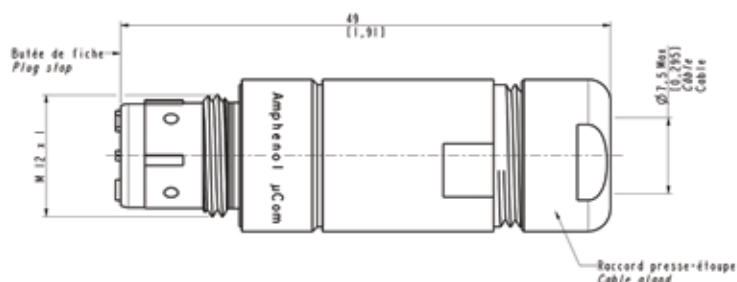


Female in-line receptacle with cable gland backshell

Compatible with both thread & push pull plugs

Part number: UCOM-10G+ L x x G x

x: see the 'How to order' below to complete your part number

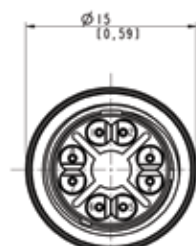
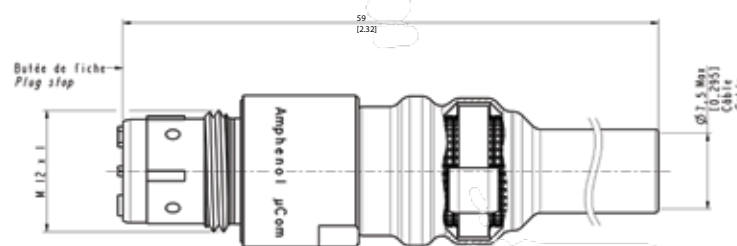


Female in-line receptacle with metallic band backshell

Compatible with both thread & push pull plugs

Part number: UCOM-10G+ L x x B

x: see the 'How to order' below to complete your part number



Nota: Metallic band and heatshrink sleeve are provided with the connector

HOW TO ORDER Female in-line receptacles

UCOM - 10G+ L S B G A

Shell

L: in line receptacle (push pull or thread)

Contacts termination

C: crimp

S: solder

Shell plating

B: black nickel

G: olive drab cadmium

U: unplated brass

Backshell type

G: gland

B: band

Cable diameter (for gland backshell only)

A: for cable diam 7.5mm

B: to be defined

NOTA:

- UCOM for order designation
- μCom for marking on connectors

CORDSETS

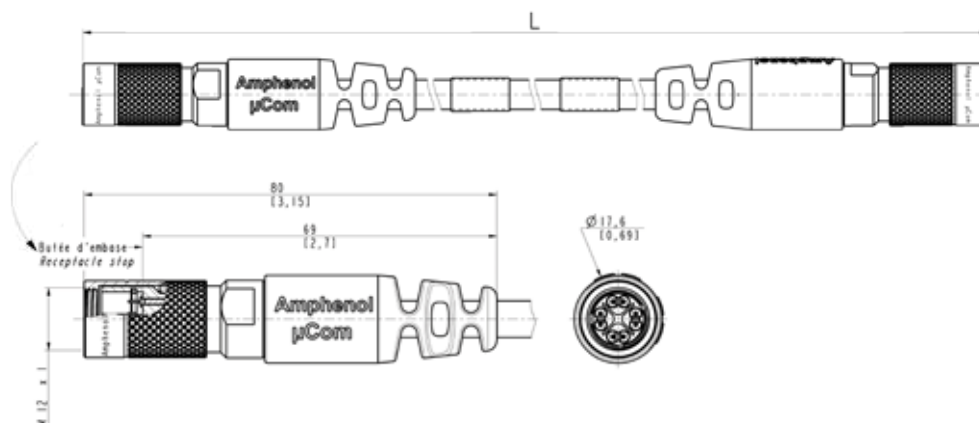


μCom plug - μCom plug cordset

Part number:

UCOM-10G+ C x x x xxx

x: see the 'How to order' on the next page to complete your part number

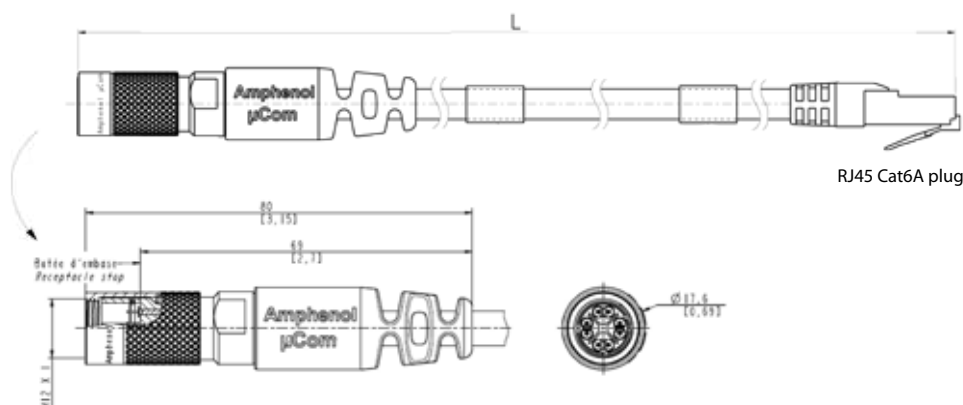


μCom plug - RJ45 Cat6A plug cordset

Part number:

UCOM-10G+ D x x x xxx

x: see the 'How to order' on the next page to complete your part number

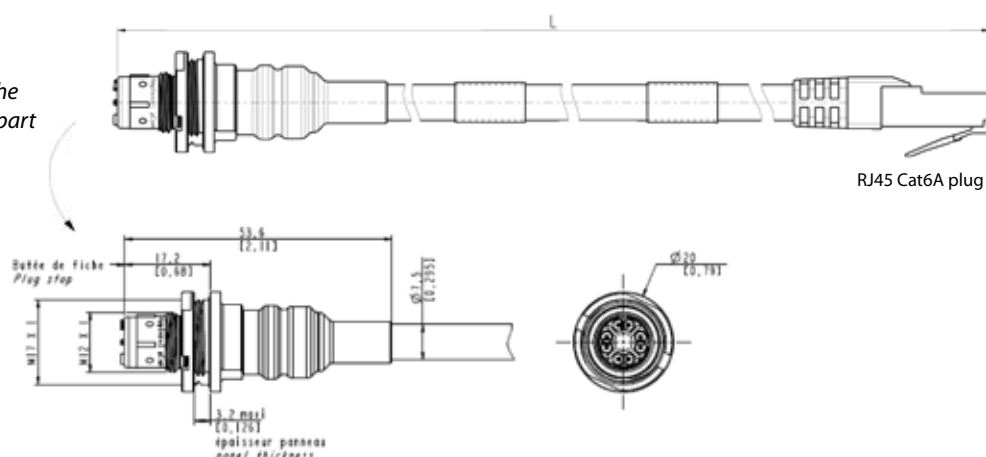


μCom panel mount receptacle - RJ45 Cat6A plug

Part number:

UCOM-10G+ E x x x xxx

x: see the 'How to order' on the next page to complete your part number

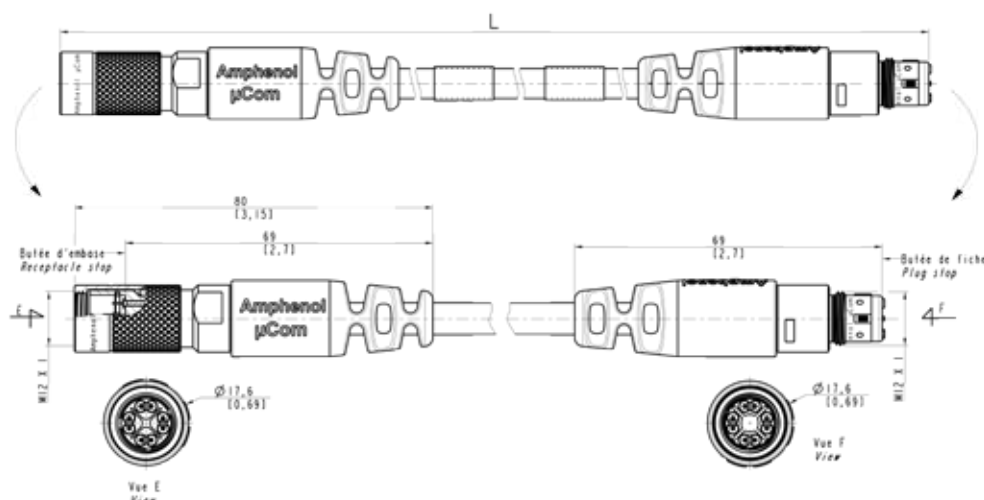


μCom plug - μCom inline receptacle

Part number:

UCOM-10G+ F x x x xxx

x: see the 'How to order' below
to complete your part number



Type of cable used: CAT 7 HFFR - According to EN 50288-4-2



- Stranded bare copper wire (26 AWG)
- 4 screened twisted pairs: 2 wires twisted to a pair, Alulami-nate foil overlapped
- Shield braiding of tinned copper wires, about 80% coverage
- Strain member of Kevlar
- Jacket in black Polyurethane (PUR), glossy finish, acc to DIN VDE 0282
- External diameter 7.0 +/-0.3 mm
- UV & Hydrolysis resistant, Halogen free, RoHS compliant
- Max Pull force: 800 N, Weight : about 54 kg/km
- Temperature : - 40°C / + 85°C
- Min. bending radius allowed: repeated 8 x Ø, single 4 x Ø

HOW TO ORDER Cordsets

UCOM - 10G+ C T C B 015

Shell

C: μCom plug - μCom plug cordset

D: μCom plug - RJ45 Cat6A plug cordset

E: μCom panel mount receptacle - RJ45 Cat6A plug cordset

F: μCom plug - μCom inline receptacle cordset

Open versions:

G: μCom plug - no connector at the end

H: μCom panel mount receptacle - no connector at the end

J: μCom inline receptacle - no connector at the end

Mating (for plugs only)

T: thread

Contacts termination

C: crimp

S: solder

Shell plating

B: black nickel

G: olive drab cadmium

U: unplated brass

Total length - For other lengths, please consult us.

002: 20 cm [7.87]

005: 50 cm [19.68]

010: 1.0 m [39.37]

015: 1.5 m [59.05]

020: 2.0 m [78.74]

050: 5.0 m [196.85]

100: 10.0 m [393.70]

NOTA:

- UCOM for order designation
- μCom for marking on connectors

ACCESSORIES

CAPS for receptacles

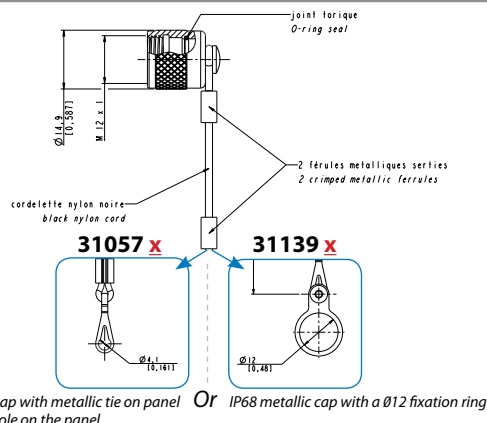
IP68 metallic cap

X to be replaced by

B for Black nickel plating

G for Olive drab cadmium plating

U for Unplated brass



IP68 neoprene cap - Part number: **31091**

Nota: plan a type M3 hole on the panel



CAPS for plugs

Cap in neoprene

Part number: **31092**



CAPS for in line receptacles

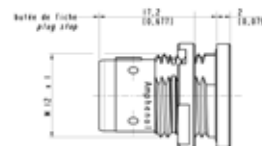
Cap in neoprene

Part number: **31093**



Dummy female receptacle

Part number: **31131 X**



X to be replaced by

B for Black nickel plating

G for Olive drab cadmium plating

U for Unplated brass

TOOLS



- Nut clamping tool for receptacle
Part number: **31055**
Only for RPx receptacles



- Insertion tool for crimp contacts
Part number: **31056**



- Contact positioner for M22520/2-01 crimping tool
Part number: **31095**

Other tools:

- Brazing tool for receptacle & in-line receptacle
Part number: **31132**
- Brazing tool for plug
Part number: **31133**

Nota: the assembling instructions are available upon demand (ref. N00-040190-00).



Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



Как с нами связаться

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