E-T-A 3120-F...Q1 switch only

Description

The 3120 switch serves for switching devices and machinery on or off. It is available in a range of design versions and meets the requirements of the relevant standard IEC/EN 61058 for switches for appliances. Type 3120 is also available as a circuit breaker for equipment protection in accordance with IEC/EN 60934 (see data sheet thermal circuit breaker 3120-F).

Product characteristics:
- rocker or push button actuation
- single pole and double pole versions
- convenient snap-in mounting
- international approvals

Optional:
- illumination
- water splash protection
- push-in terminals

Upon request:
Switch with undervoltage release module:
This version protects the user against bodily harm as an inadvertent start-up of machinery after a power failure is reliably excluded.

Typical applications

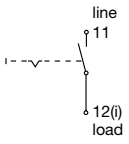
Medical and laboratory equipment, apparatus and machine construction, professional tools, household and garden appliances, offices machines, audio equipment, machine tools

Approvals

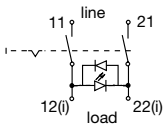
Approval authority	Standard	Voltage rating	Current rating	Approval logos
VDE	IEC/EN 61058	AC 240 V DC 50 V	16 (4) A 16 A:	
CQC	GB 17701	AC 240 V DC 50 V	0.1 - 20 A	

Schematic diagrams

1-pole



2-pole



Technical data

Voltage ratings		AC 240 V, DC 50 V
Interrupting capacity:		
AC 240 V: DC 50 V:	16 (4) A 16 A	25,000 switching cycles 50,000 switching cycles
Ambient temperature		0...55 °C
Insulation coordination (IEC 60664)		2.5 kV /2 reinforced insulation at operating area
Dielectric strength		
Operating area Pole to pole (2-pole)		test voltage AC 3,000 V test voltage AC 1,500 V
Insulation resistance		> 100 MΩ (DC 500 V)
Degree of protection (IEC 60529) Operating area Terminal area		 IP40 with water splash cover IP54 or IP66 IP00 with water splash cover IP64
Environmental tests (IEC 60068) Vibration Shock Corrosion Humidity		 8 g (57-500 Hz), ± 0.61 mm (10-57 Hz) 30 g (11 ms) 96 hours at 5 % salt mist 240 hrs in 95 % RH
Mass		approx. 33 g (2-pole) approx. 27 g (1-pole) approx. 42 g (2-pole with PT terminals)

All information and data given on our products are accurate and reliable to the best of our knowledge, but E-T-A does not accept any responsibility for the use in applications which are not in accordance with the present specification. E-T-A reserves the right to change specifications at any time in the interest of improved design, performance and cost effectiveness, Dimensions are subject to change without notice. Please enquire for the latest dimensional drawing with tolerances if required. All dimensions, data, pictures and descriptions are for information only and are not binding. Amendments, errors and omissions excepted. Ordering codes of the products may differ from their marking.

Order numbering code

Type No.
3120 switch with rocker actuation

Mounting
- **F3** snap-in, mounting cut-out 50.5 x 21.5 mm
- **F5** snap-in, mounting cut-out 44.5 x 22 mm

Number of poles
- **0** 2-pole
- **6** 1-pole

Style
- **1** standard
- **3** with actuator guard
- **4** with water splash protection (IP54)

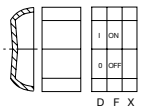
Terminal design
- **PT** push-in terminals
- **N7** blade terminals 6.3 x 0.8
- **G7** as N7, terminals 11 and 21 with additional flat head screws M3.5

Version
- **Q1** switch only

Actuator style
- **W** rocker

Rocker colour/illumination
- **01.** black opaque without illumination
- **02.** white opaque without illumination
- **14. R** red translucent with LED illumination
- **19. G** green translucent with LED illumination

Marking
- **D**
- **F**
- **Q**
- **X**



Q: 0 and 1 moulded in

Illumination voltage range
(= operating voltage)
- **1** DC 12 V
- **2** DC 24 V
- **3** AC 115 V
- **4** AC 230 V

Current rating
- **16 A:**

3120 - F 5 0 4 - N7 Q1 - W01Q - 16 A ordering example

Order numbering code

Type No.
3120 switch with push button actuation

Mounting
- **F2** flange mounting, mounting cut-out 50.5 x 26 mm, suitable for water splash cover X221 619 01 (IP66)
- **F3** snap-in, mounting cut-out 50.5 x 21.5 mm

Number of poles
- **0** 2-pole
- **6** 1-pole

Style
- **F** frame with 2 push buttons

Terminal design
- **PT** push-in terminals
- **N7** blade terminals 6.3 x 0.8
- **G7** as N7, terminals 11 and 21 with additional flat head screws M3.5

Version
- **Q1** switch only

Actuator style
- **S** two push buttons

Colour of push button/illumination
- **GRX** green/red without illumination
- **GRXG** green translucent with LED illumination/red opaque without illumination

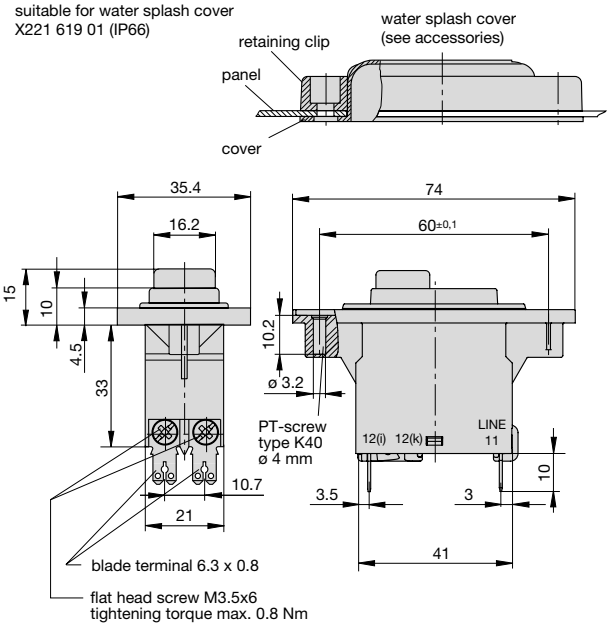
Illumination voltage range
(= operating voltage)
- **1** DC 12 V
- **2** DC 24 V
- **3** AC 115 V
- **4** AC 230 V

Current rating
- **16 A**

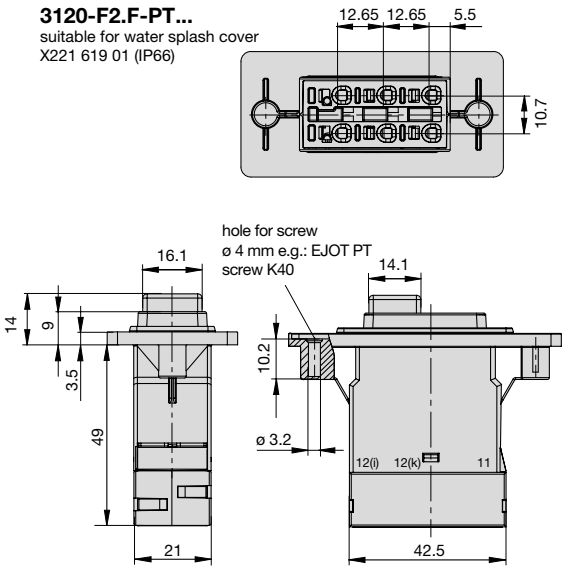
3120 - F 2 0 F - N7 Q1 - SGRX - 16 A ordering example

Dimensions

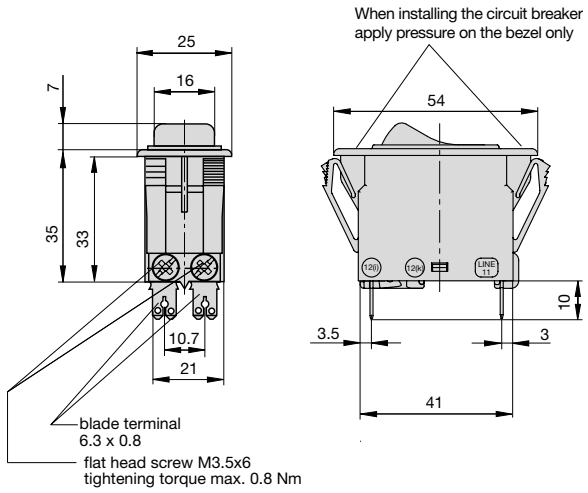
3120-F2.F-...
suitable for water splash cover
X221 619 01 (IP66)



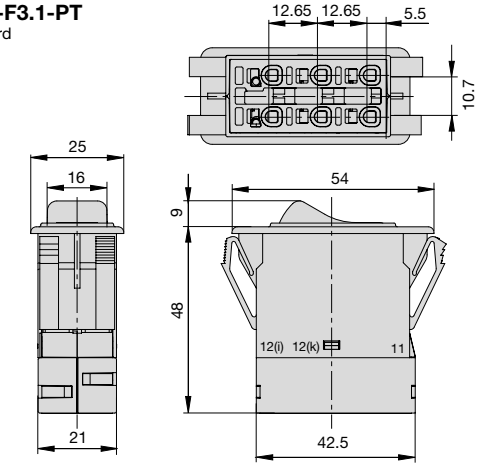
3120-F2.F-PT...
suitable for water splash cover
X221 619 01 (IP66)



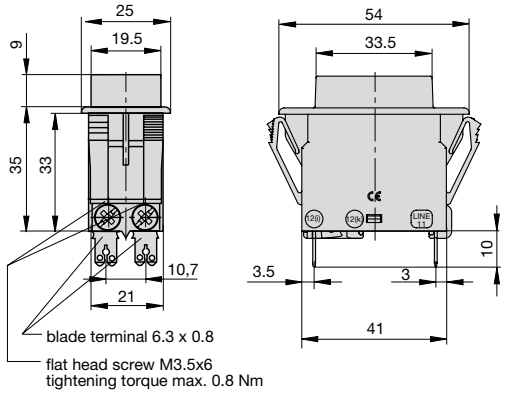
3120-F3.1
standard



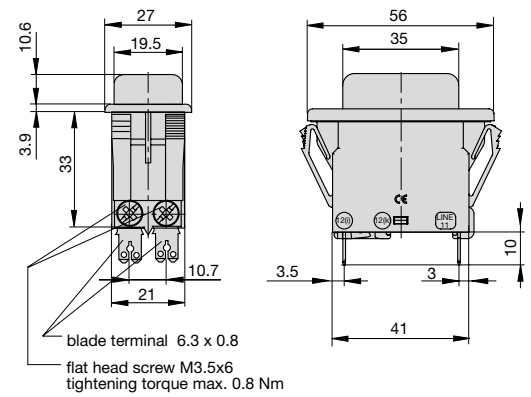
3120-F3.1-PT
standard



3120-F 3.3
with actuator guard

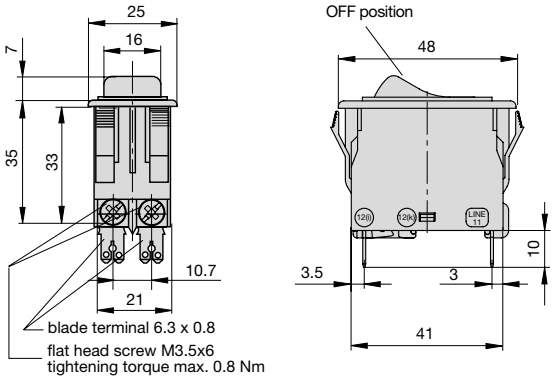


3120-F 3.4
with water splash protection (IP54)

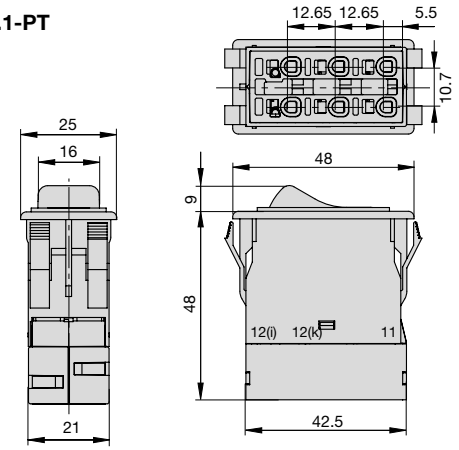


Dimensions

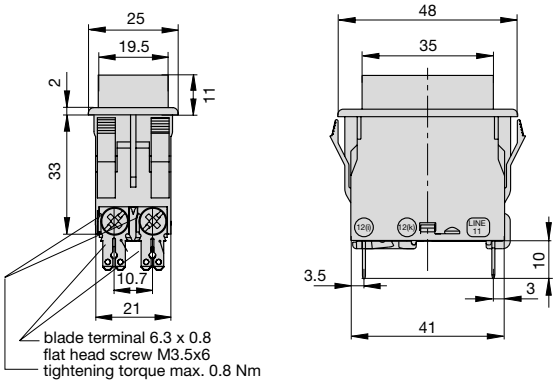
3120-F 5.1
standard



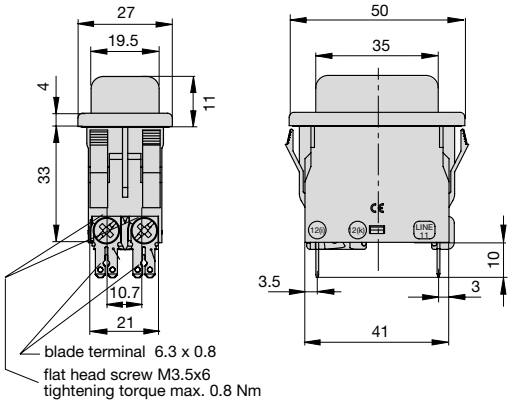
3120-F5.1-PT
standard



3120-F5.3
with actuator guard

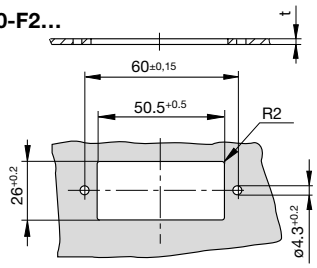


3120-F5.4
with water splash protection (IP54)



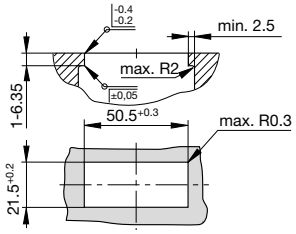
Cut-out dimensions

3120-F2...

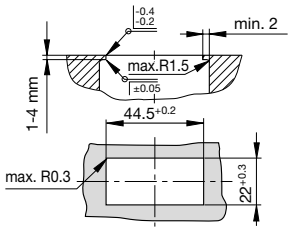


t: metal min. 2
plastic min. 3

Cut-out -F3



Cut-out -F5

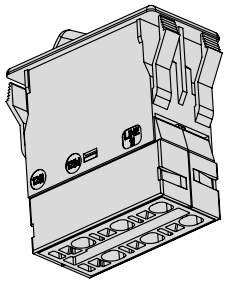


Edges of working parts: ISO13715

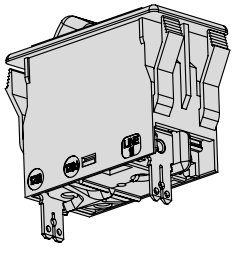
Terminal types

1-pole version

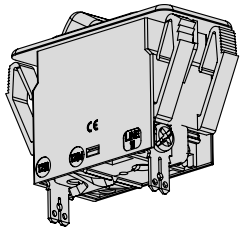
3120-F561-PT



3120-F561-N7

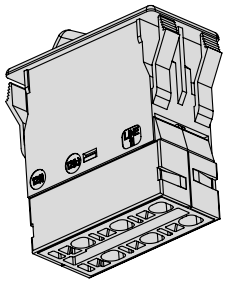


3120-F361-G7

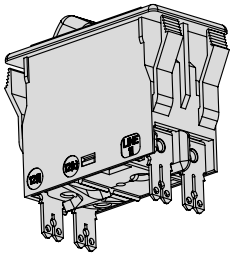


2-pole version

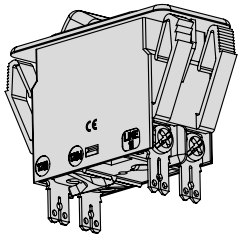
3120-F501-PT



3120-F501-N7

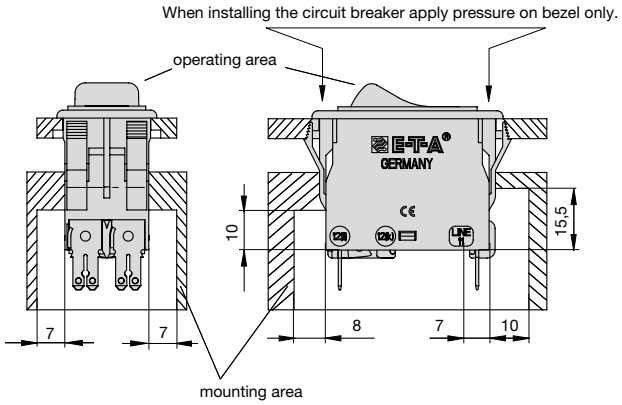


3120-F301-G7

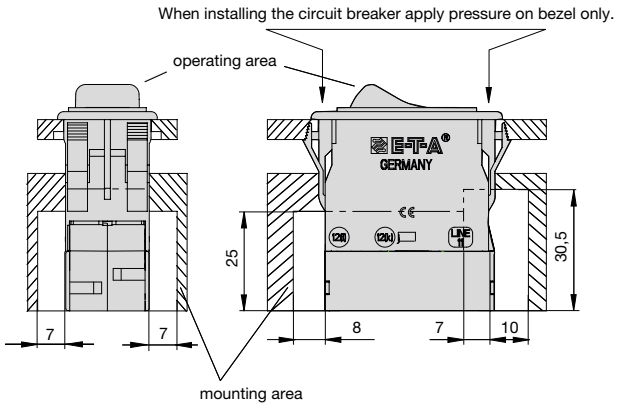


Installation drawing

3120 with blade terminals



3120 with push-in terminals

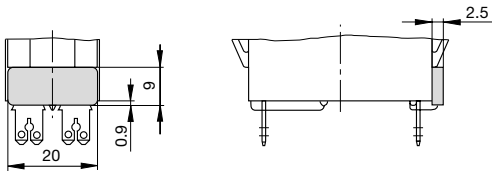


Cable cross sections PT terminals

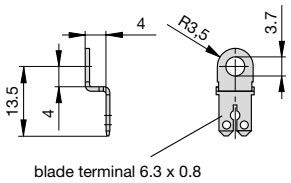
cable	**cross section with direct push-in wiring**
rigid	1…4 mm² (stripping length: 10 mm)
flexible with wire end ferrule (with or without plastic sleeve)	0.5…2.5 mm²
cable	**cross section when opening the push-in terminals**
rigid	0.5…4 mm² (stripping length: 10 mm)
flexible without wire end ferrule	0.5…2.5 mm²

Accessories

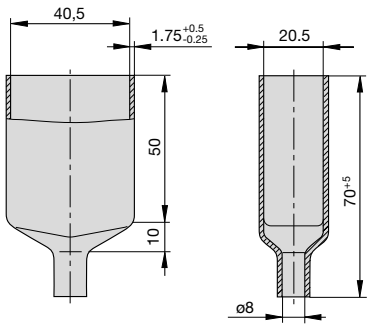
Insulated cover
Y 303 068 01



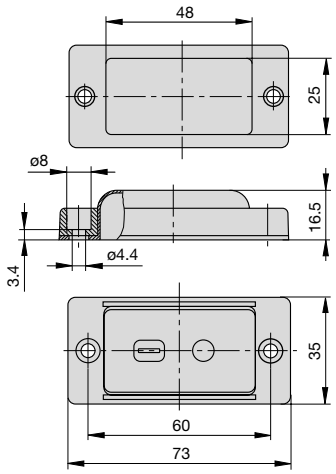
Terminal adapter
Y 303 862 01



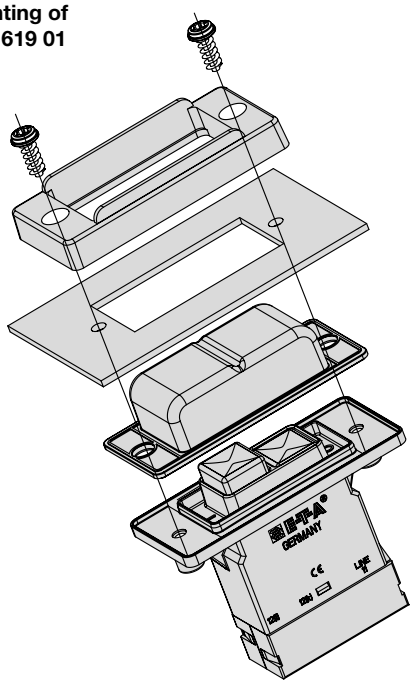
Rear terminal shroud black (IP64)
Y 304 275 01



Water splash cover, transparent (IP66)
for style -F2...
X 221 619 01

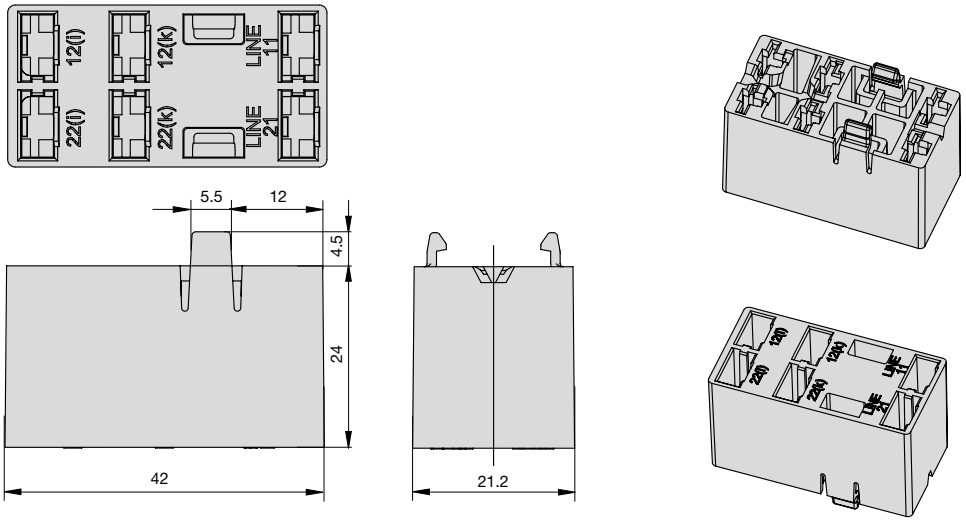


Mounting of
X221 619 01



Accessories

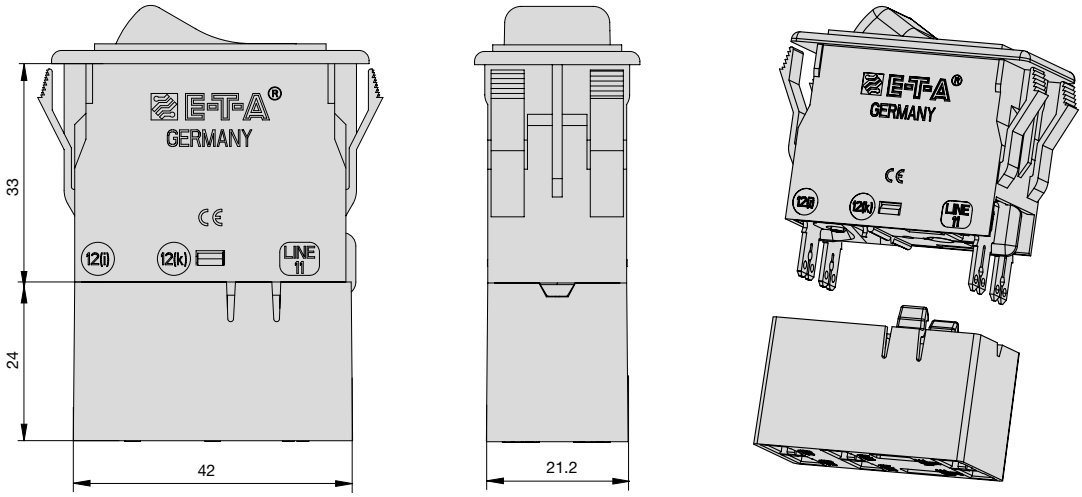
Plug-in connector (for connection types N7 and G7)
Y 31214001
Connecting cables can be pre-wired. Two retaining clips ensure a tight fit.



Benefits:
- Reduced installation time and costs for final assembly
- Quick replacement of devices

Note:
Delivery without receptacles.
Dimensions of receptacles (width 6.3 mm) are in accordance with DIN 46340 part 3, shape A.
Examples of suitable receptacles: Stocko RSB 7916 F6,3-1 / Klaucke type 2730 / Vogt type 3832d.67 / TE FASTON Terminals 250 Series / Delphi Packard 58 Series

Plug-in connector mounted on circuit breaker:



OCEAN CHIPS
Океан Электроники
Поставка электронных компонентов

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

Наши преимущества:

- Поставка оригинальных импортных электронных компонентов напрямую с производств Америки, Европы и Азии, а так же с крупнейших складов мира;
- Широкая линейка поставок активных и пассивных импортных электронных компонентов (более 30 млн. наименований);
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Помощь Конструкторского Отдела и консультации квалифицированных инженеров;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Поставка электронных компонентов под контролем ВП;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- При необходимости вся продукция военного и аэрокосмического назначения проходит испытания и сертификацию в лаборатории (по согласованию с заказчиком);
- Поставка специализированных компонентов военного и аэрокосмического уровня качества (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Actel, Aeroflex, Peregrine, VPT, Syfer, Eurofarad, Texas Instruments, MS Kennedy, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Компания «Океан Электроники» является официальным дистрибьютором и эксклюзивным представителем в России одного из крупнейших производителей разъемов военного и аэрокосмического назначения «**JONHON**», а так же официальным дистрибьютором и эксклюзивным представителем в России производителя высокотехнологичных и надежных решений для передачи СВЧ сигналов «**FORSTAR**».

AVIC JONHON

«JONHON» (основан в 1970 г.)

Разъемы специального, военного и аэрокосмического назначения:

(Применяются в военной, авиационной, аэрокосмической, морской, железнодорожной, горно- и нефтедобывающей отраслях промышленности)

«FORSTAR» (основан в 1998 г.)

ВЧ соединители, коаксиальные кабели, кабельные сборки и микроволновые компоненты:

(Применяются в телекоммуникациях гражданского и специального назначения, в средствах связи, РЛС, а так же военной, авиационной и аэрокосмической отраслях промышленности).

FORSTAR®

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