

Q14 series

Ø14 mm panel mount LED indicators



DISTINCTIVE FEATURES

10 mm colored diffused epoxy lens or 10 mm water clear super bright LEDs

Prominent and flush bezel styles

(2.8 x 0.8) solder lug/faston terminals, pins or (200 mm long) wire terminations

Custom engraving available



ENVIRONMENTAL SPECIFICATIONS

- IP67 sealing option (EN60529)
- Operating & Storage Temperature Range:
Rear plastic body: -30 °C to +65° C (-22 °F to +149 °F)
Rear epoxy body: -40 °C to +85° C (-40 °F to +185 °F)



GENERAL SPECIFICATIONS

- Max Reverse Voltage: 5 V
- Viewing Angle: 30–100° (dependant on model)
- Life Expectancy: 100,000 hours
- Torque: 4 cNm (dependent on option)
- Maximum panel thickness 11 mm

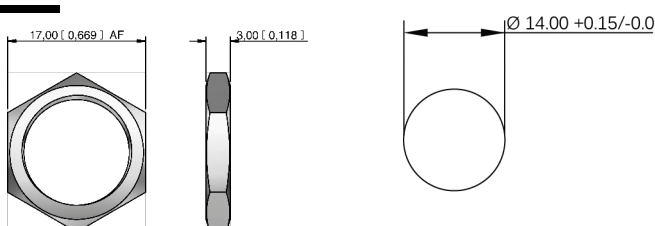


MATERIALS

- Plated brass bezel finished in bright chrome, black chrome or satin grey and moulded polycarbonate rear body



MOUNTING



The company reserves the right to change specifications without notice.

All LED characteristics are dependent upon environmental conditions. Therefore published data should be considered nominal and subject to variations.

Q14 series

Ø14 mm panel mount LED indicators



ELECTRICAL SPECIFICATIONS

STANDARD LED INTENSITY

LED COMPONENT SPECIFICATIONS			
	Prominent and Recessed	Flush	Forward Voltage
HE Red	80 mcd	10 mcd	2.0 V
Green	60 mcd	5 mcd	2.2 V
Yellow	50 mcd	4 mcd	2.1 V
Blue	540 mcd	100 mcd	3.3 V
White	1000 mcd	150 mcd	3.3 V
Orange	80 mcd	200 mcd	2.2 V
Bi-color (Typical) (Red/Green)	15/15 mcd	14/10 mcd	2.0V/2.2 V
Tri-color (Typical) (Red/Green/Yellow)	60/50/50mcd	15/10/30 mcd	2.0 V/2.2 V/2.1 V

Bi-color - The color is changed by reversing the polarity of the supply voltage.
Tri-color - The indicator has red and green LEDs, when both connected yellow is produced.

SUPER BRIGHT LED INTENSITY

LED COMPONENT SPECIFICATIONS			
	Prominent and Recessed	Flush	Forward Voltage
HE Red	17,000 mcd	2,000 mcd	2.2 V
Green	11,000 mcd	680 mcd	3.3 V
Yellow	4,000 mcd	350 mcd	2.0 V
Blue	2,500mcd	250 mcd	3.3 V
White	4,400 mcd	250 mcd	3.3 V
Orange	2,800 mcd	300 mcd	2.2 V

HYPER BRIGHT LED INTENSITY

LED COMPONENT SPECIFICATIONS			
	Prominent and Recessed	Flush	Forward Voltage
HE Red	2,800 mcd	800 mcd	2.1 V
Green	2,200 mcd	250 mcd	3.2 V
Yellow	1,300 mcd	250 mcd	2.0 V
Orange	850 mcd	200 mcd	2.1 V

- The operating voltage must not be exceeded by more than 10% as this will result in reduced life expectancy
- Luminous intensity is measured at 20 mA on a discrete led unless otherwise stated.
- Luminous intensities and color shades of white LEDs may vary within a batch.
- Luminous intensity will be reduced with lower operating current.

Voltage	Operating Voltage	Operating Current
	(Min to Max)	(Typical All Types)
02 (No Resistor)	1.8 to 3.3 VDC	20 mA max
6 VDC	5.4 to 6.6 VDC	20 mA
12 VDC	10.8 to 13.2 VDC	20 mA
24 VDC	21.6 to 26.4 VDC	20 mA
28 VDC	25.2 to 30.8 VDC	20 mA
110 VAC	99 to 121 VAC	6 mA
220 VAC	207 to 235 VAC	3 mA

* Customer to supply resistor for desired operating current.

Q14 series

Ø14 mm panel mount LED indicators



BUILD YOUR PART NUMBER

<div style="border: 1px solid black; padding: 2px; width: 30px; margin: 0 auto;">Q</div> <p>SERIES</p>	<div style="border: 1px solid black; width: 30px; height: 20px; margin: 0 auto;"></div> <p>MOUNTING HOLE</p>	<div style="border: 1px solid black; width: 30px; height: 20px; margin: 0 auto;"></div> <p>BEZEL STYLE</p>	<div style="border: 1px solid black; width: 30px; height: 20px; margin: 0 auto;"></div> <p>TERMINALS</p>	<div style="border: 1px solid black; width: 30px; height: 20px; margin: 0 auto;"></div> <p>BEZEL FINISH</p>																																																																																																																							
<div style="border: 1px solid black; padding: 2px; width: 30px; margin: 0 auto;">14</div> <p>Ø14mm</p>																																																																																																																											
		<div style="border: 1px solid black; padding: 2px; width: 30px; margin: 0 auto;">P</div> Prominent <div style="border: 1px solid black; padding: 2px; width: 30px; margin: 0 auto;">R</div> Recessed <div style="border: 1px solid black; padding: 2px; width: 30px; margin: 0 auto;">F</div> Flush	<div style="border: 1px solid black; padding: 2px; width: 30px; margin: 0 auto;">1</div> Solder Lug/ Fastons (2.8 x 0.8) <div style="border: 1px solid black; padding: 2px; width: 30px; margin: 0 auto;">2</div> Pins <div style="border: 1px solid black; padding: 2px; width: 30px; margin: 0 auto;">3</div> Wires <div style="border: 1px solid black; padding: 2px; width: 30px; margin: 0 auto;">4</div> Rear epoxy Pins	<div style="border: 1px solid black; padding: 2px; width: 30px; margin: 0 auto;">5</div> Rear epoxy Wires <div style="border: 1px solid black; padding: 2px; width: 30px; margin: 0 auto;">6</div> Short body Pins <div style="border: 1px solid black; padding: 2px; width: 30px; margin: 0 auto;">7</div> Short body Wires	<table border="0"> <tr> <th colspan="2">ANODIZED FLUSH</th> <th colspan="2">OTHERS</th> </tr> <tr> <td style="border: 1px solid black; padding: 2px;">AR</td> <td>Red</td> <td style="border: 1px solid black; padding: 2px;">C</td> <td>Bright Chrome</td> </tr> <tr> <td style="border: 1px solid black; padding: 2px;">AG</td> <td>Green</td> <td style="border: 1px solid black; padding: 2px;">B</td> <td>Black Chrome</td> </tr> <tr> <td style="border: 1px solid black; padding: 2px;">AY</td> <td>Yellow</td> <td style="border: 1px solid black; padding: 2px;">G</td> <td>Satin Grey</td> </tr> <tr> <td style="border: 1px solid black; padding: 2px;">AB</td> <td>Blue</td> <td></td> <td></td> </tr> <tr> <td style="border: 1px solid black; padding: 2px;">AN</td> <td>Black</td> <td></td> <td></td> </tr> </table>	ANODIZED FLUSH		OTHERS		AR	Red	C	Bright Chrome	AG	Green	B	Black Chrome	AY	Yellow	G	Satin Grey	AB	Blue			AN	Black																																																																																																
ANODIZED FLUSH		OTHERS																																																																																																																									
AR	Red	C	Bright Chrome																																																																																																																								
AG	Green	B	Black Chrome																																																																																																																								
AY	Yellow	G	Satin Grey																																																																																																																								
AB	Blue																																																																																																																										
AN	Black																																																																																																																										
<div style="border: 1px solid black; width: 30px; height: 20px; margin: 0 auto;"></div> <p>TYPE OF ILLUMINATION</p>	<div style="border: 1px solid black; width: 30px; height: 20px; margin: 0 auto;"></div> <p>LED COLOR</p>	<div style="border: 1px solid black; width: 30px; height: 20px; margin: 0 auto;"></div> <p>VOLTAGE</p>	<div style="border: 1px solid black; width: 30px; height: 20px; margin: 0 auto;"></div> <p>SEALING</p>																																																																																																																								
<table border="0"> <tr> <td style="border: 1px solid black; padding: 2px;">XX</td> <td>Fixed Light</td> <td style="border: 1px solid black; padding: 2px;">R</td> <td>Red</td> <td style="border: 1px solid black; padding: 2px;">HG</td> <td>Hyper Bright Green</td> <td style="border: 1px solid black; padding: 2px;">SB</td> <td>Super Bright Blue</td> <td style="border: 1px solid black; padding: 2px;">02</td> <td>no resistor</td> <td style="border: 1px solid black; padding: 2px;">(Blank)</td> <td>Unsealed</td> </tr> <tr> <td style="border: 1px solid black; padding: 2px;">KK</td> <td>Flashing Light (12V – 28VDC)</td> <td style="border: 1px solid black; padding: 2px;">G</td> <td>Green</td> <td style="border: 1px solid black; padding: 2px;">HY</td> <td>Hyper Bright Yellow</td> <td style="border: 1px solid black; padding: 2px;">SW</td> <td>Super Bright White</td> <td style="border: 1px solid black; padding: 2px;">06</td> <td>6VDC</td> <td style="border: 1px solid black; padding: 2px;">E</td> <td>IP67</td> </tr> <tr> <td style="border: 1px solid black; padding: 2px;">YY</td> <td>Bi-color</td> <td style="border: 1px solid black; padding: 2px;">Y</td> <td>Yellow</td> <td style="border: 1px solid black; padding: 2px;">HO</td> <td>Hyper Bright Orange</td> <td style="border: 1px solid black; padding: 2px;">RG</td> <td>Red/Green</td> <td style="border: 1px solid black; padding: 2px;">12</td> <td>12VDC</td> <td></td> <td></td> </tr> <tr> <td style="border: 1px solid black; padding: 2px;">ZZ</td> <td>Tri-color</td> <td style="border: 1px solid black; padding: 2px;">B</td> <td>Blue</td> <td style="border: 1px solid black; padding: 2px;">SR</td> <td>Super Bright Red</td> <td style="border: 1px solid black; padding: 2px;">RY</td> <td>Red/Yellow</td> <td style="border: 1px solid black; padding: 2px;">12A</td> <td>12VAC/DC</td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td style="border: 1px solid black; padding: 2px;">W</td> <td>White</td> <td style="border: 1px solid black; padding: 2px;">SG</td> <td>Super Bright Green</td> <td style="border: 1px solid black; padding: 2px;">GY</td> <td>Green/Yellow</td> <td style="border: 1px solid black; padding: 2px;">24</td> <td>24VDC</td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td style="border: 1px solid black; padding: 2px;">O</td> <td>Orange</td> <td style="border: 1px solid black; padding: 2px;">SY</td> <td>Super Bright Yellow</td> <td style="border: 1px solid black; padding: 2px;">RYG</td> <td>Red/Yellow/Green</td> <td style="border: 1px solid black; padding: 2px;">24A</td> <td>24VAC/DC</td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td style="border: 1px solid black; padding: 2px;">HR</td> <td>Hyper Bright Red</td> <td></td> <td></td> <td></td> <td></td> <td style="border: 1px solid black; padding: 2px;">28</td> <td>28VDC</td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td style="border: 1px solid black; padding: 2px;">28A</td> <td>28VAC/DC</td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td style="border: 1px solid black; padding: 2px;">110</td> <td>110VAC</td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td style="border: 1px solid black; padding: 2px;">220</td> <td>220VAC</td> <td></td> <td></td> </tr> </table>	XX	Fixed Light	R	Red	HG	Hyper Bright Green	SB	Super Bright Blue	02	no resistor	(Blank)	Unsealed	KK	Flashing Light (12V – 28VDC)	G	Green	HY	Hyper Bright Yellow	SW	Super Bright White	06	6VDC	E	IP67	YY	Bi-color	Y	Yellow	HO	Hyper Bright Orange	RG	Red/Green	12	12VDC			ZZ	Tri-color	B	Blue	SR	Super Bright Red	RY	Red/Yellow	12A	12VAC/DC					W	White	SG	Super Bright Green	GY	Green/Yellow	24	24VDC					O	Orange	SY	Super Bright Yellow	RYG	Red/Yellow/Green	24A	24VAC/DC					HR	Hyper Bright Red					28	28VDC											28A	28VAC/DC											110	110VAC											220	220VAC					
XX	Fixed Light	R	Red	HG	Hyper Bright Green	SB	Super Bright Blue	02	no resistor	(Blank)	Unsealed																																																																																																																
KK	Flashing Light (12V – 28VDC)	G	Green	HY	Hyper Bright Yellow	SW	Super Bright White	06	6VDC	E	IP67																																																																																																																
YY	Bi-color	Y	Yellow	HO	Hyper Bright Orange	RG	Red/Green	12	12VDC																																																																																																																		
ZZ	Tri-color	B	Blue	SR	Super Bright Red	RY	Red/Yellow	12A	12VAC/DC																																																																																																																		
		W	White	SG	Super Bright Green	GY	Green/Yellow	24	24VDC																																																																																																																		
		O	Orange	SY	Super Bright Yellow	RYG	Red/Yellow/Green	24A	24VAC/DC																																																																																																																		
		HR	Hyper Bright Red					28	28VDC																																																																																																																		
								28A	28VAC/DC																																																																																																																		
								110	110VAC																																																																																																																		
								220	220VAC																																																																																																																		



ABOUT THIS SERIES



Notice: please note that not all combinations of above numbers are available.

- Gold faston terminal denotes anode (+), silver terminal denotes cathode (-)
- Standard wire length is 200 mm, 22 AWG UL1061, red wire denotes anode (+), black wire denotes cathode (-) for other wire lengths consult APEM
- For LEDs with alternative voltages and multi-voltage options consult APEM
- 110 VAC and 220 VAC, short body terminal options, 5, 6 and 7 please consult the factory
- Bi-color leds, by connecting the gold faston (+) one color is produced, by reversing the supply voltage another color is produced – bi-colors are available up to 28 VDC

- Take care when soldering to the faston terminals (recommended solder temperature 300 °C - 3 sec)
- Short body pins and wires are only available up to 28 VDC
- The Tri-color LED has red and green LEDs when both are connected yellow is produced
- Standard tri-color faston terminals are two anodes (+) and one cathode (-)
- Tri-color wires are one red (+) and one green (+) anode and one black (-) cathode
- Tri-color pins are center (-) cathode, shortest (+) anode pin green, longest (+) anode pin red
- We recommend using Hyperbright or Superbright LEDs for use at 110 VAC and 220 VAC

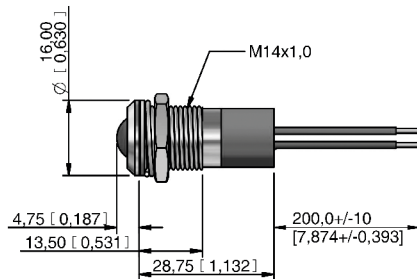
Q14 series

Ø14 mm panel mount LED indicators

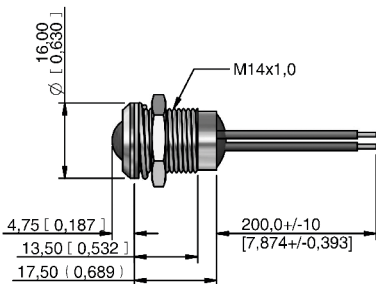
PROMINENT BEZEL



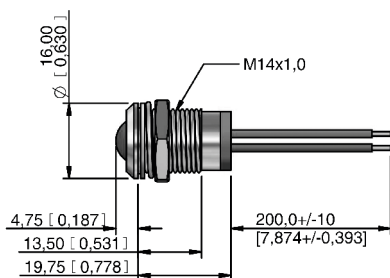
WIRES



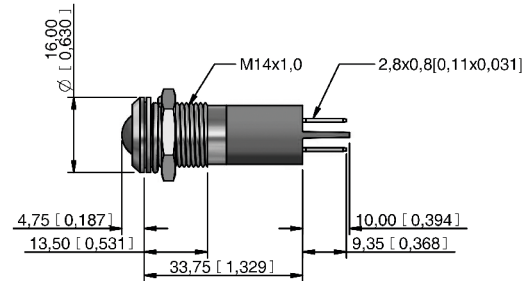
REAR EPOXY WIRES



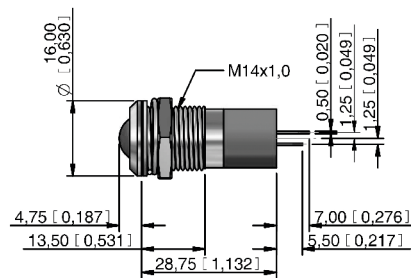
SHORT BODY WIRES



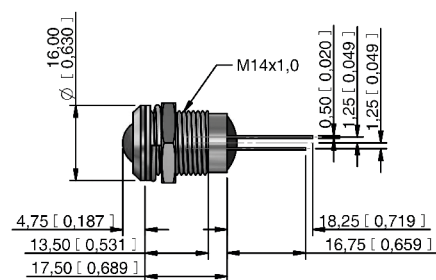
SOLDER LUG/FASTON



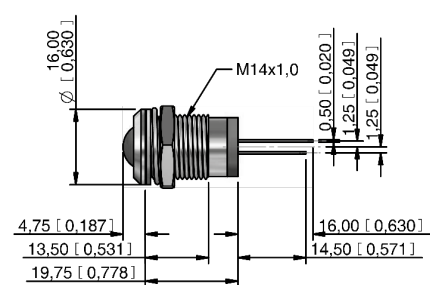
PINS



REAR EPOXY PINS



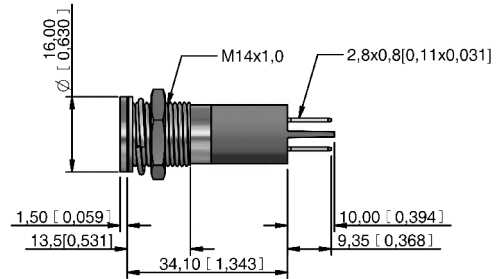
SHORT BODY PINS



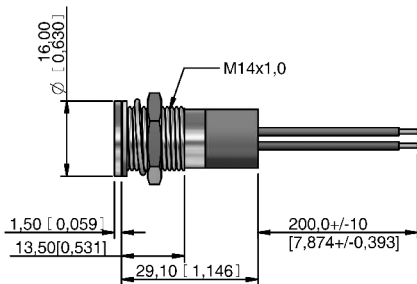
FLUSH BEZEL



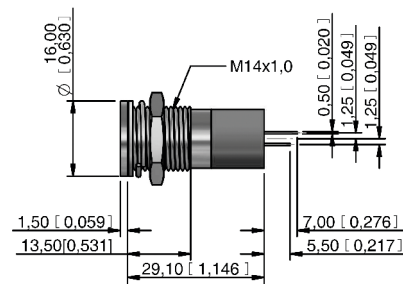
SOLDER LUG/FASTON



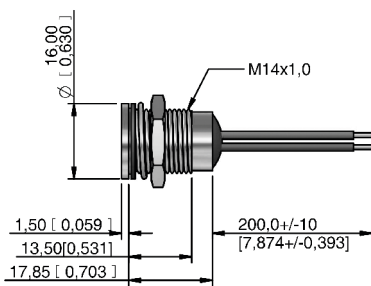
WIRES



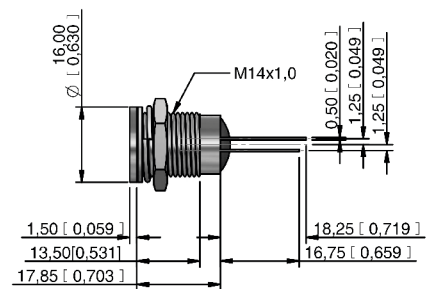
PINS



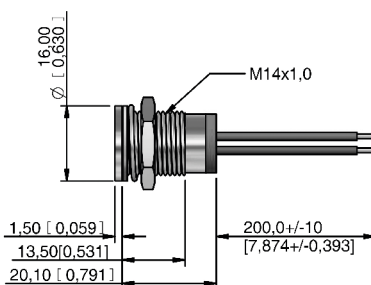
REAR EPOXY WIRES



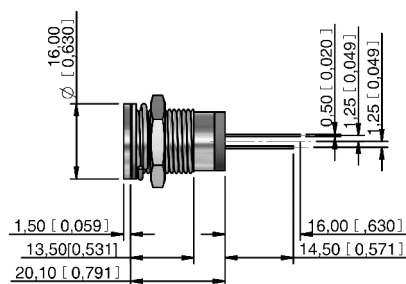
REAR EPOXY PINS



SHORT BODY WIRES



SHORT BODY PINS



Q14 series

Ø14 mm panel mount LED indicators

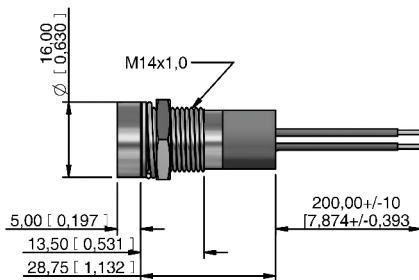
RECESSED BEZEL



SOLDER LUG/FASTON



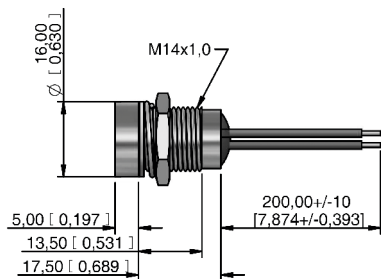
WIRES



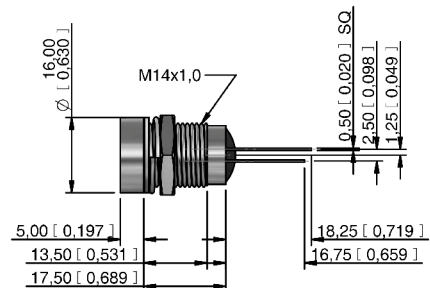
PINS



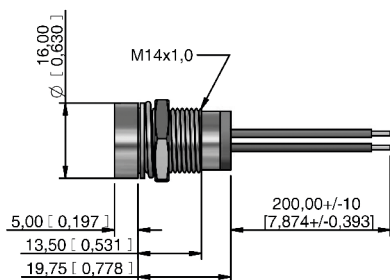
REAR EPOXY WIRES



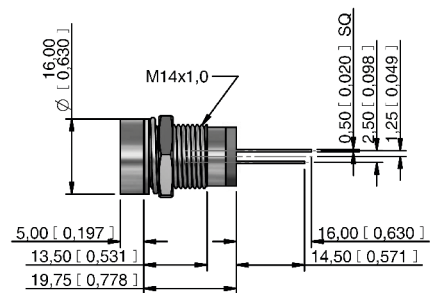
REAR EPOXY PINS



SHORT BODY WIRES



SHORT BODY PINS



Q14 series

Ø14 mm panel mount LED indicators

CUSTOM ENGRAVING

Some common codes are listed above, for your custom requirements please contact APEM.
Unless specified standard engraving with white infill will be supplied.
Suffix the part number with legend code :

						
High beam -0AJ	Low beam -097	Rear fog -027	Front fog -026	Windscreen wiper -021	Windscreen washer -022	Ventilator fan -023
						
Turn Signal -0AH	Side lights -098	Horn -041	Hazard warning -013	Heating -018	Brake test -0BU	Arrow -0K6
						
Battery -0AG	Oil can -0GP	Windscreen heating -020	ABS -086	Engine coil -0EL	Seat belt -0SB	USB connection -0UB
						
Steam -0ST	ECU -0EU	Side step -0AD	Air con -012	Engine -040	Boot/Trunk Release -0BR	



CABLE LENGTH AND CONNECTOR



For custom cable length and connectors contact APEM.

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».



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).



Телефон: 8 (812) 309-75-97 (многоканальный)

Факс: 8 (812) 320-03-32

Электронная почта: ocean@oceanchips.ru

Web: <http://oceanchips.ru/>

Адрес: 198099, г. Санкт-Петербург, ул. Калинина, д. 2, корп. 4, лит. А