

## LISA2-M-PIN

~20° medium beam. 6.8 mm high variant with location pin installation.

### TECHNICAL SPECIFICATIONS:

Dimensions	Ø 9.9 mm
Height	6.8 mm
Fastening	glue, pin
ROHS compliant	yes ⓘ

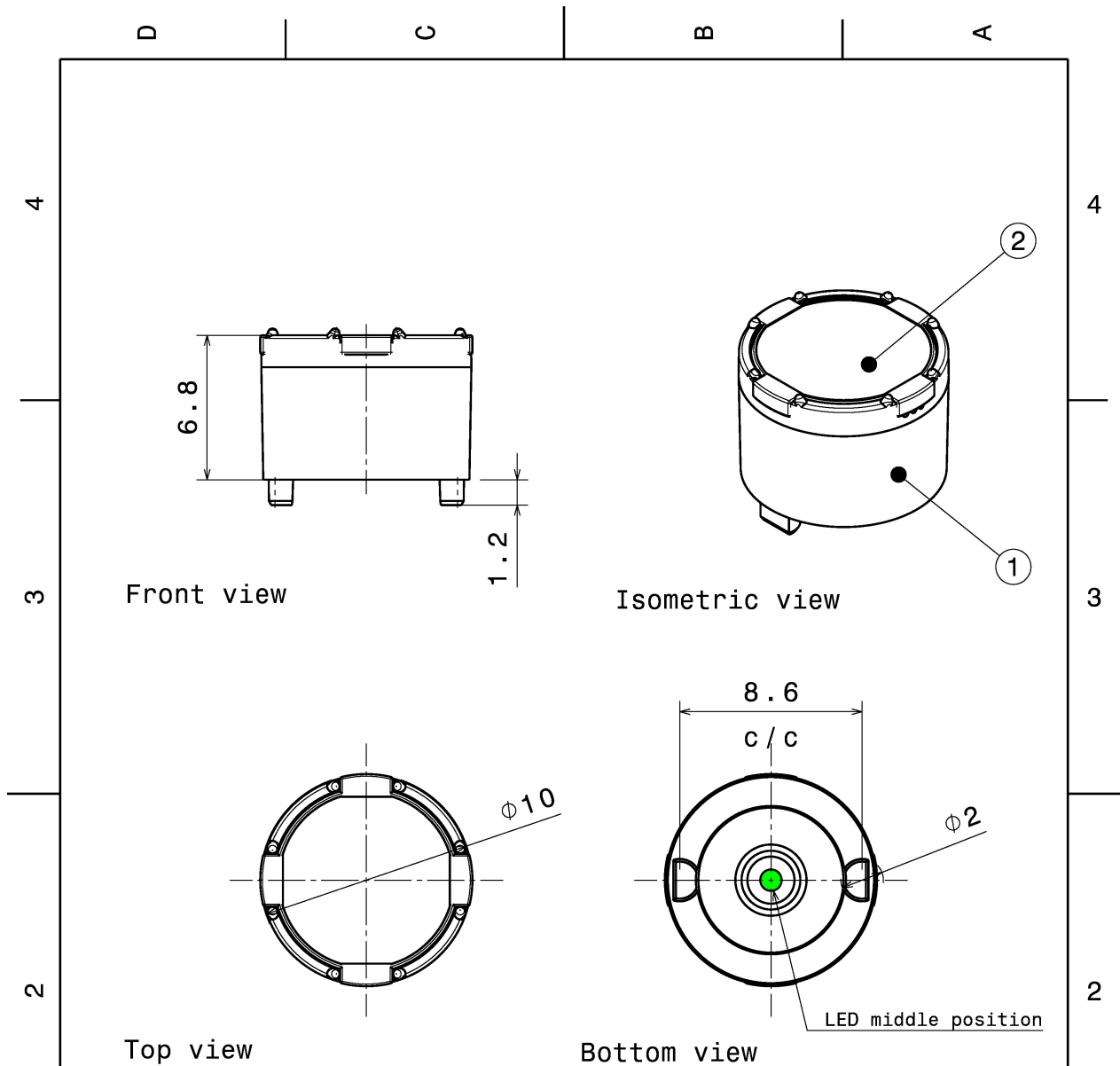
### MATERIAL SPECIFICATIONS:

Component	Type	Material	Colour	Finish
LISA2-M	Single lens	PMMA	clear	
LISA2-HLD-PIN	Holder	PC	black	



### ORDERING INFORMATION:

Component		Qty in box	MOQ	MPQ	Box weight (kg)
FP13028_LISA2-M-PIN	Single lens	2000		100	1.4
» Box size:					



INDEX	PART NO	DESCRIPTION	MATERIAL	COLOUR
1	F10989	LISA2-HLD-PIN	PC	black
2	-	LISA2_lens	PMMA	

Tolerances if not otherwise shown  
According to DIN ISO 2768-1  
Linear measures:  
up to 30mm class M, otherwise class C  
According to DIN ISO 2768-2  
Form and position: class L



Ledil Oy  
Salorankatu 10  
FIN 24240 SALO  
Finland

THIRD ANGLE PROJECTION:

DRAWING TITLE  
**Lisa2-PIN-XP assembly**

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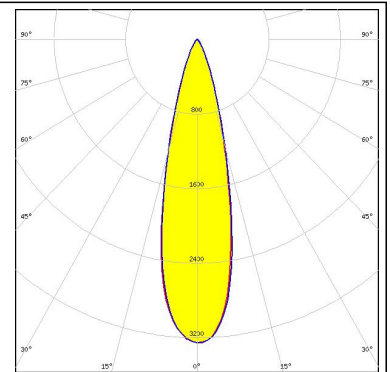
SIZE	PART NUMBER
A4	-

SCALE	WEIGHT	SHEET
4:1	0,5 g	1/1

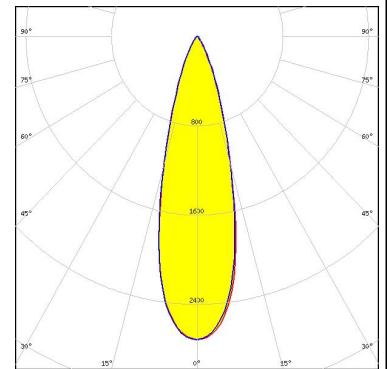
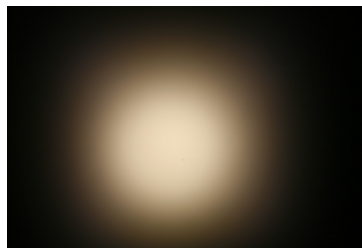
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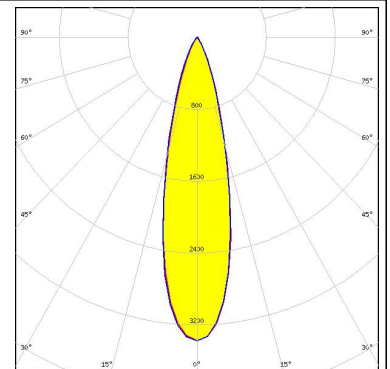
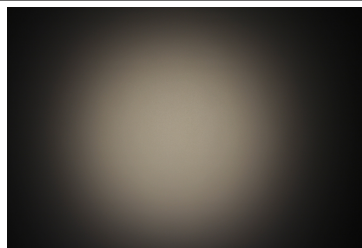
LED XT-E  
 FWHM 26.0°  
 Efficiency 89 %  
 Peak intensity 3.3 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



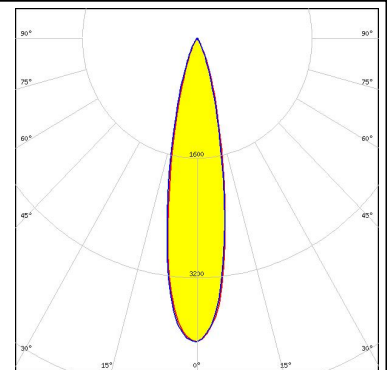
LED LUXEON T  
 FWHM 28.0°  
 Efficiency 87 %  
 Peak intensity 2.7 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



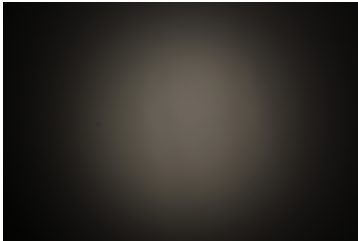
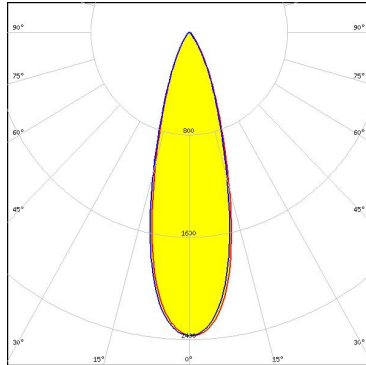
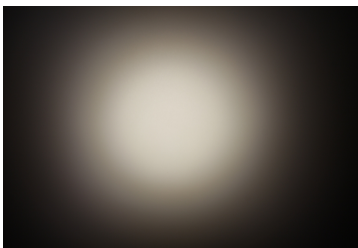
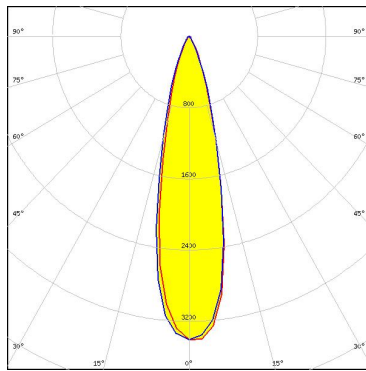




LED LUXEON TX  
 FWHM 26.0°  
 Efficiency 88 %  
 Peak intensity 3.4 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



LED NCSxx19B  
 FWHM 23.0°  
 Efficiency 85 %  
 Peak intensity 4.1 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



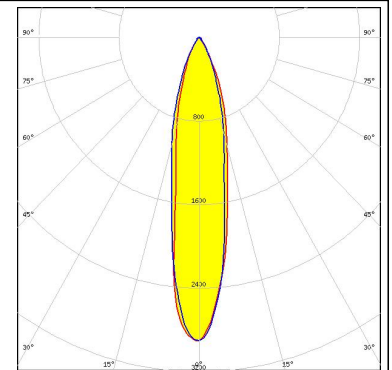
#### PHOTOMETRIC DATA (MEASURED):

<p><b>NICHIA</b></p> <p>LED NVSxx19B/NVSxx19C            FWHM 30.0°            Efficiency 86 %            Peak intensity 2.4 cd/lm            LEDs/each optic 1            Light colour White            Required components:</p>		
<p><b>OSRAM</b>  <small>Opto Semiconductors</small></p> <p>LED OSOLON Square EC            FWHM 26.0°            Efficiency 84 %            Peak intensity 3.4 cd/lm            LEDs/each optic 1            Light colour White            Required components:</p>		
<p><b>OSRAM</b>  <small>Opto Semiconductors</small></p> <p>LED SFH 4715S            FWHM 22.0°            Efficiency %            LEDs/each optic 1            Light colour White            Required components:</p>		
<p><b>OSRAM</b>  <small>Opto Semiconductors</small></p> <p>LED SFH 4725S            FWHM 23.0°            Efficiency 0 %            LEDs/each optic 1            Light colour White            Required components:</p>		

#### PHOTOMETRIC DATA (MEASURED):

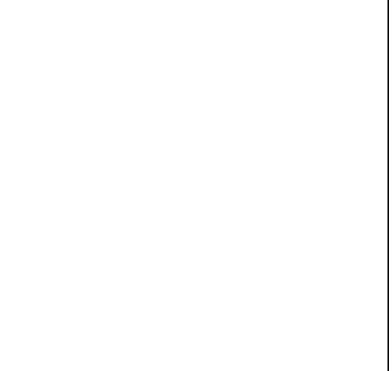
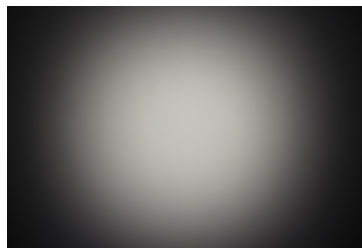
#### SAMSUNG

LED LH181B  
FWHM 20.0°  
Efficiency 78 %  
Peak intensity 2.9 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:



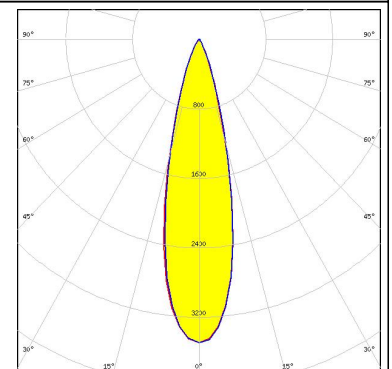
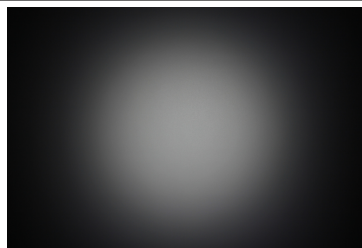
#### SAMSUNG

LED LH351B  
FWHM 31.0°  
Efficiency 87 %  
Peak intensity 2.6 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:

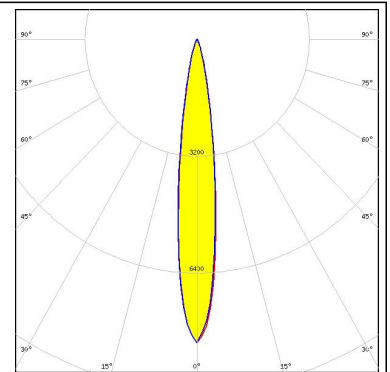
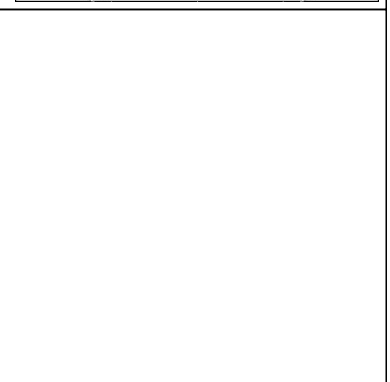
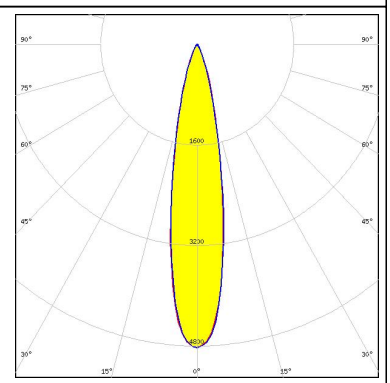
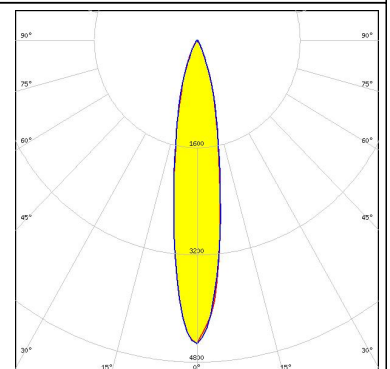


#### SAMSUNG

LED LH351Z  
FWHM 26.0°  
Efficiency 87 %  
Peak intensity 3.5 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:



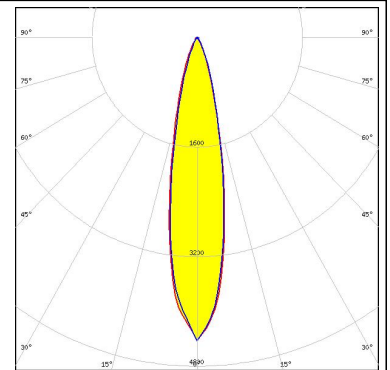
#### PHOTOMETRIC DATA (SIMULATED):

<p><b>LUMILEDS</b></p> <p>LED: LUXEON IR Compact            FWHM: 15.0°            Efficiency: 85 %            LEDs/each optic: 1            Light colour: IR            Required components:</p>	
<p><b>LUMILEDS</b></p> <p>LED: LUXEON IR Domed 150            FWHM: 20.0°            Efficiency: 88 %            LEDs/each optic: 1            Light colour: White            Required components:</p>	
<p><b>LUMINUS</b></p> <p>LED: SST-20            FWHM: 20.0°            Efficiency: 89 %            Peak intensity: 4.8 cd/lm            LEDs/each optic: 1            Light colour: White            Required components:</p>	
<p><b>NICHIA</b></p> <p>LED: NVSxE21A            FWHM: 18.0°            Efficiency: 85 %            Peak intensity: 4.5 cd/lm            LEDs/each optic: 1            Light colour: White            Required components:</p>	

#### PHOTOMETRIC DATA (SIMULATED):

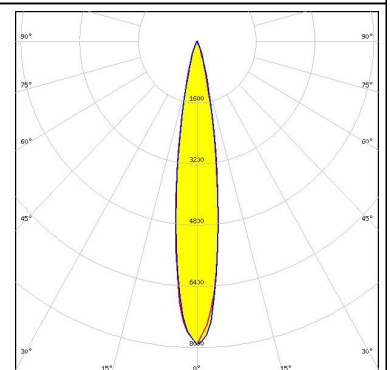
**OSRAM**  
Opto Semiconductors

LED OSLON Square CSSRM2/CSSRM3  
 FWHM 21.0°  
 Efficiency 91 %  
 Peak intensity 4.4 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



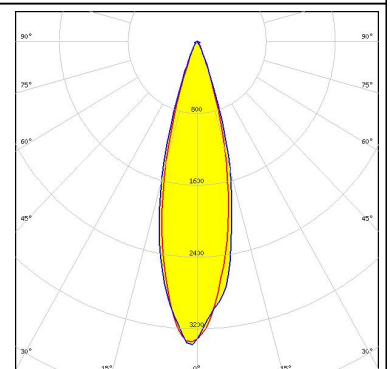
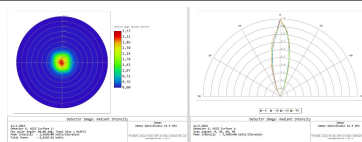
**OSRAM**  
Opto Semiconductors

LED OSLON SSL 150  
 FWHM 16.0°  
 Efficiency 91 %  
 Peak intensity 7.9 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



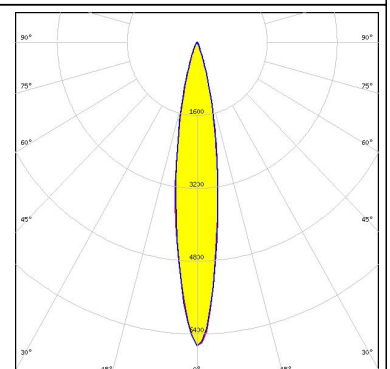
**OSRAM**  
Opto Semiconductors

LED SFH 4715AS  
 FWHM 26.0°  
 Efficiency 89 %  
 LEDs/each optic 1  
 Light colour White  
 Required components:



**OSRAM**  
Opto Semiconductors

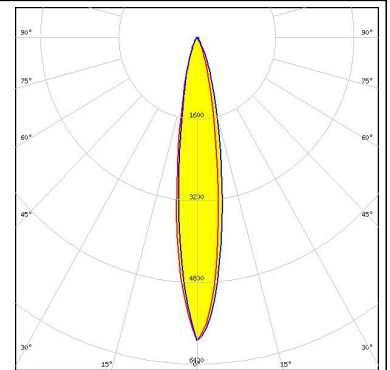
LED SFH 4716AS  
 FWHM 16.0°  
 Efficiency 89 %  
 LEDs/each optic 1  
 Light colour White  
 Required components:



#### PHOTOMETRIC DATA (SIMULATED):

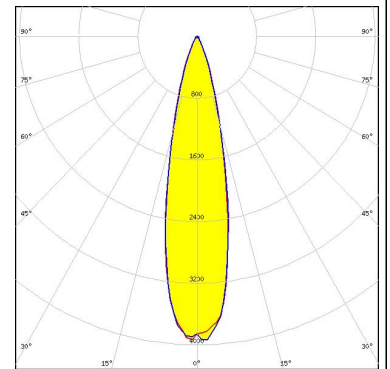
**OSRAM**  
Opto Semiconductors

LED SFH 4770S  
 FWHM 17.0°  
 Efficiency 90 %  
 Peak intensity 5.9 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



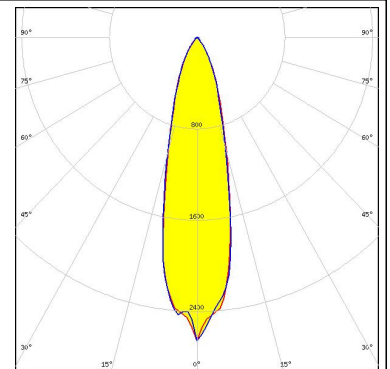
**SEOL**  
SEOL SEMICONDUCTOR

LED Z5M1/Z5M2  
 FWHM 23.0°  
 Efficiency 91 %  
 Peak intensity 4 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



**SEOL**  
SEOL SEMICONDUCTOR

LED Z8Y22P  
 FWHM 25.0°  
 Efficiency 84 %  
 Peak intensity 2.7 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:





### GENERAL INFORMATION:

NOTE: The typical beam angle will be changed by different color, chip size and chip position tolerance. The typical total beam angle is the full angle measured where the luminous intensity is half of the peak value.

### MATERIALS:

As part of our continuous research and improvement processes, and to ensure the best possible quality and availability of our products, LEDiL reserves the right to change material grades without notice.

### PRODUCT DATA USER AGREEMENT AND DISCLAIMER:

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#### LEDiL Oy

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[www.ledil.com/  
where\\_to\\_buy](http://www.ledil.com/where_to_buy)

#### Shipping locations

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Hong Kong, China

#### Distribution Partners

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- 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.);

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## 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:

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