8D Power Series

SOURIAU
Connection Technology

8D Power Series

SOURIAU

The extreme environments interconnect specialist «from deep sea to deep space»

The company designs, manufactures and markets high performance interconnect solutions for severe environments from industrial broadline and universal ranges to complex system with integrated functions: filtering, high speed data transmission, hermetic seal, separation mechanism, remote handling, underwater mating, ...

Industrial

Aeronautical

Equipment & System

The dedicated end markets for SOURIAU's products are aeronautical, defense-space and industrial.

Railway
Geophysics
Manufacturing environment
Instrumentation
Automation & process
Motosport

Civil & military aircraft
Helicopter
Weapon delivery system
Avionics

Military marine
Communications
Satellites
Launcher & missile

SOURIAU was established in 1917 and has been created by successive acquisitions of the industrial, aeronautical, defense and space activities of SOURIAU, JUPITER and BURNDY.

The Group's products are engineered and manufactured in the USA and Dominican Republic, Europe and Morocco, Japan and India, and sold by a worldwide sales and marketing organization, and in addition to SOURIAU's offices, a large network of licensed distibutors and agents.

SOURIAU complies with most of national and international Quality Assurance Standards, production unit with ISO 14001

Quality Certificate Management System	Environment Certificate Management System	Quality Certificate Management System
ISO 9001	ISO 14001	Aeronautic Industry : EN 9100

8D Power Series

Presentation

8D power series is a range extension of standard aeromil product line to adress high power supply in harsh environment for civil and military aeronautics market.

Thanks to its unique contact design (socket with a braid) these products can be used wherever very high power supply is required in environment where vibration and temperature are high.

Typical applications can be motor of electro hydraulic or electro mechanical actuators (located on Aircraft wings and tail or in the thrust reverser actuation sytem).

8D range features 6 different layouts in 4 shell sizes (composite or aluminum) with contacts from size 8 to size 4 enabling current rating up to 80 Amps.

Contents

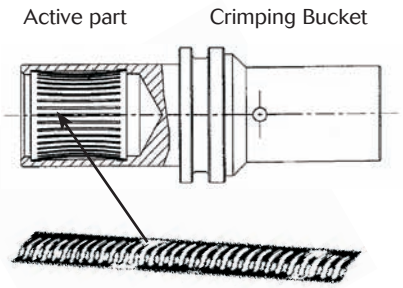
- Company profile 2
- Presentation 3
- Technical features and benefits 4
- Ordering information 6
- Layouts 7
- Dimensions 8
- Contacts and sealing boot 9
- Tooling 10

8D Power Series

Technical features and benefits

A unique contact design with a braid socket

- Enabling 20 contact points for a size 4 contact vs 2 or 3 for a standard socket,
- Allowing 20 % more intensity as compared to standard socket,
- Excellent vibration withstanding,
- Insure excellent crimping (crimping bucket can be heat treated to insure good plasticity without affecting the active part elasticity insuredby the braid - added after heat treatment).



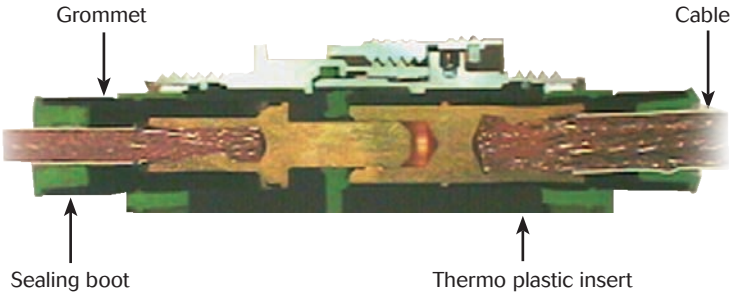
Braid : active part of the socket

20 contact points on the pin for a #4 contact

Cut of a contact mated pair

A versatile individual sealing on the cable

- Sealing on the cable done thanks to a sealing boot,
- Same connector can accomodate a wild range of cable diameter.



Longitudinal cut of a connector

A contact technology integrated in well proven standard aeromil connectors

- Up to 260°C service temperature,
- Up to 60G vibration withstanding.

8D Power Series

Description

- Quick screw coupling connector with removable crimp contact.
- Designed to be used in severe environments, fluid resistance, high shock and vibration.
- Shell available in, aluminium, composite, Stainless steel, Titanium & Bronze.
- Six layouts with different current rating.
- Consult us for power hermetic version.

Applications

- Power supply in harsh environment: Electro Hydraulic actuator on Aircraft wings, Electro Mechnical actuator for Aircraft Thrust Reverser…

Technical features

Mechanical

- **Shell:** Aluminum alloy, Composite, Bronze, Stainless steel, Titanium.
- **Plating:**
  - Olive green cadmium (W/J),
  - Nickel (F/M/TF/S),
  - Without plating (X for composite, TT for titanium and JVS for Bronze),
  - Passivated (K).
- **Grommet and seal:** Silicon elastomer.
- **Insulator:** Thermoset.
- **Contact body:** Copper Alloy.
- **Contact retention:**
  #4 = 200N
  #8 = 111N.
- **Shock:** 300g during 3ms.
- **Endurance:** 500 mating / unmating operations.
- **Vibration:** As per MIL DTL 38999.

Electrical

- **Dielectric withstanding:**
  Test voltage rating (Vrms).

Service	Sea level	at 21 000 m
M	1 300	800
I	1 800	1 000

- **Insulation Resistance:**
  5000 MΩ under 500 Vdc.
- **Max current rating per contact:**
  #4 = 80A
  #8 = 45A.
- **Contact resistance:**
  #4 = 2mΩ
  #8 = 3MΩ.
- **Shielding:** As per MIL DTL 38999.
- **Electrical continuity:**
  W = 2.5 mΩ,
  F = 1mΩ,
  J, M = 3 mΩ,
  JVS = 5 mΩ.

Environmental

- **Temperature range:**
  W, J, X, JVS = - 65°C +175°C,
  F, M, K, S, TT, TF = - 65°C +200°C.
- **Sealing:** As per MIL DTL 38999.
- **Damp Heat:** As per MIL DTL 38999.
- **Salt Spray:**
  W, TT, TF, K, JVS = 500 hours,
  F, S = 48 hours,
  J,M,X = 2000 hours.
- **Fire resistance:**
  As per EN 2591 - c 17 method A.
- **Resistance to fluid:**
  As per MIL DTL 38999.

8D Power Series

Ordering information

Basic Series	8D	0	-	11	W	80	P	N	251

Style:
0: Square flange receptacle
5: Plug with RFI shielding
7: Jam nut receptacle

Type: Crimp contact

Shell size: 11 - 17 - 21 - 25

Plating (according shell material - see below):
Aluminum shell:
W: Olive green cadmium
F: Nickel
Composite shell:
J: Olive green cadmium
M: Nickel
X: Without plating
Stainless steel shell:
K: Corrosion resistant
S: Nickel
Titanium shell:
TT: Without plating
TF: Nickel

Contact layouts: See p.8

Contact style:
P: Pin contact
S: Socket contact
A: Male connector supplied without contact
B: Female connector supplied without contact

Orientation: N - A - B - C - D - E

Specification:
251: To be added for some layouts to be supplied with power contacts (see page 8)

Ordering information (Marine Bronze serie)

Basic Series	JVS	16	A	11	80	P	N	251

Style:
00: Square flange receptacle
07: Jam nut receptacle
16: Plug

Material:
A: Bronze shell material

Shell size: 11 - 17 - 21 - 25

Contact layouts: See p.8

Contact style:
P: Pin contact
S: Socket contact
A: Male connector supplied without contact
B: Female connector supplied without contact

Orientation: N - A - B - C - D - E

Specification:
251: To be added for some layouts to be supplied with power contacts (see page 8)

8D Power Series

Layouts

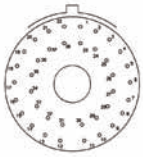
11

80*
Spec 251

1#8

17

02*
Spec 251

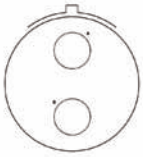


38#22
1#8

22*
Spec 251

2#12
2#8

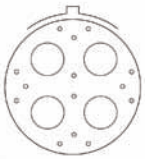
75*
Spec 251



2#8

19

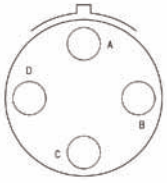
18*
Spec 251



14#22
4#8

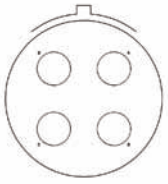
21

48



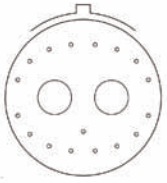
4#8

75*
Spec 251



4#8

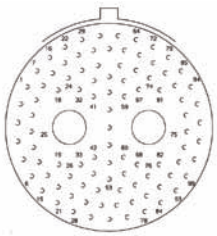
78*
Spec 251



17#22
4#8

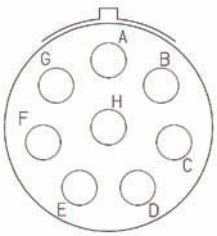
25

07*
Spec 251



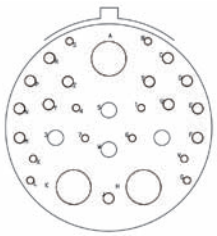
97#22
2#8

08*
Spec 251



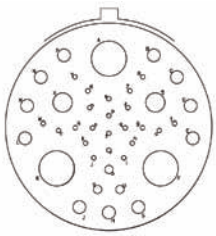
8#8

20*
Spec 251



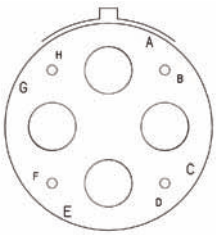
10#20
13#16
4#12
3#8

41*
Spec 251



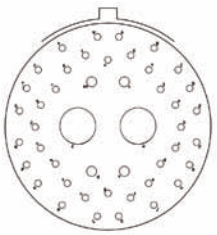
22#22
3#20
11#16
2#12
3#8

44



4#16
4#4

46*
Spec 251

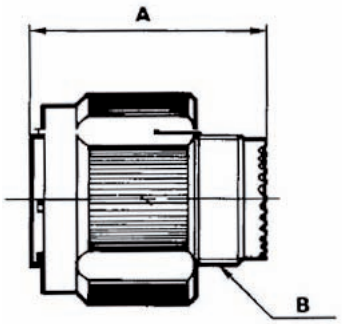


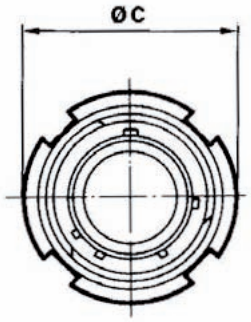
40#20
4#16
2#8

* For classes F, W, K, S only

8D Power Series

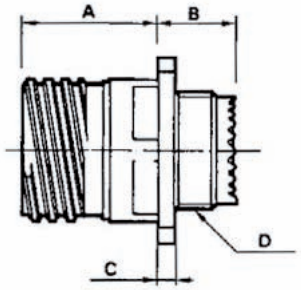
Dimension plug type 5 - for all material

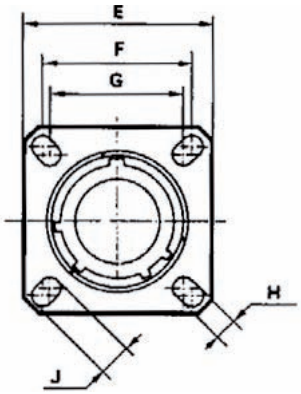




Shell size	11	17	21	25
A max	31	31	31	31
B (thread)	M 15x1-6g	M 25x1-6g	M 31x1-6g	M 37x1-6g
C max	25.00	36.5	42.5	48.4

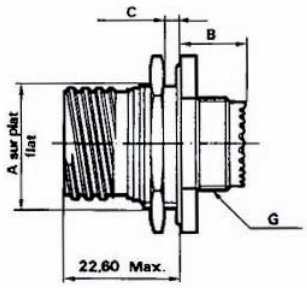
Dimension receptacle type 0 - for all material

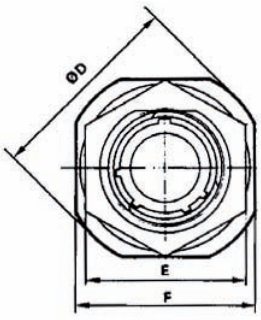




Shell size	11	17	21	25
A max	20.83	20.83	20.10	20.10
B max	12.00	12.00	12.00	12.00
C max	2.50	3.65	4.35	4.35
D (thread)	M 15x1-6g	M 25x1-6g	M 31x1-6g	M 37x1-6g
E ±0.3	26.20	33.30	39.70	46.00
F	20.62	26.97	31.75	38.10
G	18.26	24.61	29.36	34.93
H ±0.20	3.25	3.25	3.25	3.91
J ±0.20	4.93	4.93	4.93	6.15

Dimension Jam nut type 7 - for all material (excepted composite)



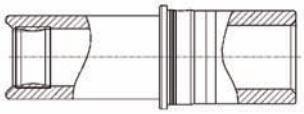


Shell size	11	17	21	25
A +0.10 -0.15	19.07	30.18	36.50	42.85
B max	9.90	9.90	9.90	9.90
C max	3.20	3.20	3.20	3.20
D max	35.20	44.80	52.70	59.00
E max	27.00	37.00	46.00	51.23
F 0.4	31.80	41.30	49.20	55.60
G (thread)	M 15x1-6g	M 25x1-6g	M 31x1-6g	M 37x1-6g

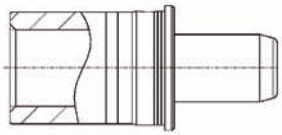
8D Power Series

Contacts

Socket contact



Pin contact



Contact size	Contact type	Contact reference	Cable		Protection	Dimensions	
			Cable size	Cable material		L	D
#4	Male	8599-7534	#4-5 or 10-16mm² **	Copper	Au	9.70	5.74
	Female	8599-7535				16.58	8.50
	Male	8599-7598 900 *	for cable 25mm² (#3)	Copper	Au	9.70	5.74
	Female	8599-7599 900 *				16.58	8.50
#4 with reduced barrel	Male	8599-7528 900	#6 or 10mm² **	Copper	Au	9.70	5.74
	Female	8599-7529 900				16.58	8.50
#8 JVS only	Male	8599-7544	#8 or 10 **	Copper	Au	9.60	3.64
	Female	8599-7541				16.00	7.30
#8	Male	8599-7580	#8 or 10 **	Copper	Au	9.60	3.64
	Female	8599-7581				16.00	7.30

* Not included in connector P/N. Must be ordered separately.
** To be used with crimping bucket reductor.

Sealing boot and crimping bucket reducer

Contact size	Cable size	Cable material	Sealing boot reference
#4	16mm²	Copper	8599-4594
	10mm²		8599-4593
#8	#8	Copper	8599-4542
	#10		8599-4547

Contact size	Cable size	Reducing sleeve reference
#4	10mm²	8400-2352A
#8	#10	8599-7545

8D Power Series

Tooling

Contact size	Contact type	Contact reference	Cable AWG	Crimping tool	Die set	Locator	Contact extraction tool (metallic)	Contact extraction tool (plastic)
#4	Male	8599-7534	#4-5 or 10-16mm² *	M22520/23-01	M22520/23-04	M22520/23-11	8533-8175	M81969/14-07
	Female	8599-7535	#4-5 or 10-16mm² *	M22520/23-01	M22520/23-04	M22520/23-11	8533-8175	M81969/14-07
#8 JVS only	Male	8599-7544	#8 or 10 *	M22520/23-01	M22520/23-02	8599-9601	8660-197	M81969/14-12
	Female	8599-7541	#8 or 10 *	M22520/23-01	M22520/23-02	8599-9601	8660-197	M81969/14-12
#8	Male	8599-7580	#8 or 10 *	M22520/23-01	M22520/23-02	8599-9601	8660-197	M81969/14-12
	Female	8599-7581	#8 or 10 *	M22520/23-01	M22520/23-02	8599-9601	8660-197	M81969/14-12

Manual hand tool also existing fo power contacts #8.
* To be used with crimping bucket reductor.

Automatic tool for contacts #4 & #8

Crimping tool (M22520/23-01)

Die set (M22520/23-02)

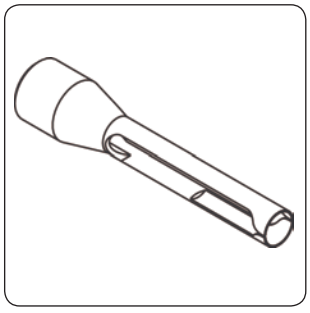
Locator (M22520/23-11)

Manual hand tool for contacts #8

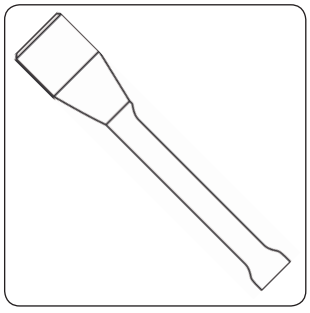
Crimping tool (M300 BT)

Locator (SP 593)

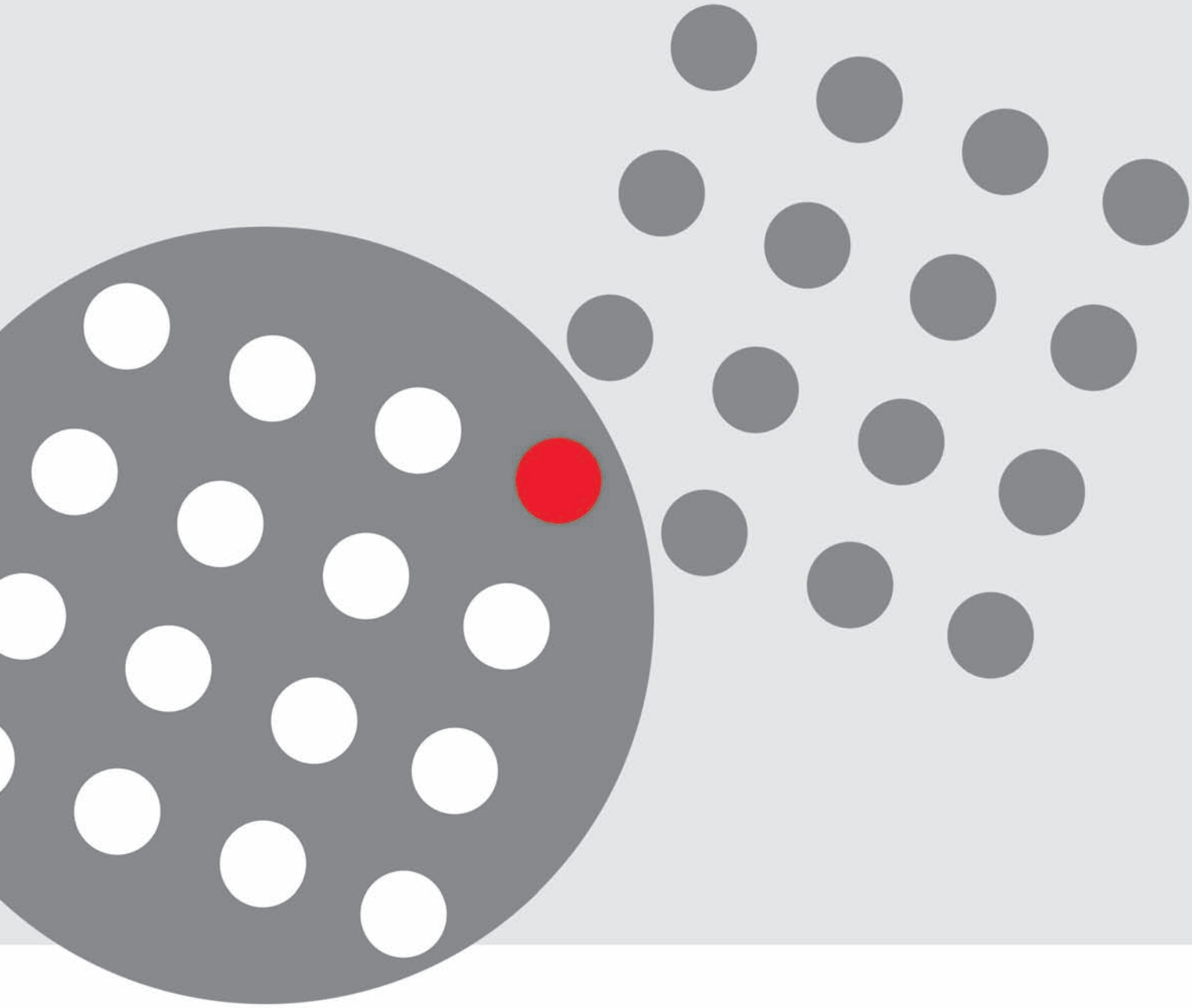
Extraction tool



Metallic extraction tool
for #4 (8533-8175)



Metallic extraction tool
for #8 (8660-197)



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contactmilaero@souriau.com

SOURIAU
Connection Technology

LifeElectronics
Живое партнерство

ООО «ЛайфЭлектроникс» **“LifeElectronics” LLC**

ИНН 7805602321 КПП 780501001 Р/С 40702810122510004610 ФАКБ "АБСОЛЮТ БАНК" (ЗАО) в г.Санкт-Петербурге К/С 30101810900000000703 БИК 044030703

Компания «Life Electronics» занимается поставками электронных компонентов импортного и отечественного производства от производителей и со складов крупных дистрибьюторов Европы, Америки и Азии.

С конца 2013 года компания активно расширяет линейку поставок компонентов по направлению коаксиальный кабель, кварцевые генераторы и конденсаторы (керамические, пленочные, электролитические), за счёт заключения дистрибьюторских договоров

Мы предлагаем:

- *Конкурентоспособные цены и скидки постоянным клиентам.*
- *Специальные условия для постоянных клиентов.*
- *Подбор аналогов.*
- *Поставку компонентов в любых объемах, удовлетворяющих вашим потребностям.*

- *Приемлемые сроки поставки, возможна ускоренная поставка.*
- *Доставку товара в любую точку России и стран СНГ.*
- *Комплексную поставку.*
- *Работу по проектам и поставку образцов.*
- *Формирование склада под заказчика.*

- *Сертификаты соответствия на поставляемую продукцию (по желанию клиента).*
- *Тестирование поставляемой продукции.*
- *Поставку компонентов, требующих военную и космическую приемку.*
- *Входной контроль качества.*
- *Наличие сертификата ISO.*

В составе нашей компании организован Конструкторский отдел, призванный помогать разработчикам, и инженерам.

Конструкторский отдел помогает осуществить:

- *Регистрацию проекта у производителя компонентов.*
- *Техническую поддержку проекта.*
- *Защиту от снятия компонента с производства.*
- *Оценку стоимости проекта по компонентам.*
- *Изготовление тестовой платы монтаж и пусконаладочные работы.*

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Email: org@lifeelectronics.ru

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