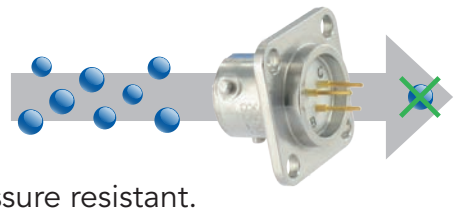
8525 Series
Hermetic Connectors

Hermetic and Small Bayonet Connectors EN3646 Standard Qualified

Combination of pressure robustness and compacity. For sensors and space constrained applications.

High pressure performance

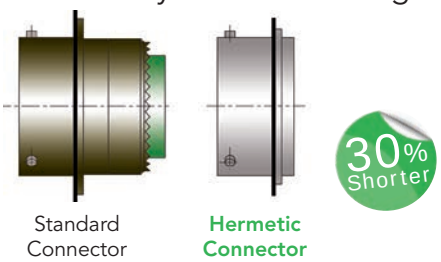
- Glass to metal sealing.
  Helium leakage of less than 10^{-7} atm.cm^3/s.



Pressure resistant.

Compact design

- No rear accessory thread and no grommet.



Standard Connector

Hermetic Connector

High environmental performance

- Robust and corrosion resistant stainless shell.
  Rated for up to 200°C use.

SOURIAU
Connection Technologies

Description

- EN3646 standard qualified robust bayonet coupling according to HE302 standard
- Glass sealed hermetic
- Compact low profile - 30% shorter than the standard version
- Solder cup contacts as well as PCB contacts
- Specific fuel tank version for long term fuel immersion
- Specific large square flange option to adapt an O'ring for an improved panel to connector sealing

Technical features

Mechanical

- **Shell:**
  Passivated stainless steel
- **Seals:**
  Silicone elastomer
- **Contact:**
  Gold plated ferrous alloy
- **Shock:**
  As per EN3646
- **Endurance:**
  500 mating/unmating operations
- **Vibrations:**
  5Hz to 3000Hz at constant acceleration of 10g (3 x 4 hours)

Electrical

- **Max current rating per contact:**

Contact size	20	16	12
Rating (A)	5	10	17

- **Dielectric withstanding voltage:**

Service	Sea level	21 000 m
I	1 500 Vrms	375 Vrms
II	2 300 Vrms	500 Vrms

- **Shell continuity:**
  ≤ 50 mΩ
- **Contact resistance at rated current:**
  Maximum initial contact resistance at ambient temperature

Contact size	20	16	12
Resistance mΩ	12	8	5

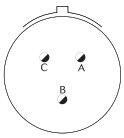
Environmental

- **Operating temperature:**
  -65°C to 200°C
- **Hermeticity:**
  10^{-7} atm.cm³/s (helium gas test)
- **Salt spray:**
  48 hours min. as per EN3646
- **Resistance to fluids (standard):**
  As per EN3646, including fuel, hydraulic fluids and oils
- **Fuel immersion version:**
  . JP5 long term immersion
  . 105°C maximum

Contact layouts

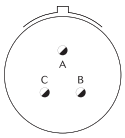
08

B3A



3#20
Service I

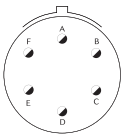
B33



3#20
Service I

10

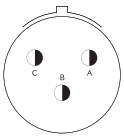
B6



6#20
Service I

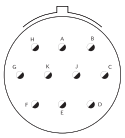
12

B3



3#16
Service II

B10

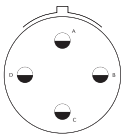


10#20
Service I

Contact #20
Contact #16
Contact #12

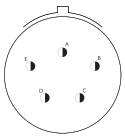
14

B4



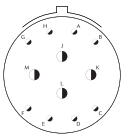
4#12
Service I

B5



5#16
Service II

B12

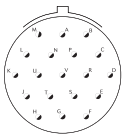


8#20
4#16
Service I

B15

14#20
1#16
Service I

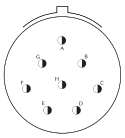
B19



19#20
Service I

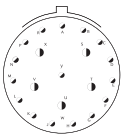
16

B8



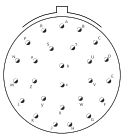
8#16
Service II

B21



16#20
5#16
Service I

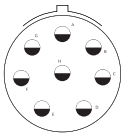
B26



26#20
Service I

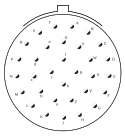
18

B8



8#12
Service I

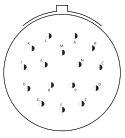
B32



32#20
Service I

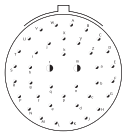
20

B16



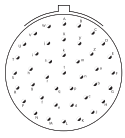
16#16
Service II

B39



37#20
2#16
Service I

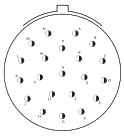
B41



41#20
Service I

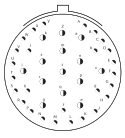
22

B21



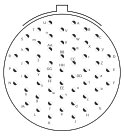
21#16
Service II

B41



27#20
14#16
Service I

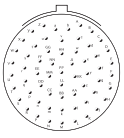
B55



55#20
Service I

24

B61



61#20
Service I

Contact layouts (matrix)

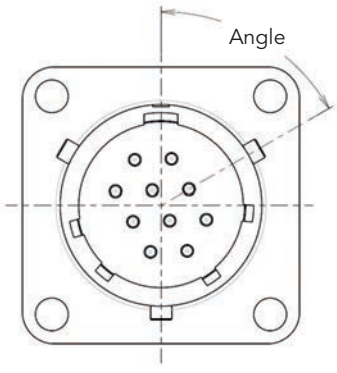
Shell size	Layout	Hermetic 8525	Hermetic EN3646	8525 spec. 002	8525 spec. 022	8525 spec. A76	Number of contacts		
							#20	#16	#12
08	8B3A	OK	Q	OK	OK		3		
	8B33	OK	Q	OK			3		
10	10B6	OK	Q	OK			6		
12	12B3	OK	Q	OK				3	
	12B8	Available on request, please consult us					8		
	12B10	OK	Q	OK	OK	OK	10		
14	14B4	OK	Q	OK	OK				4
	14B5	OK	Q	OK				5	
	14B12	OK	Q	OK			8	4	
	14B15	OK	Q	OK			14	1	
	14B19	OK	Q	OK	OK	OK	19		
16	16B8	OK	Q	OK				8	
	16B21	OK	Q	OK			16	5	
	16B23	Available on request, please consult us					22	1	
	16B26	OK	Q	OK	OK		26		
18	18B8	OK	Q	OK					8
	18B11	Available on request, please consult us						11	
	18B32	OK	Q	OK			32		

Shell size	Layout	Hermetic 8525	Hermetic EN3646	8525 spec. 002	8525 spec. 022	8525 spec. A76	Number of contacts		
							#20	#16	#12
20	20B16	OK	Q	OK				16	
	20B34	Available on request, please consult us					26	8	
	20B39	OK		OK			37	2	
	20B41	OK	Q	OK	OK	OK	41		
22	22B12	Available on request, please consult us							12
	22B21	OK	Q	OK				21	
	22B41	OK	Q	OK			27	14	
	22B55	OK	Q	OK	OK		55		
24	24B19	Available on request, please consult us							19
	24B31	Available on request, please consult us						31	
	24B61	OK	Q	OK			61		

OK = SOURIAU's layout
Q = SOURIAU's qualified layout

Orientation

Polarization code



Viewed from receptacle front face.
Insulator rotated inside metal body.

Shell size	Layout	N	W	X	Y	Z
08	B3A	0	60	210	-	-
	B33	0	90	-	-	-
10	B6	0	90	-	-	-
12	B3	0	140	220	180	-
	B10	0	60	155	270	295
14	B4	0	45	-	-	-
	B5	0	40	92	184	273
	B12	0	43	90	-	-
	B15	0	17	110	155	234
	B19	0	30	165	315	-

Shell size	Layout	N	W	X	Y	Z
16	B8	0	54	152	180	331
	B21	0	-	-	-	-
	B26	0	60	-	275	338
18	B8	0	180	-	-	-
	B32	0	85	138	222	265
20	B16	0	238	318	333	347
	B39	0	63	144	252	333
	B41	0	45	126	225	-
22	B21	0	16	135	175	349
	B41	0	39	135	264	-
	B55	0	30	142	226	314
24	B61	0	90	180	270	324

Ordering information

SOURIAU part numbers

Basic series	8525	IH	18B32	P	N	H

Shell type
IH: Solder mount receptacle
02H: Square flange receptacle
07H: Jam nut receptacle

Contact layout
See page 3

Contact type
P: Pin

Orientation
N, W, X, Y, Z - see previous page

Specification
H: Standard hermetic version
H002: Large flange - 02H version only
022: Fuel tank version
Other specification (PCB contacts): see page 10

EN3646 qualified products

Basic series	EN3646	Y	0	08	03	M	N

Mandatory suffix:
Y: Hermetic

Shell type:
0: Square flange receptacle
1: Solder mount receptacle
7: Jam nut receptacle

Shell size:
08, 10, 12, 14, 16, 18, 20, 22, 24

Contact layout:
See page 3

Contact type:
M: Pin

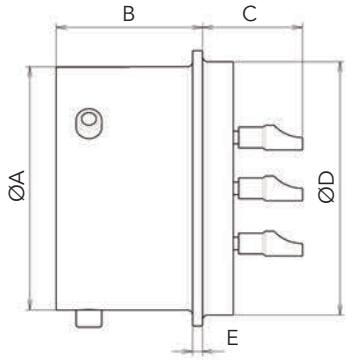
Orientation:
N, W, X, Y, Z - see previous page

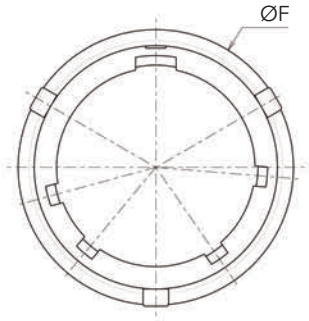
Maximum connector weights (in grams)

Shell type \ Shell size	8	10	12	14	16	18	20	22	24
Solder mount receptacle (type IH)	7	9	13	17	21	26	32	37	43
Square flange receptacle (type 02H)	10	12	16	21	26	33	41	47	55
Large square flange receptacle (type 02H spec. 002)	16	18	24	29	34	40	56	60	70
Jam nut receptacle (type 07H)	20	25	38	45	52	63	86	96	115

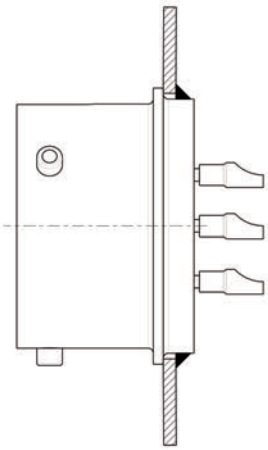
Dimensions

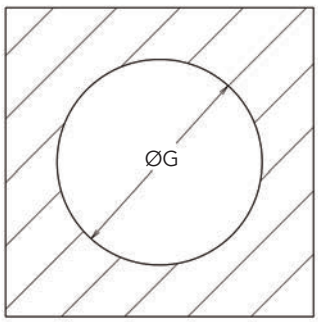
Solder mount receptacle (type IH)





Shell size	A max	B ±0.5	C max	D +0.02 -0.13	E ±0.14	F max	G +0.25 0
8	12.02	11.5	10	14.27	0.8	16.1	14.79
10	14.99	11.5	10	17.07	0.8	19.3	17.59
12	19.05	11.5	10	19.84	0.8	21.7	20.36
14	22.23	11.5	10	23.01	0.8	24.9	23.53
16	25.4	11.5	10	26.19	0.8	28.1	26.71
18	28.58	11.5	10	29.36	0.8	31.2	29.88
20	31.75	13.5	10	31.75	0.8	33.8	32.27
22	34.93	13.5	11	34.92	0.8	36.8	35.42
24	38.1	13.9	11	38.1	0.8	40	38.60

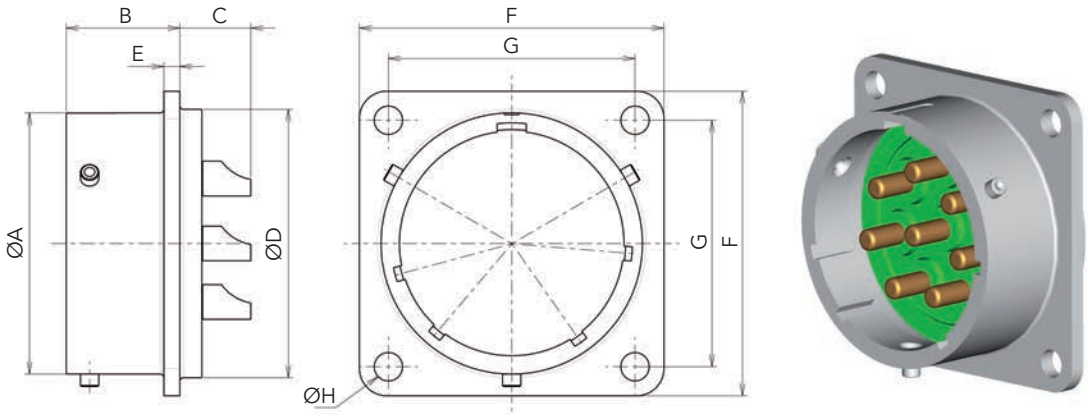




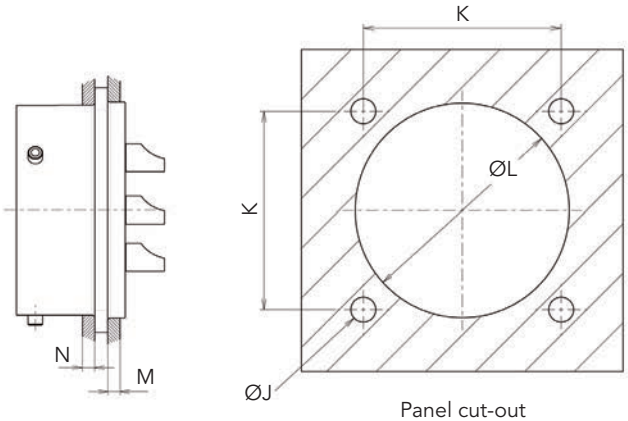
Panel cut-out

Note: All dimensions are in millimeters (mm)

Square flange receptacle (type 02H)



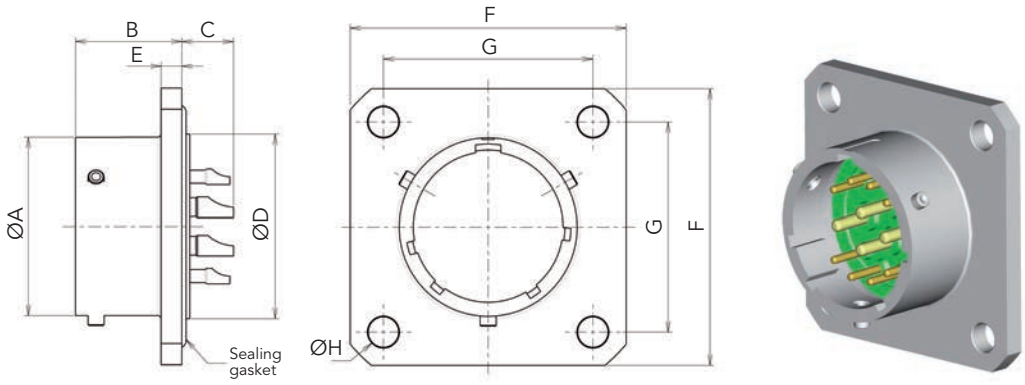
Shell size	A max	B ±0.55	C max	D +0 -0.3	E	F max	G	H ±0.15	J ±0.15	K	L +0 -0.3	M	N max
8	12.02	12.65	8.4	14.3	1.63±0.28	21.03	15.1	3.15	3.15	15.1	14.79	3.5	2.3
10	14.99	12.65	8.4	17.1	1.63±0.28	24.23	18.26	3.15	3.15	18.26	17.59	3.5	2.3
12	19.05	12.65	8.4	19.9	1.63±0.28	26.59	20.62	3.15	3.15	20.62	20.36	3.5	2.3
14	22.23	12.65	8.4	23.05	1.63±0.28	28.98	23.01	3.15	3.15	23.01	23.53	3.5	2.3
16	25.4	12.65	8.4	26.25	1.63±0.28	31.34	24.61	3.15	3.15	24.61	26.71	3.5	2.3
18	28.58	12.65	8.4	29.4	1.63±0.28	33.73	26.97	3.15	3.15	26.97	29.88	3.5	2.3
20	31.75	14.25	9.6	31.8	1.93±0.58	36.91	29.36	3.15	3.15	29.36	32.27	3.5	5.4
22	34.93	14.25	9.6	35	1.93±0.58	40.1	31.75	3.15	3.15	31.75	35.42	3.5	5.4
24	38.1	15.05	9.6	38.2	1.93±0.58	43.27	34.92	3.73	3.73	34.92	38.60	3.5	5.4



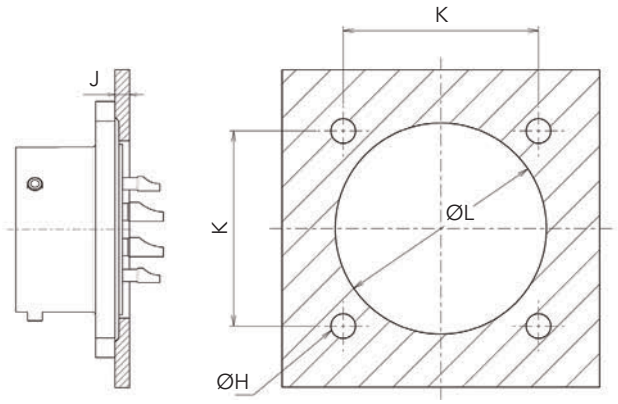
Panel cut-out

Note: All dimensions are in millimeters (mm)

Large square flange receptacle (type 02H spec. 002)



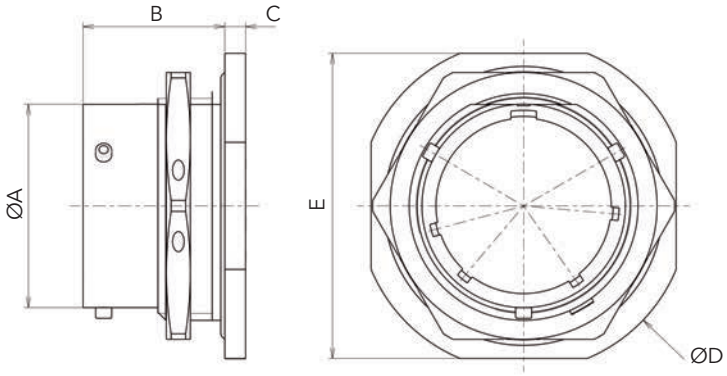
Shell size	A max	B max	C		D max	E max	F max	G	H	J	K	L $^{+0}_{-0.3}$
			#20	#12/#16								
8	12.02	13.14	6.8	-	14.27	2.6	26.4	18.1	3.8	3.5	18.1	14.79
10	14.99	13.14	6.8	-	17.06	2.6	28.9	20.62	3.8	3.5	20.62	17.59
12	19.05	13.14	6.8	7.1	19.83	2.6	32.1	23.82	3.8	3.5	23.82	20.36
14	22.23	13.14	6.8	7.1	23.01	2.6	34.5	26.18	3.8	3.5	26.18	23.53
16	25.4	13.14	6.8	7.1	26.18	2.6	36.8	28.57	3.8	3.5	28.57	26.71
18	28.58	13.14	6.8	7.1	29.36	2.6	38.8	30.55	3.8	3.5	30.55	29.88
20	31.75	15.84	6	6.3	31.74	3.4	42.8	32.94	3.8	3.5	32.94	32.27
22	34.93	15.84	6	6.3	34.92	3.4	44.8	34.92	3.8	3.5	34.92	35.42
24	38.1	16.64	5.2	5.5	38.09	3.4	47.9	38.1	3.8	3.5	38.1	38.60



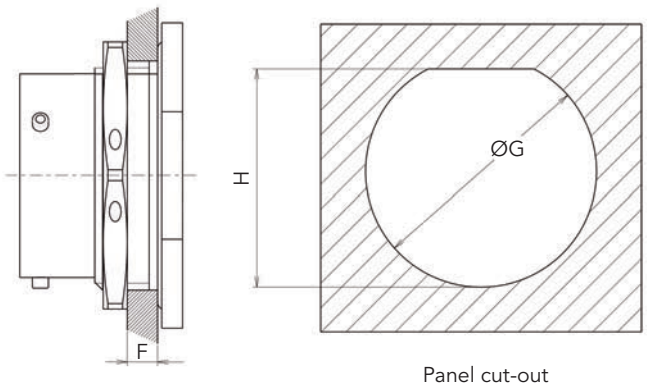
Panel cut-out

Note: All dimensions are in millimeters (mm)

Jam nut receptacle (type 07H)



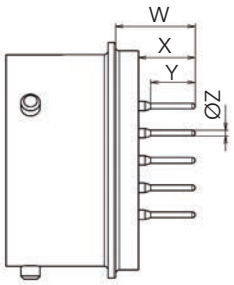
Shell size	A max	B max	C ±0.-5	D max	E ±0.25	F		G +0.25 -0	H +0.25 -0
						min	max		
8	12.02	18.34	2.4	27.37	23.82	1.57	4.75	14.4	13.48
10	14.99	18.34	2.4	30.57	26.97	1.57	4.75	17.58	16.66
12	19.05	18.34	2.4	35.32	31.75	1.57	4.75	22.6	20.8
14	22.23	18.34	2.4	38.5	34.92	1.57	4.75	25.52	23.95
16	25.4	18.34	2.4	41.67	38.1	1.57	4.75	28.7	27.1
18	28.58	18.34	2.4	44.85	41.27	1.57	4.75	31.87	30.27
20	31.75	23.12	3.2	49.62	46.02	1.57	6.35	35.05	33.45
22	34.93	23.12	3.2	52.77	49.22	1.57	6.35	38.22	36.62
24	38.1	23.95	3.2	55.97	52.37	1.57	5.56	41.4	39.8



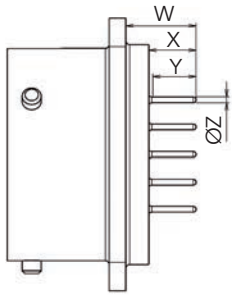
Panel cut-out

Note: All dimensions are in millimeters (mm)

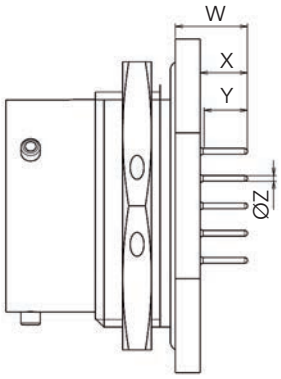
Contact variations



Type IH: Solder mount receptacle



Type 02H: Square flange receptacle



Type 07H: Jam nut receptacle

Type of contact	Specification	Shell type	Contact size	W Max	X Min	Y Min	Ø Z Max
Short PCB contact	005	IH	20	9.1	4.55	4.5	0.65
		02H	20	8.4	3.35	4.5	0.65
		07H	20	8.05	3.75	4.5	0.65
Long PCB contact	275	IH	20	13.87	8.5	6	0.65
		02H	20	12.9	7.3	6	0.65
		07H	20	12	7.7	6	0.65

Note: All dimensions are in millimeters (mm)

Gaskets

Shell size	Gasket for receptacle Type 0		O ring for receptacle Type 7	
	Part number	Material	Part number	Material
08	85251431	Fluoro silicone	AS3582-016	Silicone
10	85251432	Fluoro silicone	AS3582-018	Silicone
12	85251433	Fluoro silicone	AS3582-021	Silicone
14	85251434	Fluoro silicone	AS3582-023	Silicone
16	85251435	Fluoro silicone	AS3582-025	Silicone
18	85251436	Fluoro silicone	AS3582-027	Silicone
20	85251437	Fluoro silicone	AS3582-029	Silicone
22	85251438	Fluoro silicone	AS3582-030	Silicone
24	85251439	Fluoro silicone	AS3582-031	Silicone

For further information contact us at technical.emear@souriau.com (Europe - Asia - Africa)
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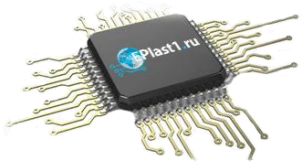
Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

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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