

### »» Features

- ☐ Mini ISO high power automotive relay 30A/50A.
- ☐ High temperature endurance up to 125 degree C.
- ☐ Optional SPNC, SPNO, SPDT, DPNO contact configurations.
- ☐ Optional to be equipped with protection diode or resistor.
- ☐ Both available PCB terminal and quick connect terminal versions.
- ☐ Available for plain cover type, skirted cover flanged cover, and weather proof versions.
- ☐ Tinned terminal is available on request.
- ☐ Comply with RoHS-Directive 2002/95/EC, and ELV-Directive 2000/53/EC.

### »» Type List

| Terminal style  | Contact form | Enclosure style |             |                      |
|-----------------|--------------|-----------------|-------------|----------------------|
|                 |              | Dust cover      | Flux tight  | Sealed type washable |
| Socket terminal | 1A (SPNO)    | 896-1AH-D       | 896-1AH-C   | 896-1AH-S            |
|                 |              | 896H-1AH-D      | 896H-1AH-C  | 896H-1AH-S           |
|                 | 1C (SPDT)    | 896-1CH-D       | 896-1CH-C   | 896-1CH-S            |
|                 |              | 896H-1CH-D      | 896H-1CH-C  | 896H-1CH-S           |
|                 | 2A (DPNO)    | 896-2AH-D       | 896-2AH-C   | 896-2AH-S            |
|                 |              | 896H-2AH-D      | 896H-2AH-C  | 896H-2AH-S           |
| PCB terminal    | 1A (SPNO)    | 896P-1AH-D      | 896P-1AH-C  | 896P-1AH-S           |
|                 |              | 896HP-1AH-D     | 896HP-1AH-C | 896HP-1AH-S          |
|                 | 1C (SPDT)    | 896P-1CH-D      | 896P-1CH-C  | 896P-1CH-S           |
|                 |              | 896HP-1CH-D     | 896HP-1CH-C | 896HP-1CH-S          |
|                 | 2A (DPNO)    | 896P-2AH-D      | 896P-2AH-C  | 896P-2AH-S           |
|                 |              | 896HP-2AH-D     | 896HP-2AH-C | 896HP-2AH-S          |

| Terminal style  | Contact form | Enclosure style             |                            |
|-----------------|--------------|-----------------------------|----------------------------|
|                 |              | Flanged cover ( dust cover) | Flanged cover (flux tight) |
| Socket terminal | 1A (SPNO)    | 896-1AH-D1                  | 896-1AH-C1                 |
|                 |              | 896H-1AH-D1                 | 896H-1AH-C1                |
|                 | 1C (SPDT)    | 896-1CH-D1                  | 896-1CH-C1                 |
|                 |              | 896H-1CH-D1                 | 896H-1CH-C1                |
|                 | 2A (DPNO)    | 896-2AH-D1                  | 896-2AH-C1                 |
|                 |              | 896H-2AH-D1                 | 896H-2AH-C1                |

| Terminal style  | Contact form | Enclosure style             |                            |
|-----------------|--------------|-----------------------------|----------------------------|
|                 |              | Steel bracket ( dust cover) | Steel bracket (flux tight) |
| Socket terminal | 1A (SPNO)    | 896-1AH-D1S                 | 896-1AH-C1S                |
|                 |              | 896H-1AH-D1S                | 896H-1AH-C1S               |
|                 | 1C (SPDT)    | 896-1CH-D1S                 | 896-1CH-C1S                |
|                 |              | 896H-1CH-D1S                | 896H-1CH-C1S               |
|                 | 2A (DPNO)    | 896-2AH-D1S                 | 896-2AH-C1S                |
|                 |              | 896H-2AH-D1S                | 896H-2AH-C1S               |

| Terminal style  | Contact form | Designation (provided with) | Enclosure style                         |                                                |
|-----------------|--------------|-----------------------------|-----------------------------------------|------------------------------------------------|
|                 |              |                             | Steel bracket ( dust cover with shroud) | Steel bracket ( dust cover with weather proof) |
| Socket terminal | 1C (SPDT)    | Resistor                    | 896H-1CH-D1SF-R1                        | 896H-1CH-D1SW-R1                               |

### Ordering Information

896      H      P      -      1CH      -      C      -      R1      -      T      001  
1          2          3          4          5          6          7          8

- 896 -- Basic series designation
- Blank -- Standard type  
H -- High power type
- Blank -- Socket terminal  
P -- PCB terminal
- 1AH -- Single pole normally open, contact material AgSnO  
1BH -- Single pole normally closed, contact material AgSnO  
1CH -- Single pole double throw, contact material AgSnO  
2AH -- Double pole double make, contact material AgSnO
- D -- Dust cover  
C -- Flux tight  
S -- Sealed type washable  
C1 -- Flanged cover (flux tight)  
D1 -- Flanged cover (dust cover)  
S1 -- Flanged cover (sealed type washable)
- Blank -- Standard type  
R1 -- Coil parallel with resistor 1/2W for 12V 680Ω , 24V 2700Ω
- Blank -- Standard type  
T -- Special requirement for Tin plated terminal
- Blank -- Standard type  
001 -- Coil parallel with diode IN4007 the positive pole on # 85 terminal  
002 -- Coil parallel with diode IN4007 the negative pole on # 85 terminal

## »» Contact Rating

| Type           | 896 1A    | 896 1B    | 896 1C                           | 896 2A      |
|----------------|-----------|-----------|----------------------------------|-------------|
| Resistive load | 40A 14VDC | 40A 14VDC | NO : 40A 14VDC<br>NC : 30A 14VDC | 2×15A 14VDC |

| Type           | 896H 1A                | 896H 1B                | 896H 1C                                                | 896H 2A                    |
|----------------|------------------------|------------------------|--------------------------------------------------------|----------------------------|
| Resistive load | 50A 14VDC<br>20A 28VDC | 40A 14VDC<br>15A 28VDC | NO : 50A 14VDC, 20A 28VDC<br>NC : 30A 14VDC, 15A 28VDC | 2×30A 14VDC<br>2×10A 28VDC |

## »» Coil Rating(DC)

| Rated voltage (V) | Rated current ±10 % at 23°C (mA) | Coil resistance ±10 % at 23°C (Ω) | Max. continuous Voltage at 85°C <sup>(1)</sup> | Pick up voltage(Max) at 23°C | Drop out voltage(Min) at 23°C | Power consumption at rated voltage |
|-------------------|----------------------------------|-----------------------------------|------------------------------------------------|------------------------------|-------------------------------|------------------------------------|
| 12                | 133                              | 90                                | 120 % of rated voltage                         | 65 % of rated voltage        | 10 % of rated voltage         | approx. 1.6W                       |
| 24                | 66.7                             | 360                               |                                                |                              |                               |                                    |
|                   |                                  |                                   |                                                |                              |                               |                                    |

Notes : (1) Without switching the load.

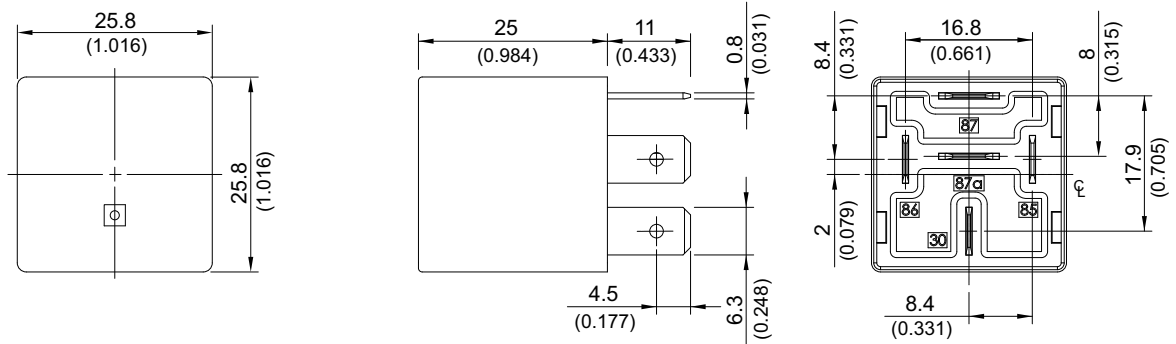
## »» Specification

|                                      |                          |                                                           |
|--------------------------------------|--------------------------|-----------------------------------------------------------|
| Contact material                     | AgSnO alloy              |                                                           |
| Contact voltage drop <sup>(1)</sup>  | Typ. 50mV at 10A         |                                                           |
| Insulation resistance <sup>(1)</sup> | 20MΩ Min. (DC 500V)      |                                                           |
| Operate time <sup>(1)</sup>          | 20ms Max.                |                                                           |
| Release time <sup>(1)</sup>          | 20ms Max.                |                                                           |
| Dielectric strength <sup>(1)</sup>   | Between open contact     | : AC 500V , 50/60Hz 1 min.                                |
|                                      | Between contact and coil | : AC 500V , 50/60Hz 1 min.                                |
| Vibration resistance                 | Operating extremes       | 10~55Hz , amplitude 2mm                                   |
| Shock resistance                     | Operating extremes       | 10G                                                       |
|                                      | Damage limits            | 100G                                                      |
| Life expectancy                      | Mechanical               | 10,000,000 operations<br>(frequency 18,000 operations/hr) |
|                                      | Electrical               | 100,000 operations<br>(frequency 1,200 operations/hr)     |
| Temperature range                    | Operating                | -40~+125°C (no freezing)                                  |
| Weight                               | Approx. 40 g             |                                                           |

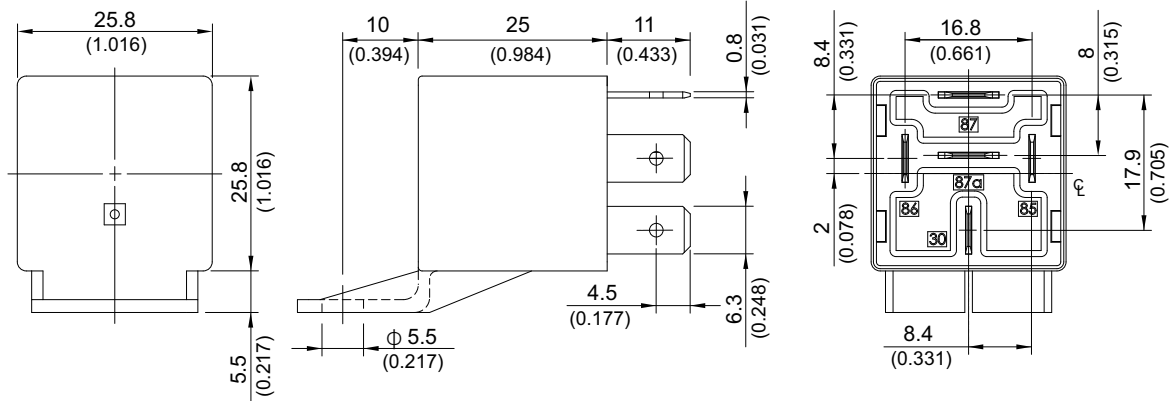
Note : (1) initial value

# Outline Dimensions

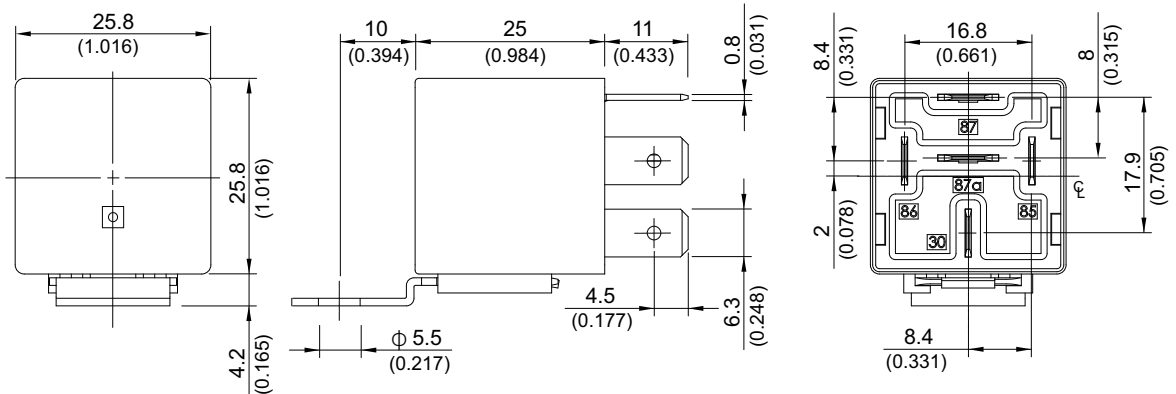
## ◆896,896H (C,D,S)



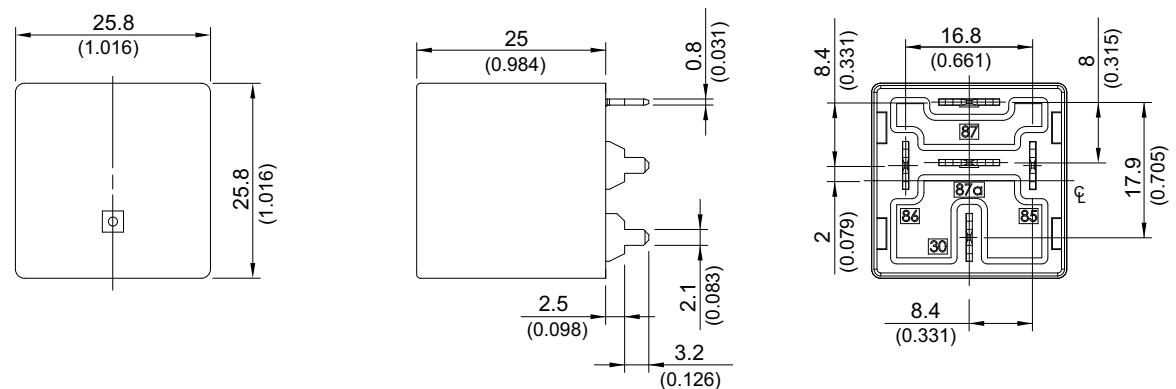
## ◆896,896H (C1,D1,S1)



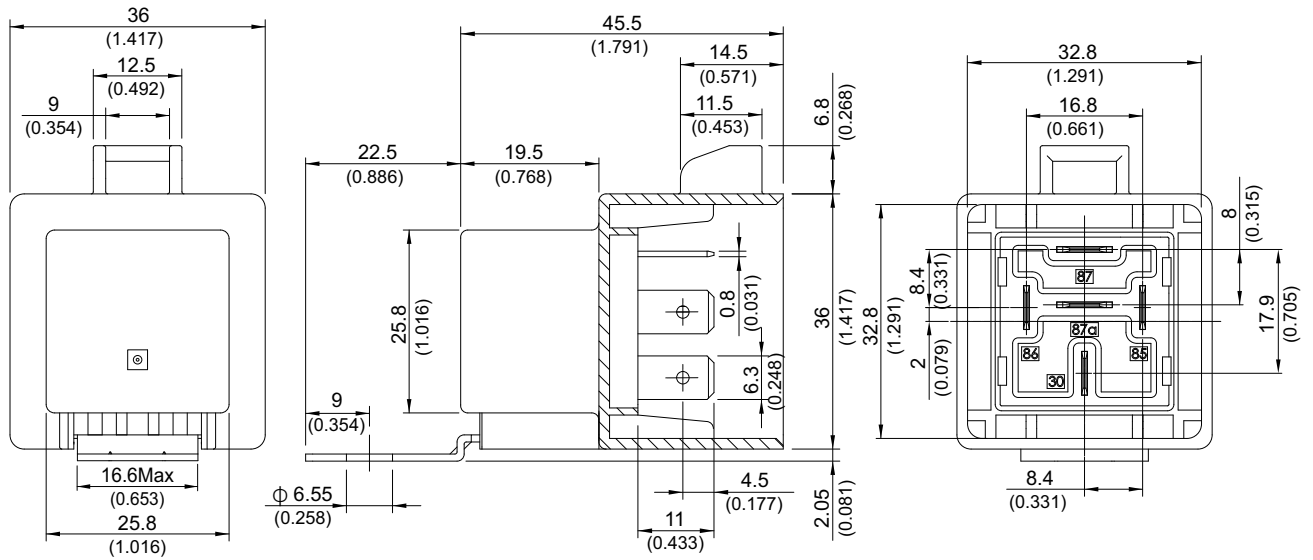
## ◆896,896H (C1S,D1S,S1S)



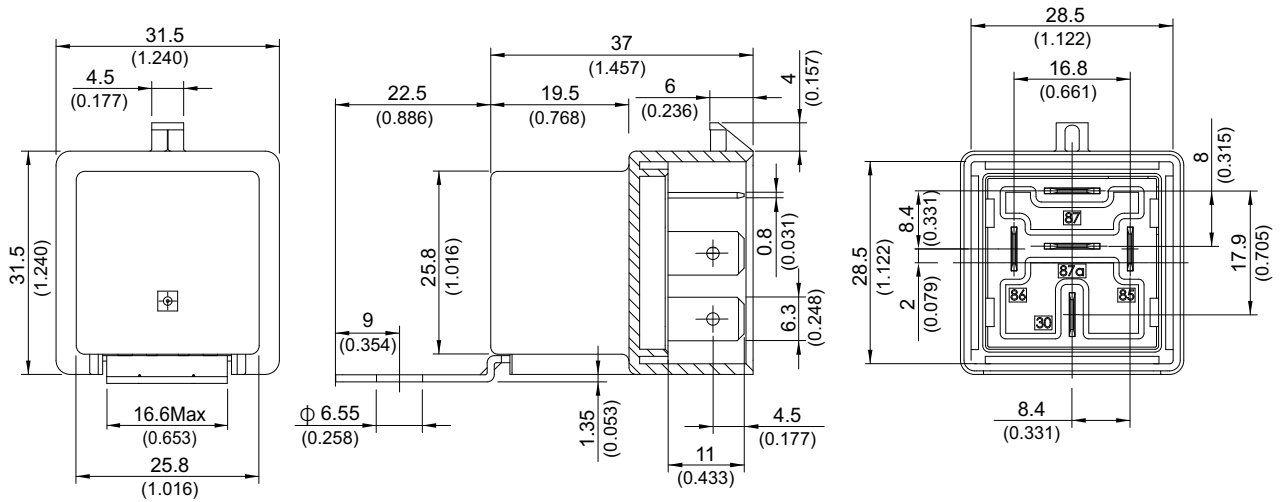
## ◆896P,896HP (C,D,S)



## ◆896H (D1SW)



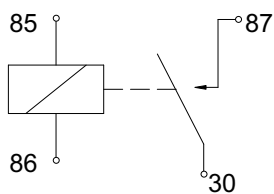
## ◆896H (D1SF)



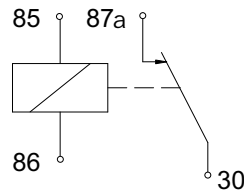
## »» Wiring Diagram

BOTTOM VIEW

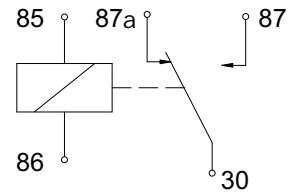
1A



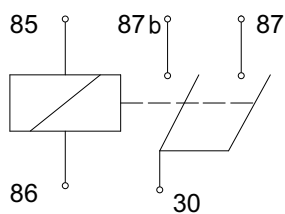
1B



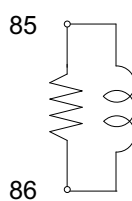
1C



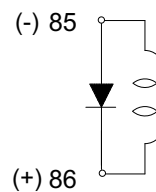
2A



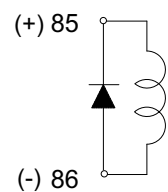
R1



001

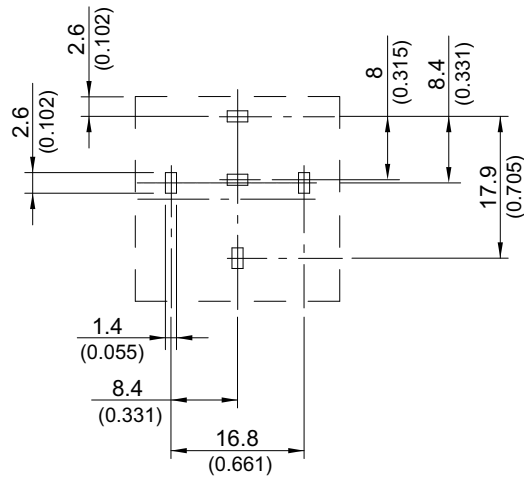


002

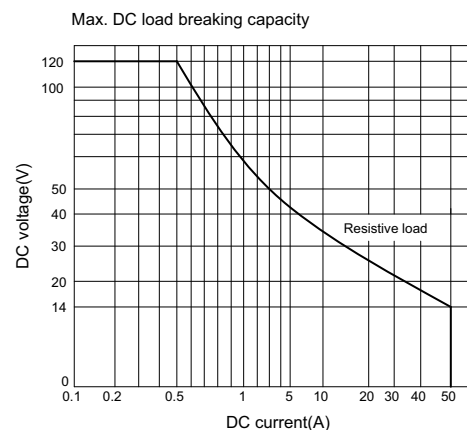
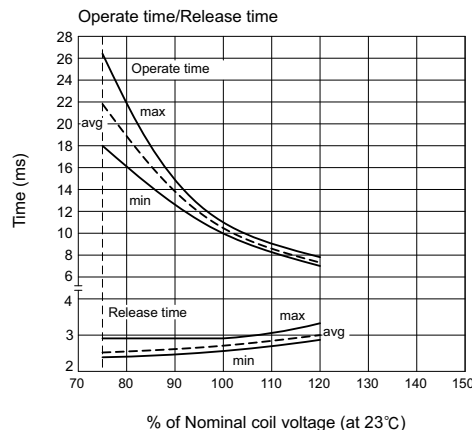
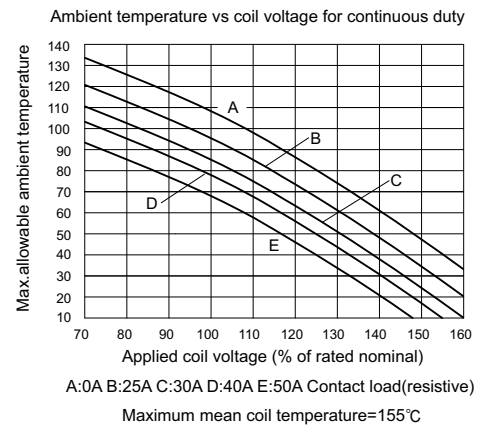
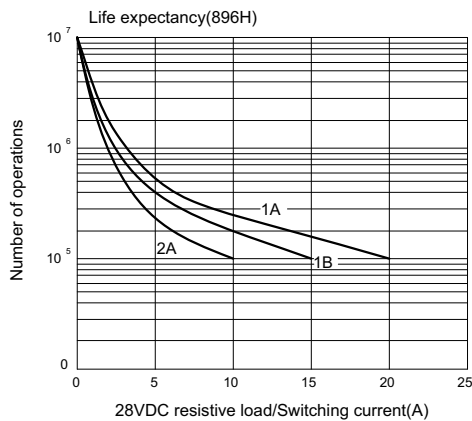
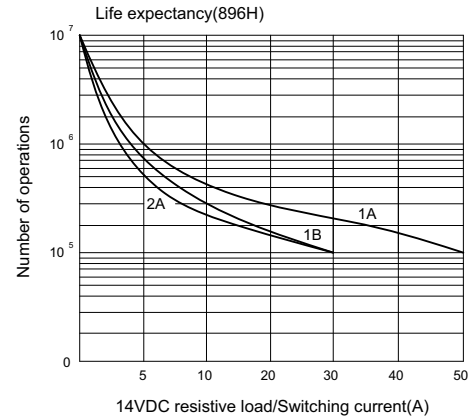
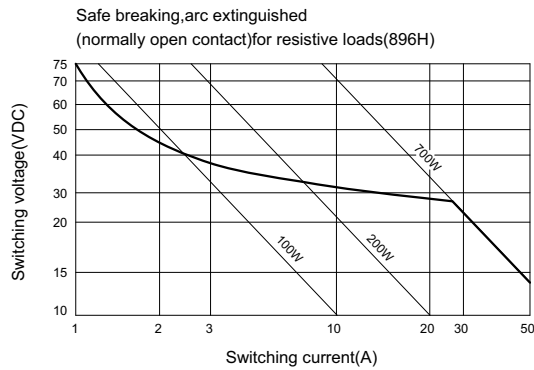


## »» PC Board Layout

BOTTOM VIEW



## »» Engineering Data



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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