



Multilayer Triplexer

For 698-960MHz / 1452-2170MHz / 2496-5850MHz

TPX252690MT-7029A1

2.5x2.0mm [EIA 1008]*

* Dimensions Code JIS[EIA]

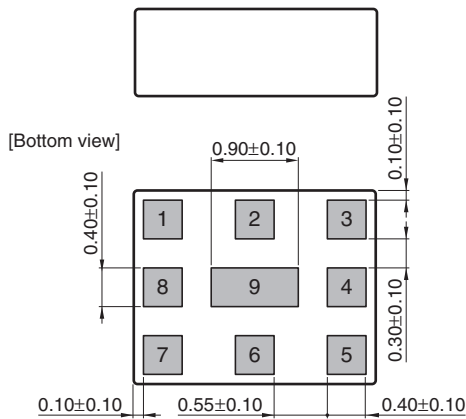
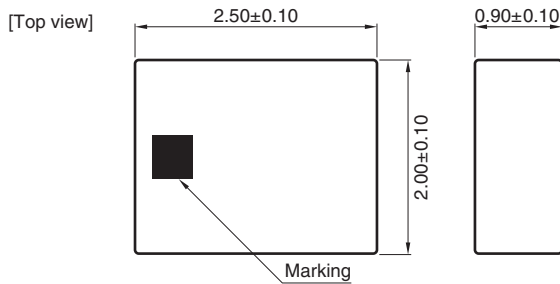
Multilayer Triplexer

Conformity to RoHS Directive

For 698-960MHz / 1452-2170MHz / 2496-5850MHz

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SHAPES AND DIMENSIONS

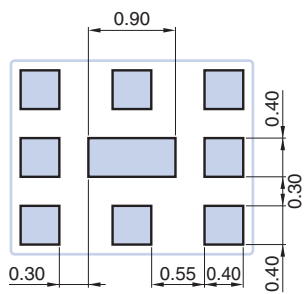


Terminal functions

| | |
|---|------------------|
| 1 | High-Band Port |
| 2 | GND |
| 3 | Middle-Band Port |
| 4 | GND |
| 5 | Low-Band Port |
| 6 | GND |
| 7 | Common Port |
| 8 | GND |
| 9 | GND |

Dimensions in mm

RECOMMENDED LAND PATTERN



Dimensions in mm

○ RoHS Directive Compliant Product: See the following for more details. <https://product.tdk.com/info/en/environment/rohs/index.html>

- All specifications are subject to change without notice.
- Before using these products, be sure to request the delivery specifications.

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ELECTRICAL CHARACTERISTICS

LOW-BAND

| Item | Frequency Range (MHz) | Min. | Typ. | Max. |
|---------------------------------------|-----------------------|------|--------------|---------------------|
| Insertion Loss (dB) | 698 to 960 | — | 0.43 | 0.70 |
| | 698 to 960 | — | 0.53 | 0.85 (–40 to +85°C) |
| Return Loss (dB) | 698 to 960 | 9.54 | 15.6 | — |
| Attenuation (dB) | 1452 to 1496 | 12 | 14 | — |
| | 1565 to 1606 | 15 | 18 | — |
| | 1710 to 2170 | 20 | 22 | — |
| | 2496 to 2690 | 20 | 31 | — |
| | 3400 to 3800 | 20 | 43 | — |
| | 4900 to 5850 | 20 | 35 | — |
| Isolation (dB) | -Mid 1452 to 1496 | 10 | 14 | — |
| | -Mid 1710 to 2170 | 18 | 22 | — |
| | -High 2496 to 2690 | 25 | 35 | — |
| Power Handling (W) | 698 to 960 | — | — | 1.5 |
| Characteristic Impedance (Ω) | | | 50 (Nominal) | |

· Ta: +25±5°C

MIDDLE-BAND

| Item | Frequency Range (MHz) | Min. | Typ. | Max. |
|---------------------------------------|-----------------------|------|--------------|---------------------|
| Insertion Loss (dB) | 1452 to 1496 | — | 1.66 | 2.30 |
| | 1710 to 2170 | — | 1.16 | 1.50 |
| | 1452 to 1496 | — | 1.79 | 2.50 (–40 to +85°C) |
| | 1710 to 2170 | — | 1.34 | 1.70 (–40 to +85°C) |
| Return Loss (dB) | 1452 to 1496 | 6.49 | 8.6 | — |
| | 1710 to 2170 | 9.54 | 22.6 | — |
| Attenuation (dB) | 698 to 960 | 23 | 27 | — |
| | 2496 to 2690 | 18 | 22 | — |
| | 3400 to 3800 | 20 | 23 | — |
| | 4900 to 5850 | 20 | 27 | — |
| Isolation (dB) | -Low 698 to 960 | 25 | 28 | — |
| | -High 2496 to 2690 | 18 | 21 | — |
| Power Handling (W) | 1452 to 1496 | — | — | 1.0 |
| | 1710 to 2170 | — | — | 1.0 |
| Characteristic Impedance (Ω) | | | 50 (Nominal) | |

· Ta: +25±5°C

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ELECTRICAL CHARACTERISTICS

HIGH-BAND

| Item | Frequency Range (MHz) | Min. | Typ. | Max. |
|---------------------------------------|-----------------------|------|--------------|---------------------|
| Insertion Loss (dB) | 2496 to 2690 | — | 1.40 | 1.84 |
| | 3400 to 3800 | — | 0.82 | 1.20 |
| | 4900 to 5850 | — | 0.16 | 0.50 |
| | 2496 to 2690 | — | 1.51 | 2.04 (−40 to +85°C) |
| | 3400 to 3800 | — | 0.89 | 1.40 (−40 to +85°C) |
| | 4900 to 5850 | — | 0.22 | 0.70 (−40 to +85°C) |
| Return Loss (dB) | 2496 to 2690 | 9.54 | 11.3 | — |
| | 3400 to 3800 | 7.71 | 9.2 | — |
| | 4900 to 5850 | 9.54 | 15.6 | — |
| Attenuation (dB) | 698 to 960 | 23 | 26 | — |
| | 1452 to 1496 | 30 | 39 | — |
| | 1710 to 2170 | 20 | 25 | — |
| Isolation (dB) | -Low 698 to 960 | 20 | 25 | — |
| | -Mid 1452 to 1496 | 28 | 32 | — |
| | -Mid 1710 to 2170 | 18 | 22 | — |
| Power Handling (W) | 2496 to 2690 | — | — | 1.0 |
| | 3400 to 3800 | — | — | 1.0 |
| | 4900 to 5850 | — | — | 2.0 |
| Characteristic Impedance (Ω) | | | 50 (Nominal) | |

· Ta: +25±5°C

TEMPERATURE RANGE

| Operating temperature (°C) | Storage temperature (°C) |
|----------------------------|--------------------------|
| −40 to +85 | −40 to +85 |

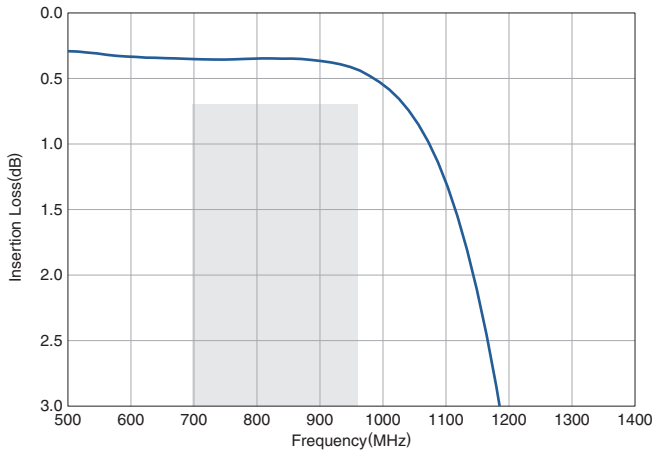
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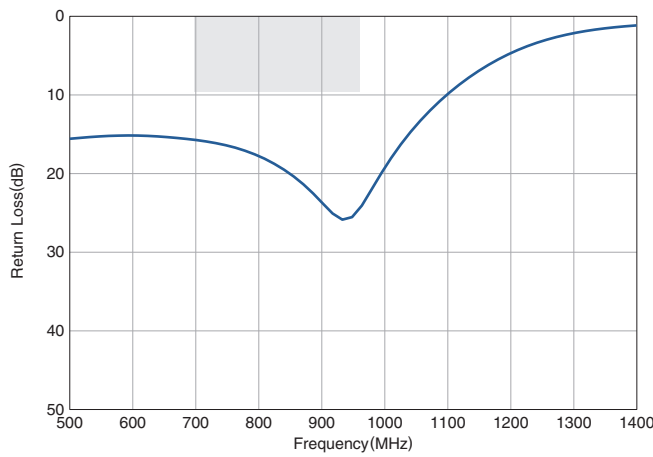
FREQUENCY CHARACTERISTICS

LOW-BAND

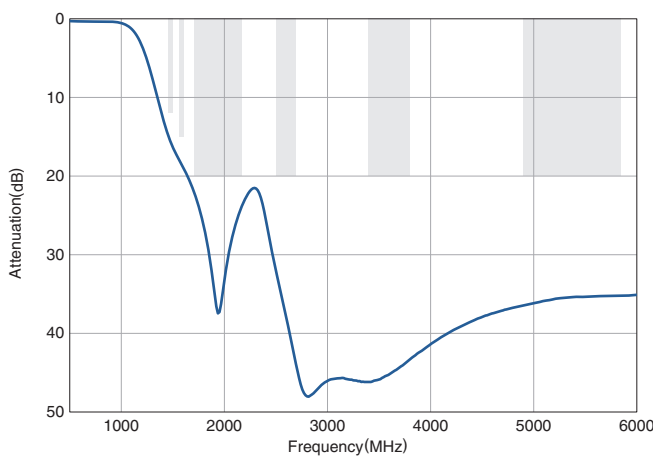
Insertion Loss



Return Loss

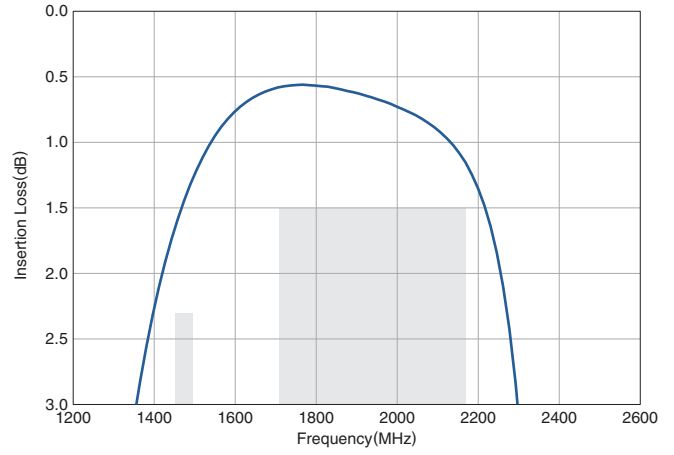


Attenuation

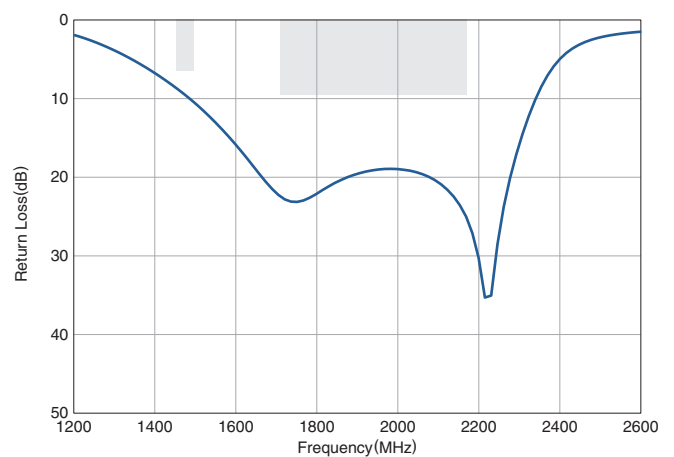


MIDDLE-BAND

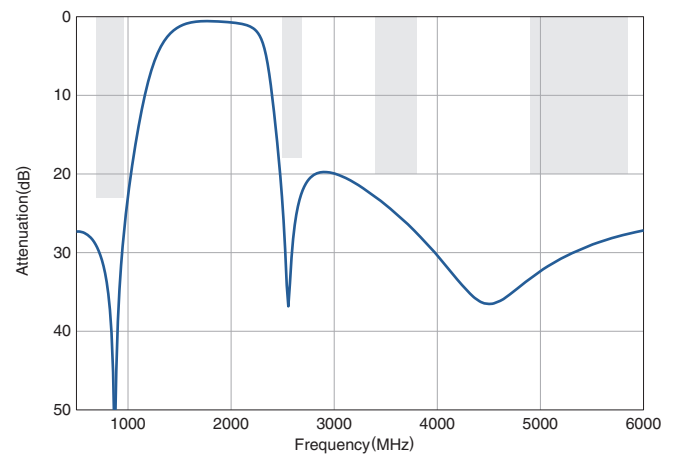
Insertion Loss



Return Loss



Attenuation



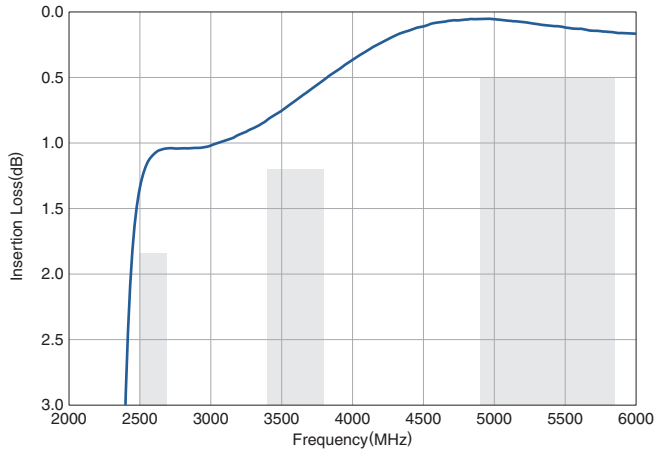
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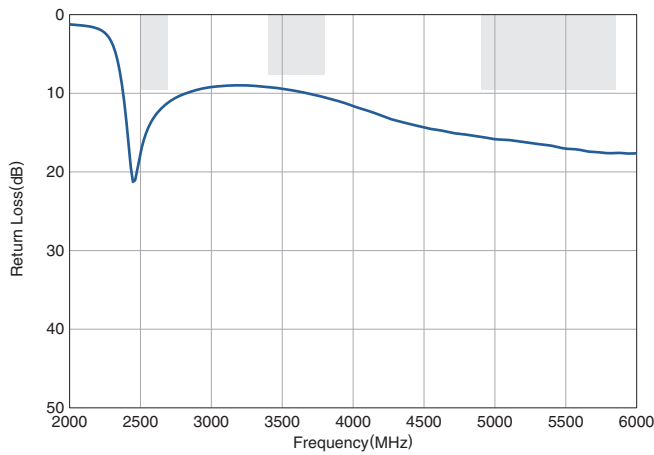
FREQUENCY CHARACTERISTICS

HIGH-BAND

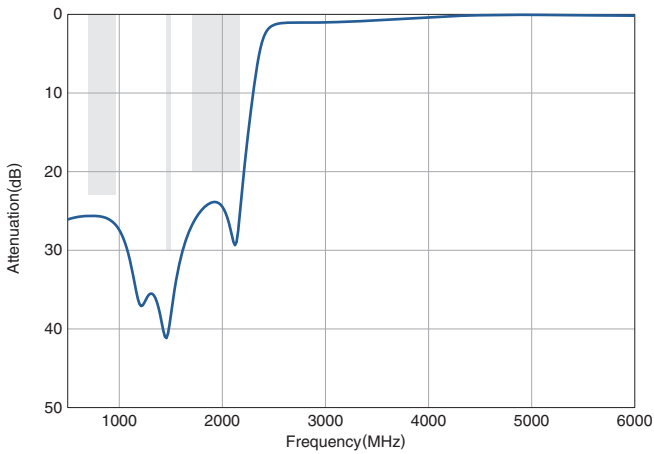
Insertion Loss



Return Loss



Attenuation



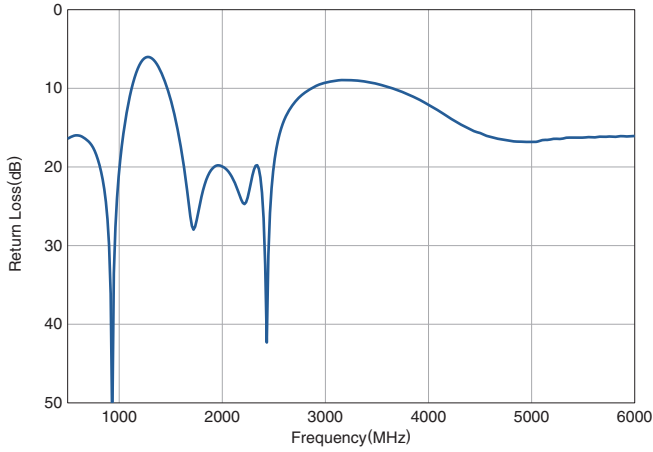
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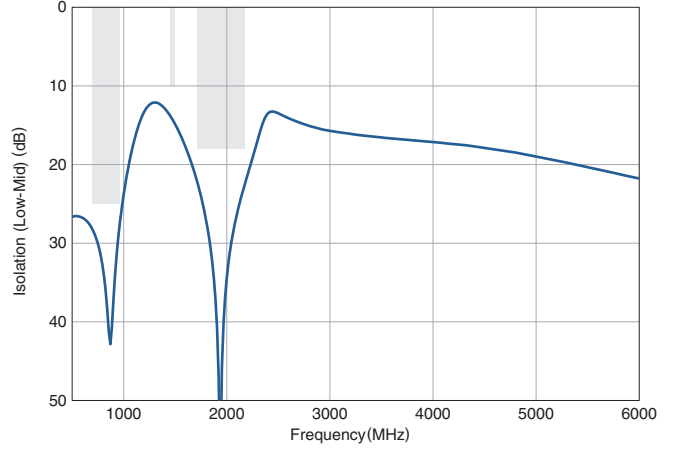
FREQUENCY CHARACTERISTICS

COMMON

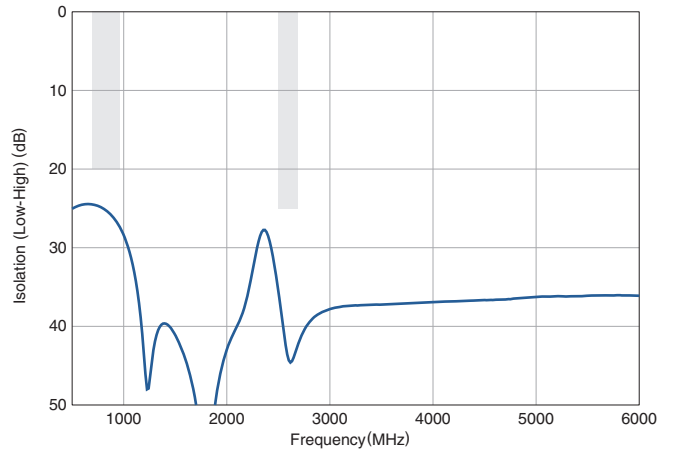
Return Loss



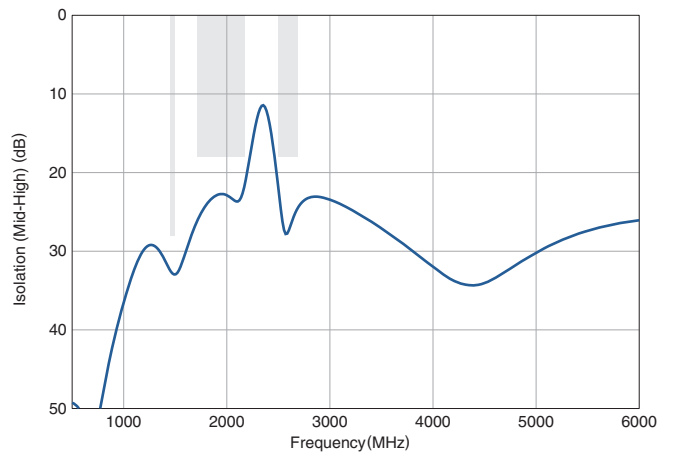
Isolation (Low-Mid)



Isolation (Low-High)



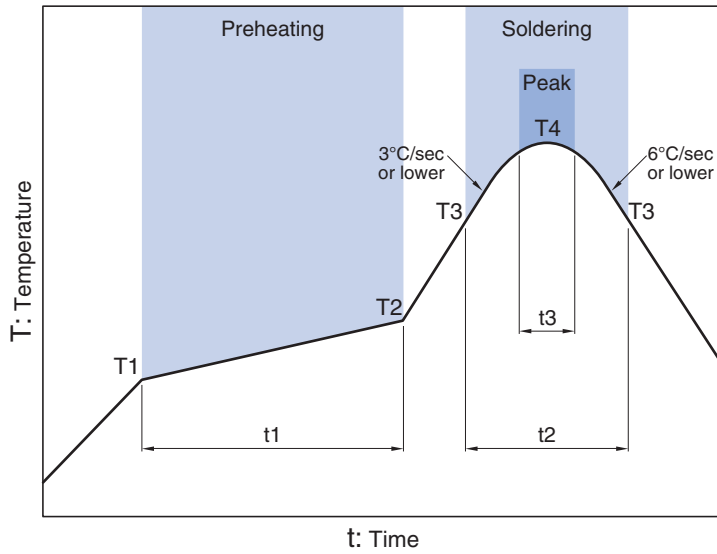
Isolation (Mid-High)



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RECOMMENDED REFLOW PROFILE



| Preheating | | | Soldering | | | |
|------------|-------|--------------|--------------------------|--------------|--------------|------------|
| | | | Critical zone (T3 to T4) | | Peak | |
| Temp. | Temp. | Time | Temp. | Time | Temp. | Time |
| T1 | T2 | t1 | T3 | t2 | T4 | t3* |
| 150°C | 200°C | 60 to 120sec | 217°C | 60 to 120sec | 240 to 260°C | 30sec max. |

* t3 : Time within 5°C of actual peak temperature
The maximum number of reflow is 3.

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REMINDERS FOR USING THESE PRODUCTS

Before using these products, be sure to request the delivery specifications.

SAFETY REMINDERS

Please pay sufficient attention to the warnings for safe designing when using these products.

REMINDERS

The products listed on this catalog are intended for use in general electronic equipment (AV equipment, telecommunications equipment, home appliances, amusement equipment, computer equipment, personal equipment, office equipment, measurement equipment, industrial robots) under a normal operation and use condition.

The products are not designed or warranted to meet the requirements of the applications listed below, whose performance and/or quality require a more stringent level of safety or reliability, or whose failure, malfunction or trouble could cause serious damage to society, person or property.

Please understand that we are not responsible for any damage or liability caused by use of the products in any of the applications below or for any other use exceeding the range or conditions set forth in this catalog.

- | | |
|---|--|
| (1) Aerospace/Aviation equipment | (8) Public information-processing equipment |
| (2) Transportation equipment (cars, electric trains, ships, etc.) | (9) Military equipment |
| (3) Medical equipment | (10) Electric heating apparatus, burning equipment |
| (4) Power-generation control equipment | (11) Disaster prevention/crime prevention equipment |
| (5) Atomic energy-related equipment | (12) Safety equipment |
| (6) Seabed equipment | (13) Other applications that are not considered general-purpose applications |
| (7) Transportation control equipment | |

When using this product in general-purpose applications, you are kindly requested to take into consideration securing protection circuit/equipment or providing backup circuits, etc., to ensure higher safety.

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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