Multilayer Diplexer
For 1565-1585MHz / 2400-2500MHz

DPX162500DT-8014A1

1.6x0.8mm [EIA 0603]*
* Dimensions Code JIS[EIA]
Multilayer Diplexer
For 1565-1585MHz / 2400-2500MHz

DPX162500DT-8014A1

SHAPES AND DIMENSIONS

[Top view]

[Bottom view]

Terminal functions:
1. Low-band
2. GND
3. High-band
4. Common

Dimensions in mm:

RECOMMENDED LAND PATTERN

EVALUATION BOARD

Line width should be designed to match 50Ω characteristic impedance, depending on PCB material and thickness.


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

#### LOW-BAND

<table>
<thead>
<tr>
<th>Item</th>
<th>Frequency Range (MHz)</th>
<th>Min.</th>
<th>Typ.</th>
<th>Max.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Insertion Loss (dB)</td>
<td>1565 to 1585</td>
<td>—</td>
<td>0.47</td>
<td>0.65</td>
</tr>
<tr>
<td>Return Loss (dB)</td>
<td>1565 to 1585</td>
<td>9.54</td>
<td>27.8</td>
<td>—</td>
</tr>
<tr>
<td>Attenuation (dB)</td>
<td>2400 to 2500</td>
<td>20</td>
<td>25.8</td>
<td>—</td>
</tr>
</tbody>
</table>

- Ta: +25±5°C

#### HIGH-BAND

<table>
<thead>
<tr>
<th>Item</th>
<th>Frequency Range (MHz)</th>
<th>Min.</th>
<th>Typ.</th>
<th>Max.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Insertion Loss (dB)</td>
<td>2400 to 2500</td>
<td>—</td>
<td>0.51</td>
<td>0.80</td>
</tr>
<tr>
<td>Return Loss (dB)</td>
<td>2400 to 2500</td>
<td>9.54</td>
<td>17.1</td>
<td>—</td>
</tr>
<tr>
<td>Attenuation (dB)</td>
<td>1565 to 1585</td>
<td>20</td>
<td>27.9</td>
<td>—</td>
</tr>
</tbody>
</table>

- Ta: +25±5°C

#### COMMON

<table>
<thead>
<tr>
<th>Item</th>
<th>Frequency Range (MHz)</th>
<th>Min.</th>
<th>Typ.</th>
<th>Max.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Return Loss (dB)</td>
<td>1565 to 1585</td>
<td>9.54</td>
<td>19.9</td>
<td>—</td>
</tr>
<tr>
<td></td>
<td>2400 to 2500</td>
<td>9.54</td>
<td>15.2</td>
<td>—</td>
</tr>
<tr>
<td>Power Handling (W)</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>3</td>
</tr>
</tbody>
</table>

- Ta: +25±5°C

#### TEMPERATURE RANGE

<table>
<thead>
<tr>
<th>Operating temperature (°C)</th>
<th>Storage temperature (°C)</th>
</tr>
</thead>
<tbody>
<tr>
<td>-40 to +85</td>
<td>-40 to +85</td>
</tr>
</tbody>
</table>

---

- All specifications are subject to change without notice.
- Before using these products, be sure to request the delivery specifications.
DPX162500DT-8014A1

FREQUENCY CHARACTERISTICS

LOW-BAND

Insertion Loss

Return Loss

Attenuation

HIGH-BAND

Insertion Loss

Return Loss

Attenuation

• All specifications are subject to change without notice.
• Before using these products, be sure to request the delivery specifications.
DPX162500DT-8014A1

FREQUENCY CHARACTERISTICS

COMMON

Return Loss

Isolation

Return Loss (dB) vs. Frequency (MHz)

Isolation (dB) vs. Frequency (MHz)
### RECOMMENDED REFLOW PROFILE

- **Preheating**
  - Temperature: T1, T2
  - Time: t1

- **Soldering**
  - Critical zone (T3 to T4): 3°C/sec or lower
  - Peak: T4
  - Temperature: 217°C
  - Time: 60 to 120 sec

- **Peak**
  - Temperature: T3
  - Time: t3

- **T1**
  - 150°C
  - 200°C
  - 60 to 120 sec

- **T3**
  - 217°C
  - 60 to 120 sec

- **T4**
  - 240 to 260°C
  - 30 sec max.

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

---

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

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

SAFETY REMINDEERS

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

⚠️ REMINDEERS

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

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.

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