Multilayer 3dB Divider
For 2400-2500MHz

HHM2293A1

1.6x0.8mm [EIA 0603]*
* Dimensions Code JIS[EIA]
Multilayer 3dB Divider
For 2400-2500MHz

HHM2293A1

SHAPES AND DIMENSIONS

[Top view]

[Bottom view]

Terminal functions
1 Output 1
2 GND
3 Output 2
4 GND
5 Input
6 GND

RECOMMENDED LAND PATTERN

Dimensions in mm

Terminal functions

1 Output 1
2 GND
3 Output 2
4 GND
5 Input
6 GND

Dimensions in mm


• All specifications are subject to change without notice.
• Before using these products, be sure to request the delivery specifications.
HHM2293A1

**ELECTRICAL CHARACTERISTICS**

<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>2.8</td>
<td>—</td>
<td>4.0</td>
</tr>
<tr>
<td>Return Loss (dB)</td>
<td>2400 to 2500</td>
<td>14</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Phase Balance (deg.)</td>
<td>2400 to 2500</td>
<td>–3</td>
<td>—</td>
<td>3</td>
</tr>
<tr>
<td>Attenuation (dB)</td>
<td>4800 to 5000</td>
<td>10</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>7200 to 7500</td>
<td>15</td>
<td>—</td>
<td>—</td>
<td></td>
</tr>
<tr>
<td>Isolation (dB)</td>
<td>2400 to 2500</td>
<td>15</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Power Handling (W)</td>
<td>2400 to 2500</td>
<td>—</td>
<td>—</td>
<td>3</td>
</tr>
<tr>
<td>Characteristic Impedance (Ω)</td>
<td>50 (Nominal)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- Ta: +25°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>
HHM2293A1

FREQUENCY CHARACTERISTICS

INSERTION LOSS

ISOLATION

RETURN LOSS

PHASE BALANCE

Insertion Loss (dB)

Isolation (dB)

Return Loss (dB)

Phase Balance (deg.)

Frequency (MHz)

Frequency (MHz)

Frequency (MHz)

Frequency (MHz)

All specifications are subject to change without notice.

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

---

Preheating

<table>
<thead>
<tr>
<th>Temp.</th>
<th>T1</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>150°C</td>
<td>200°C</td>
<td>60 to 120sec</td>
</tr>
</tbody>
</table>

Soldering

<table>
<thead>
<tr>
<th>Temp.</th>
<th>T2</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>T3</td>
<td>217°C</td>
<td>60 to 120sec</td>
</tr>
<tr>
<td>T4</td>
<td>240 to 260°C</td>
<td>30sec max.</td>
</tr>
</tbody>
</table>

Critical zone (T3 to T4)

<table>
<thead>
<tr>
<th>Temp.</th>
<th>T3</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>217°C</td>
<td>60 to 120sec</td>
<td></td>
</tr>
</tbody>
</table>

Peak

- T1: 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.
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
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.