

# 积层带通滤波器

## 2.4GHz W-LAN/Bluetooth用

### DEA系列

|       |                                           |
|-------|-------------------------------------------|
| Type: | DEA202450BT-1261A2 (2.0×1.25×0.55mm)      |
|       | DEA202441BT-2106A2 (2.0×1.25×0.7mm max.)  |
|       | DEA202450BT-3201B2 (2.0×1.25×0.8mm max.)  |
|       | DEA202450BT-1213C1 (2.0×1.25×0.95mm)      |
|       | DEA202450BT-1275A1 (2.0×1.25×0.95mm)      |
|       | DEA202450BT-2038A1 (2.0×1.25×0.95mm)      |
|       | DEA202450BT-1283A2 (2.0×1.25×1.05mm max.) |

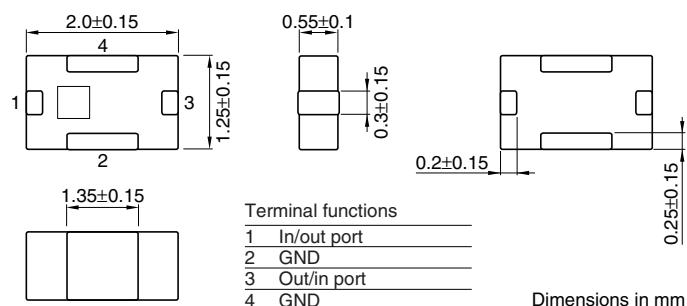
Issue date: December 2010

# 积层贴片带通滤波器 蓝牙和2.4GHz W-LAN用

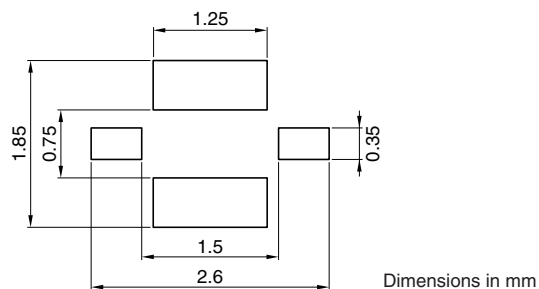
RoHS指令对应产品

DEA 系列 DEA202450BT-1261A2

## 形状・尺寸



## 推荐印刷电路板图样



## 电气特性

| 项目        |                   |      | 最小值 | 代表值 | 最大值 |
|-----------|-------------------|------|-----|-----|-----|
| 插入损耗      | [2400 to 2500MHz] | (dB) | —   | —   | 2.8 |
| 回波损耗      | [2400 to 2500MHz] | (dB) | 9.5 | —   | —   |
| 衰减量       | [695 to 800MHz]   | (dB) | 25  | —   | —   |
|           | [1910MHz]         | (dB) | 25  | —   | —   |
|           | [3200MHz]         | (dB) | 35  | —   | —   |
|           | [4800 to 5000MHz] | (dB) | 20  | —   | —   |
|           | [7200 to 7500MHz] | (dB) | 20  | —   | —   |
| 输出输入端口的阻抗 | [2400 to 2500MHz] | (Ω)  | —   | 50  | —   |
| 温度范围      | 工作时               | (°C) | −30 | —   | +80 |
|           | 保存时               | (°C) | −30 | —   | +80 |

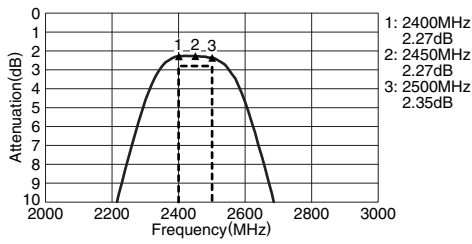
· Ta: +25°C

● RoHS 指令的对应：表示除了依据 EU Directive 2002/95/EC 免除的用途之外，未使用铅，镉，汞，六价铬及特定溴系难燃剂 PBB，PBDE 等。

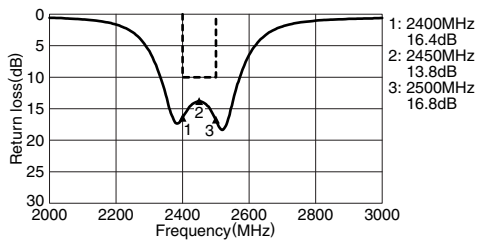
· 记载内容，在没有予告的情况下有可能改进和变更，请予以谅解。

## 频率特性

### 插入损耗



### 回波损耗



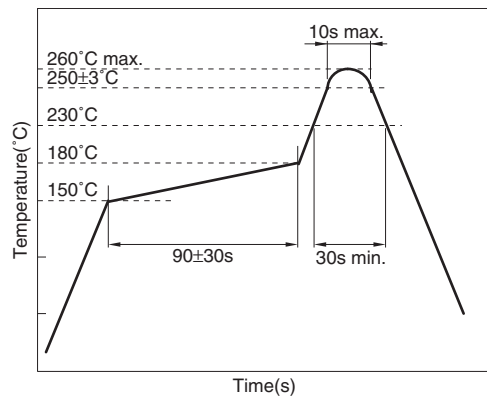
## 焊接

- 焊接请按照下列示意图进行红外再流焊。
- 而且，请不要使用点式加热焊接或烙铁。

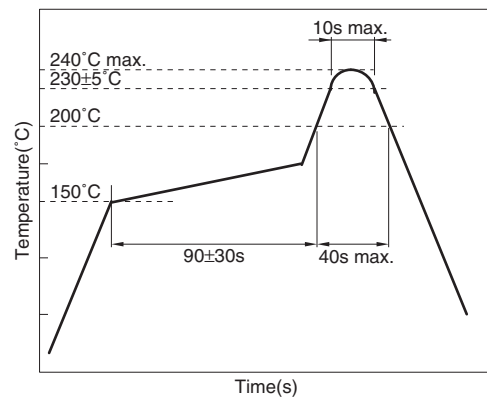
### 推荐焊接条件

#### 回流焊接施工方法

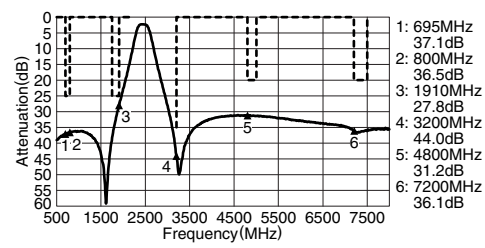
##### A. 当使用无铅焊料时



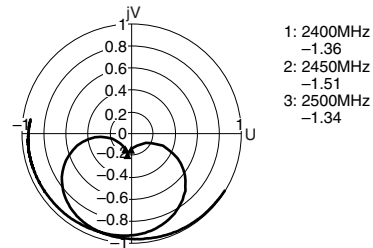
##### B. 当使用锡铅焊料时



## 衰减量



## VSWR

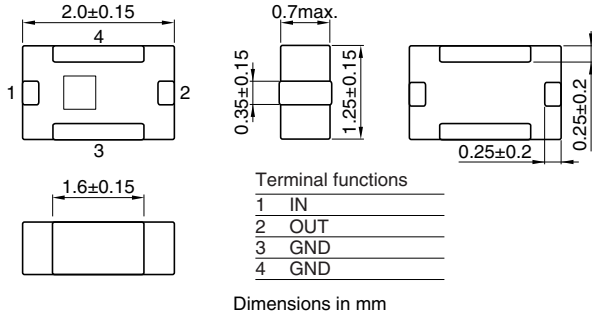


# 积层贴片带通滤波器 蓝牙和2.4GHz W-LAN用

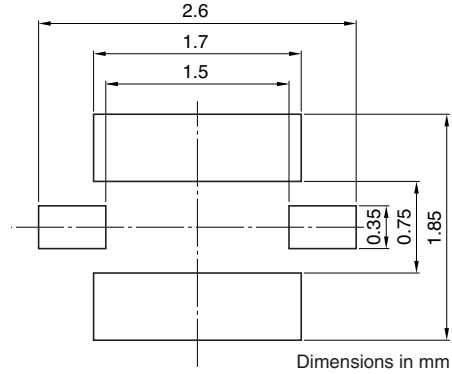
RoHS指令对应产品

DEA 系列 DEA202441BT-2106A2

## 形状·尺寸



## 推荐印刷电路板图样



## 电气特性

| 项目       |                     |       | 最小值         | 代表值 | 最大值 |
|----------|---------------------|-------|-------------|-----|-----|
| RF输入电力   | [2400 to 2483.5MHz] | (dBm) | —           | —   | 24  |
| 插入损耗     | [2400 to 2483.5MHz] | (dB)  | —           | 2.7 | 3.6 |
| 单端输出特性阻抗 | [2400 to 2483.5MHz] | (Ω)   | 50[Nominal] |     |     |
| 单端输入特性阻抗 | [2441MHz]           | (Ω)   | 50[Nominal] |     |     |
| 输入VSWR   | [2400 to 2483.5MHz] |       | —           | 1.3 | 1.9 |
| 输出VSWR   | [2400 to 2483.5MHz] |       | —           | 1.3 | 1.9 |
| 频带纹波     | [2400 to 2483.5MHz] | (dB)  | —           | 0.7 | 1.1 |
|          | [DC to 746MHz]      | (dB)  | 30          | 43  | —   |
|          | [746 to 764MHz]     | (dB)  | 30          | 43  | —   |
|          | [776 to 794MHz]     | (dB)  | 30          | 42  | —   |
|          | [824 to 849MHz]     | (dB)  | 30          | 42  | —   |
|          | [869 to 894MHz]     | (dB)  | 30          | 40  | —   |
|          | [894 to 915MHz]     | (dB)  | 30          | 40  | —   |
|          | [925 to 960MHz]     | (dB)  | 30          | 40  | —   |
|          | [1570 to 1580MHz]   | (dB)  | 28          | 37  | —   |
|          | [1710 to 1785MHz]   | (dB)  | 33          | 37  | —   |
|          | [1805 to 1850MHz]   | (dB)  | 33          | 38  | —   |
|          | [1850 to 1910MHz]   | (dB)  | 33          | 38  | —   |
|          | [1920 to 1980MHz]   | (dB)  | 34          | 40  | —   |
|          | [2110 to 2170MHz]   | (dB)  | 28          | 33  | —   |
|          | [4000 to 4800MHz]   | (dB)  | 20          | 33  | —   |
|          | [4800 to 4967MHz]   | (dB)  | 29          | 33  | —   |
|          | [4967 to 7200MHz]   | (dB)  | 20          | 34  | —   |
| 衰减量      | [7200 to 7451MHz]   | (dB)  | 22          | 44  | —   |
|          | [7451 to 8000MHz]   | (dB)  | 10          | 17  | —   |
|          |                     |       |             |     |     |
| 温度范围     | 工作时                 | (°C)  | −40         | —   | +85 |
|          | 保存时                 | (°C)  | −40         | —   | +85 |

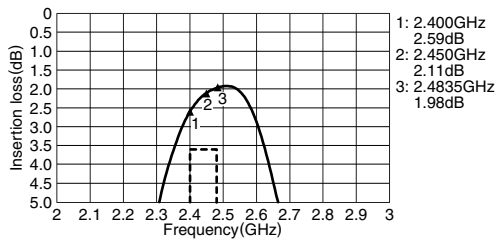
· Ta: +25°C

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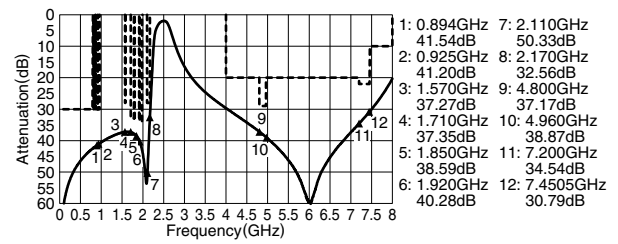
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## 频率特性

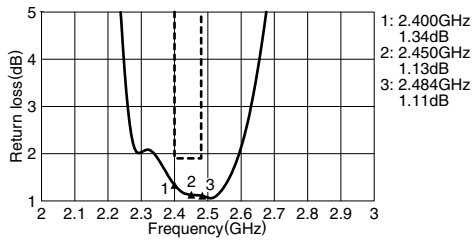
### 插入损耗



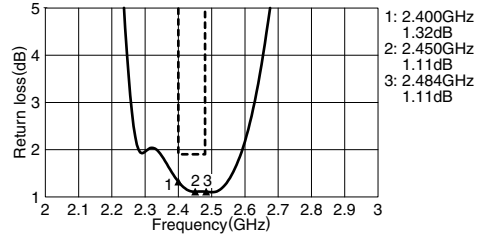
### 衰减量



### S11 VSWR



### S22 VSWR

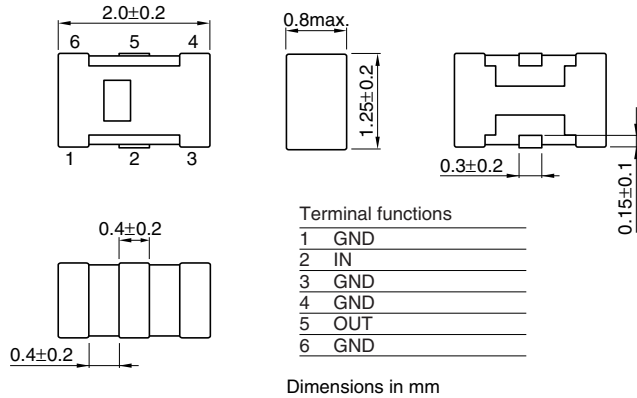


# 积层贴片带通滤波器 蓝牙和2.4GHz W-LAN用

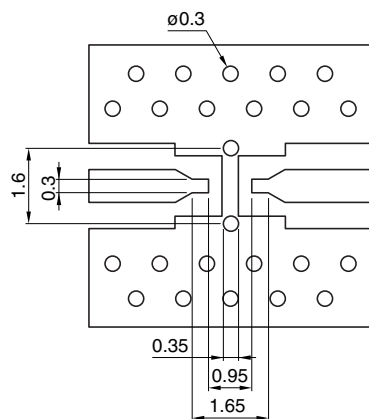
RoHS指令对应产品

DEA 系列 DEA202450BT-3201B2

## 形状・尺寸

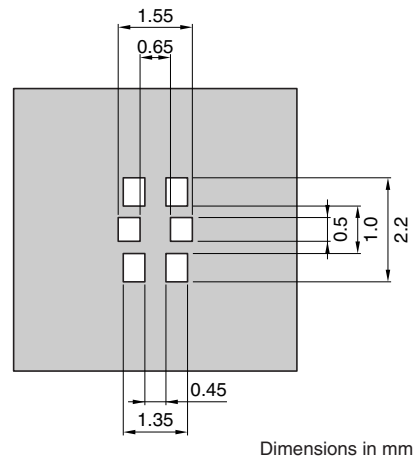


## 推荐印刷电路板图样 焊盘



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

## 焊料抗蚀剂



## 电气特性

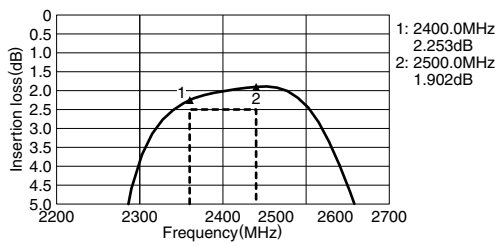
|           |                   |                 |
|-----------|-------------------|-----------------|
| 频率范围 (频带) |                   | 2400 to 2500MHz |
| 插入损耗      | [+25°C]           | 2.5dB max.      |
| 回波损耗      | [2400 to 2500MHz] | 10dB min.       |
|           | [880 to 915MHz]   | 40dB min.       |
|           | [1710 to 1850MHz] | 40dB min.       |
|           | [1850 to 1910MHz] | 40dB min.       |
| 衰减量       | [1920 to 1990MHz] | 40dB min.       |
|           | [2110 to 2170MHz] | 26dB min.       |
|           | [4800 to 5000MHz] | 30dB min.       |
|           | [7200 to 7500MHz] | 30dB min.       |
| 温度范围      | 工作时               | -40 to +85°C    |
|           | 保存时               | -40 to +85°C    |

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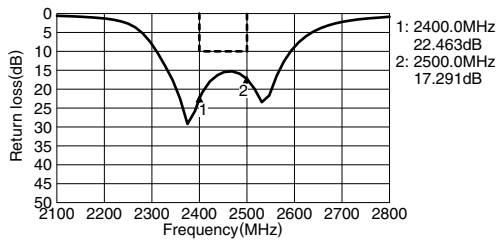
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## 频率特性

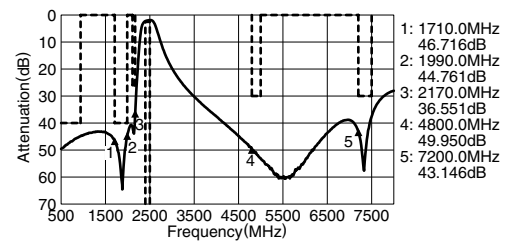
### 插入损耗



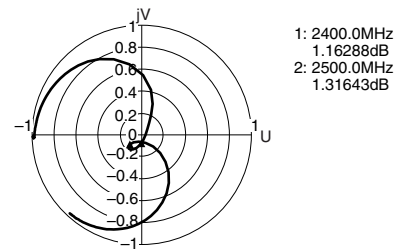
### 回波损耗



### 衰减量



### VSWR

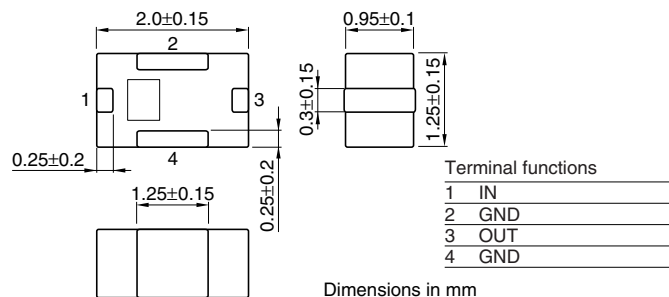


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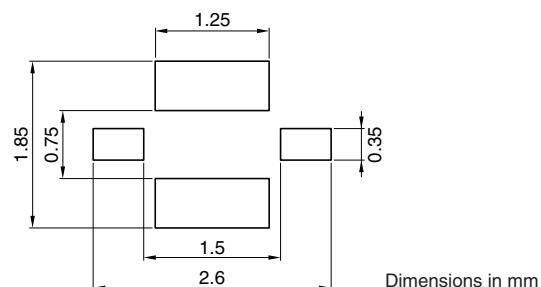
RoHS指令对应产品

DEA 系列 DEA202450BT-1213C1

## 形状・尺寸



## 推荐印刷电路板图样

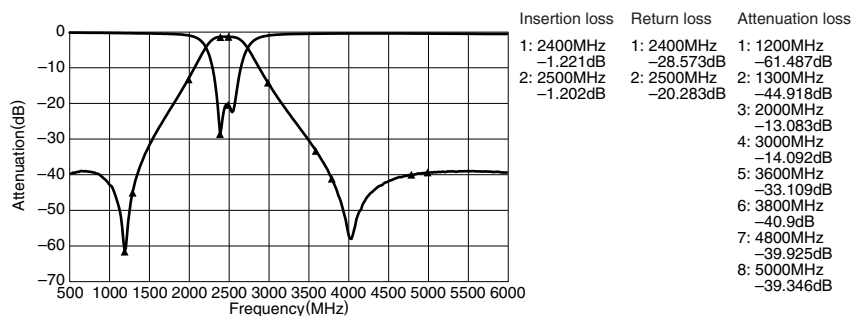


## 电气特性

| 项目   |                   |      | 最小值 | 代表值 | 最大值 |
|------|-------------------|------|-----|-----|-----|
| 插入损耗 | [2400 to 2500MHz] | (dB) | —   | —   | 1.5 |
| 回波损耗 | [2400 to 2500MHz] | (dB) | 10  | —   | —   |
| 衰减量  | [1200 to 1300MHz] | (dB) | 25  | —   | —   |
|      | [2000MHz]         | (dB) | 10  | —   | —   |
|      | [3000MHz]         | (dB) | 12  | —   | —   |
|      | [3600 to 3800MHz] | (dB) | 30  | —   | —   |
|      | [4800 to 5000MHz] | (dB) | 34  | —   | —   |
| 温度范围 | 工作时               | (°C) | −40 | —   | +85 |
|      | 保存时               | (°C) | −40 | —   | +85 |

· Ta: +25°C

## 频率特性



● RoHS 指令的对应: 表示除了依据 EU Directive 2002/95/EC 免除的用途之外, 未使用铅, 镉, 汞, 六价铬及特定溴系难燃剂 PBB, PBDE 等。

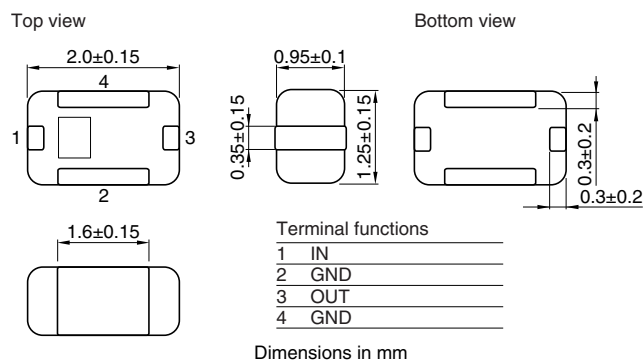
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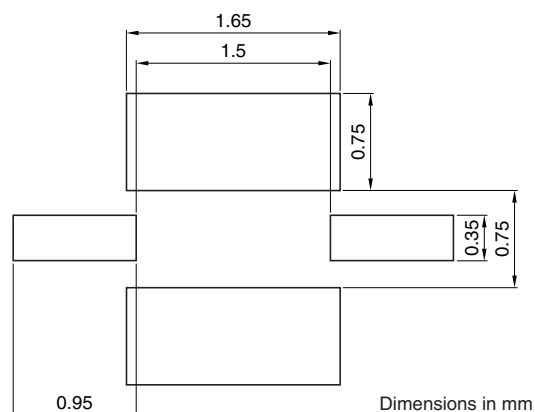
RoHS指令对应产品

DEA 系列 DEA202450BT-1275A1

## 形状・尺寸



## 推荐印刷电路板图样



## 电气特性

| 项目      |                |                   |      | 最小值 | 代表值 | 最大值 |
|---------|----------------|-------------------|------|-----|-----|-----|
| 插入损耗    | [25°C]         | [2400 to 2500MHz] | (dB) | —   | —   | 1.4 |
|         | [−40 to +85°C] | [2400 to 2500MHz] | (dB) | —   | —   | 1.6 |
| 纹波      |                | [2400 to 2500MHz] | (dB) | —   | —   | 1.0 |
| 输出 VSWR |                | [2400 to 2500MHz] |      | —   | —   | 2.0 |
| 输入 VSWR |                | [2400 to 2500MHz] |      | —   | —   | 2.0 |
| 衰减量     |                | [824 to 960MHz]   | (dB) | 30  | —   | —   |
|         |                | [1710 to 1910MHz] | (dB) | 27  | —   | —   |
|         |                | [1920 to 1990MHz] | (dB) | 22  | —   | —   |
|         |                | [2110 to 2170MHz] | (dB) | 6   | —   | —   |
|         |                | [4800 to 5000MHz] | (dB) | 20  | —   | —   |
| 输出/输入阻抗 |                |                   | (Ω)  | —   | 50  | —   |
| 最大可输出功率 |                |                   | (W)  | —   | 0.5 | —   |
| 温度范围    | 工作时            |                   | (°C) | −40 | —   | +85 |
|         | 保存时            |                   | (°C) | −40 | —   | +85 |

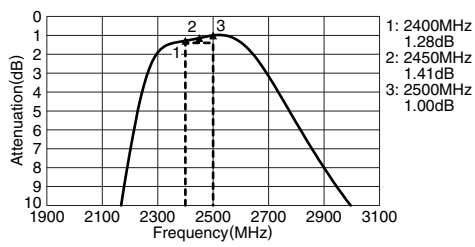
· Ta: +25°C

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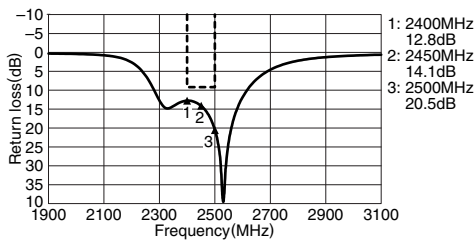
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## 频率特性

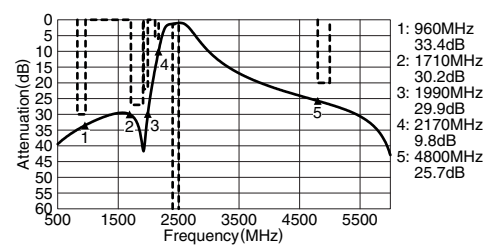
### 插入损耗



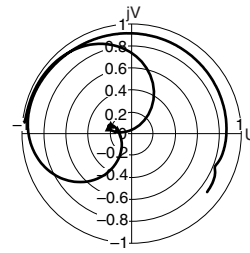
### 回波损耗



### 衰减量



### VSWR

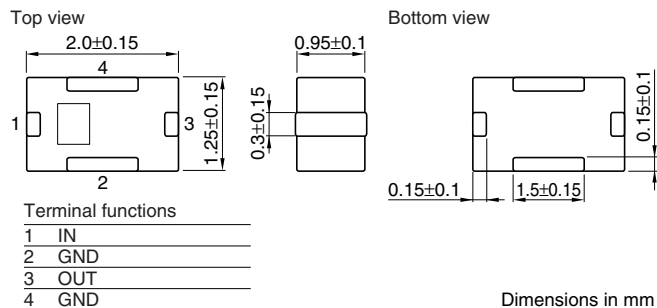


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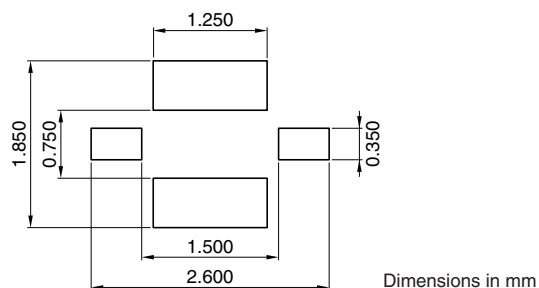
RoHS指令对应产品

DEA 系列 DEA202450BT-2038A1

## 形状・尺寸



## 推荐印刷电路板图样

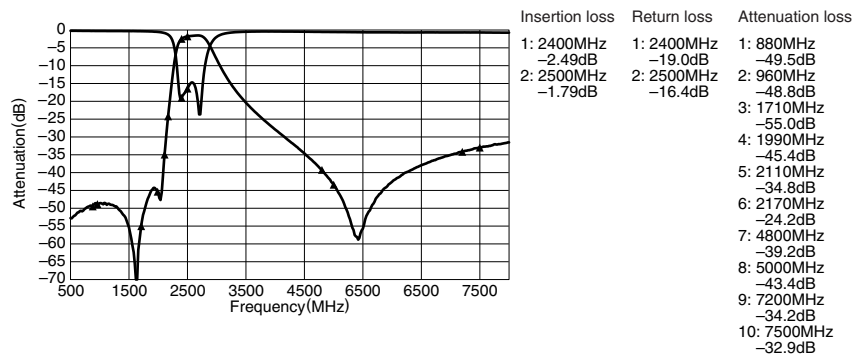


## 电气特性

| 项目             |                   |      | 最小值 | 代表值 | 最大值 |
|----------------|-------------------|------|-----|-----|-----|
| 插入损耗(at +25°C) | [2400 to 2500MHz] | (dB) | —   | —   | 2.6 |
| 回波损耗           | [2400 to 2500MHz] | (dB) | 10  | —   | —   |
| 衰减量            | [880 to 960MHz]   | (dB) | 40  | —   | —   |
|                | [1710 to 1990MHz] | (dB) | 40  | —   | —   |
|                | [2110 to 2170MHz] | (dB) | 20  | —   | —   |
|                | [4800 to 5000MHz] | (dB) | 30  | —   | —   |
|                | [7200 to 7500MHz] | (dB) | 30  | —   | —   |
| 温度范围           | 工作时               | (°C) | −40 | —   | +85 |
|                | 保存时               | (°C) | −40 | —   | +85 |

・ Ta: +25°C

## 频率特性



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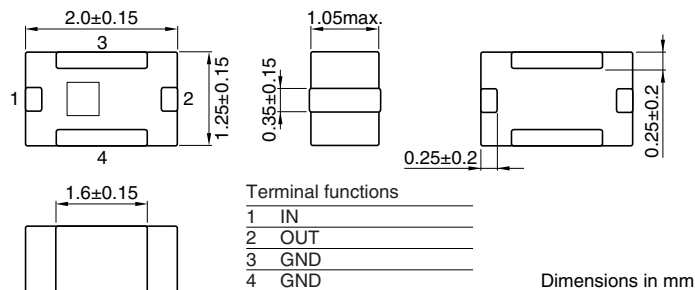
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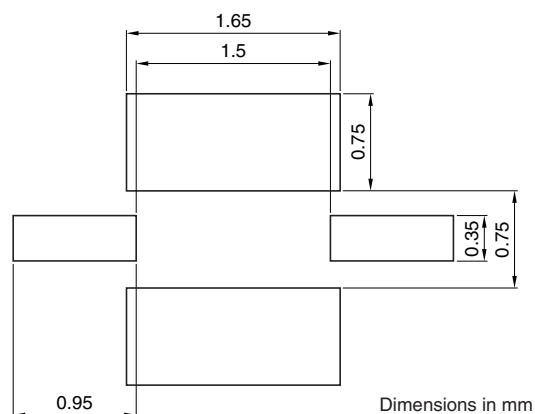
RoHS指令对应产品

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## 形状・尺寸



## 推荐印刷电路板图样



## 电气特性

| 项目       |                   |       | 最小值  | 代表值         | 最大值  |
|----------|-------------------|-------|------|-------------|------|
| 频率范围（频带） |                   | (MHz) | 2400 | —           | 2500 |
| 插入损耗     | [25°C]            | (dB)  | —    | 1.04        | 1.3  |
|          | [-40 to +85°C]    | (dB)  | —    | —           | 1.6  |
| 单端特性阻抗   |                   | (Ω)   | —    | 50[Nominal] | —    |
| 衰减量      | [1600MHz]         | (dB)  | 22   | 24.8        | —    |
|          | [3200MHz]         | (dB)  | 30   | 38.3        | —    |
|          | [4800 to 5000MHz] | (dB)  | 20   | 26.1        | —    |
| 回波损耗     | [2400 to 2500MHz] | (dB)  | 10   | 18.4        | —    |
| 温度范围     | 工作时               | (°C)  | -40  | —           | +85  |
|          | 保存时               | (°C)  | -40  | —           | +85  |

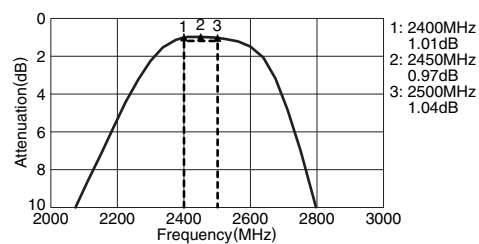
· Ta: +25°C

● RoHS 指令的对应：表示除了依据 EU Directive 2002/95/EC 免除的用途之外，未使用铅，镉，汞，六价铬及特定溴系难燃剂 PBB，PBDE 等。

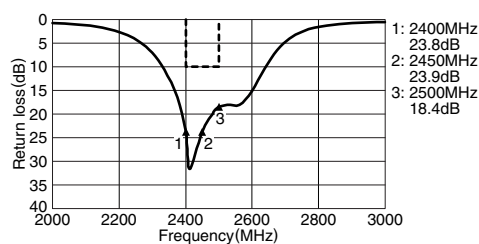
· 记载内容，在没有予告的情况下有可能改进和变更，请予以谅解。

## 频率特性

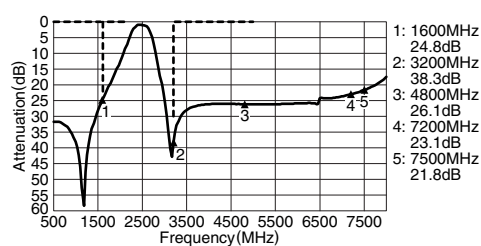
### 插入损耗



### 回波损耗



### 衰减量



### VSWR

