



Multilayer Diplexer

For 806-941MHz / 1574.42-1576.42MHz

DPX161576DT-8011B1

1.6x0.8mm [EIA 0603]*

* Dimensions Code JIS[EIA]

Multilayer Diplexer

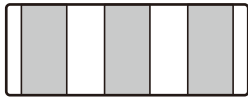
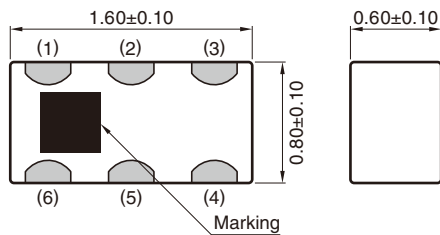
Conformity to RoHS Directive

For 806-941MHz / 1574.42-1576.42MHz

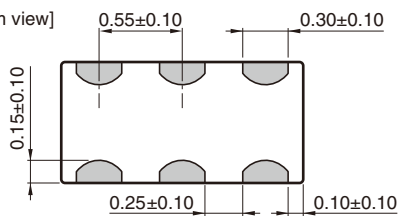
DPX161576DT-8011B1

SHAPES AND DIMENSIONS

[Top view]



[Bottom view]

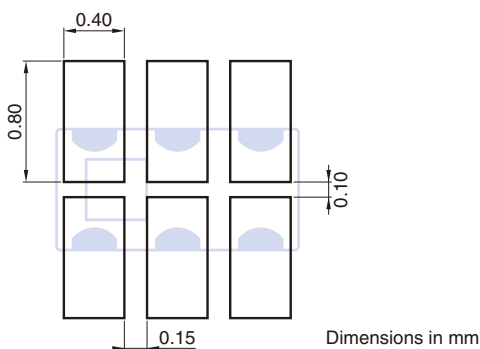


Terminal functions

1	Low-band
2	GND
3	High-band
4	GND
5	Common
6	GND

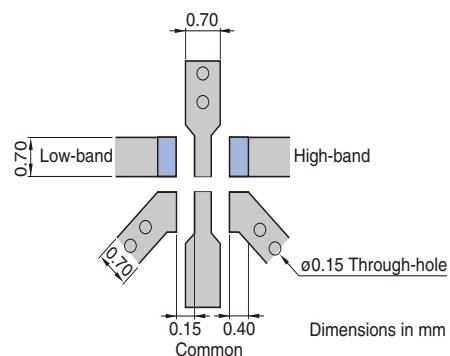
Dimensions in mm

RECOMMENDED LAND PATTERN



Dimensions in mm

EVALUATION BOARD



Dimensions in mm

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

○ RoHS Directive Compliant Product: See the following for more details related to RoHS Directive compliant products. <http://product.tdk.com/en/environment/rohs/>

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

DPX161576DT-8011B1

ELECTRICAL CHARACTERISTICS

LOW-BAND

Item	Frequency Range (MHz)	Min.	Typ.	Max.
Insertion Loss (dB)	806 to 941	—	0.40	0.60
	806 to 941	—	—	0.70 (−30 to +85°C)
Return Loss (dB)	806 to 941	14	16.8	—
	1575	16	21.7	—
Attenuation (dB)	1612 to 1648	18	25.2	—
	1792 to 1856	14	18.9	—
	2000 to 3000	5	10.1	—
Characteristic Impedance (Ω)			50 (Nominal)	

· Ta: +25±5°C

HIGH-BAND

Item	Frequency Range (MHz)	Min.	Typ.	Max.
Insertion Loss (dB)	1574.42 to 1576.42	—	0.66	0.70
	1574.42 to 1576.42	—	—	0.80 (−30 to +85°C)
Return Loss (dB)	1574.42 to 1576.42	14	22.8	—
Attenuation (dB)	806 to 928	20	30.5	—
Characteristic Impedance (Ω)			50 (Nominal)	

· Ta: +25±5°C

COMMON

Item	Frequency Range (MHz)	Min.	Typ.	Max.
Isolation (dB)	806 to 928	20	30.8	—
	1575	16	22.3	—
	1612 to 1648	18	26.0	—
	1792 to 1856	14	21.5	—
Return Loss (dB)	806 to 941	14	17.6	—
	1574.42 to 1576.42	14	16.7	—
Characteristic Impedance (Ω)			50 (Nominal)	

· Ta: +25±5°C

TEMPERATURE RANGE

Operating temperature (°C)
−30 to +85

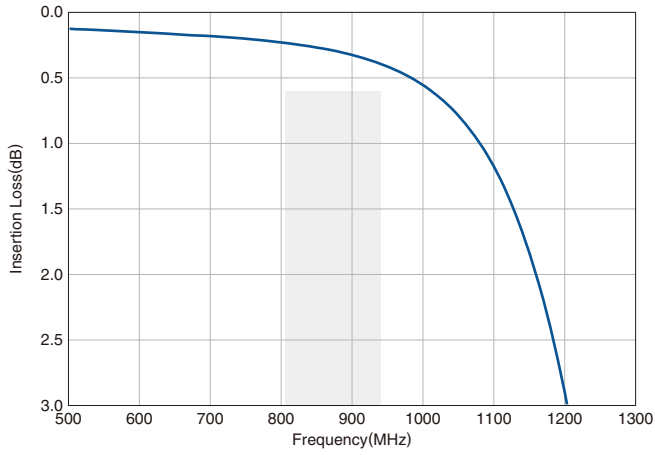
- All specifications are subject to change without notice.
- Before using these products, be sure to request the delivery specifications.

DPX161576DT-8011B1

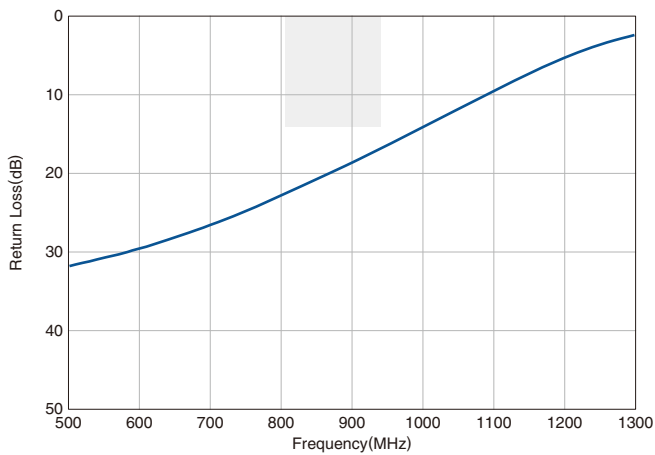
FREQUENCY CHARACTERISTICS

LOW-BAND

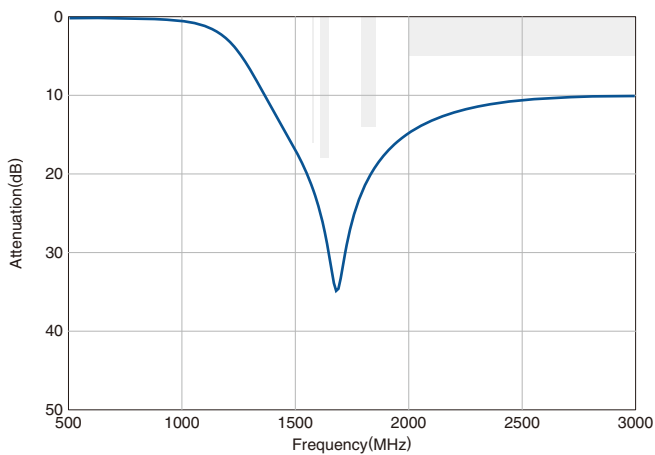
Insertion Loss



Return Loss

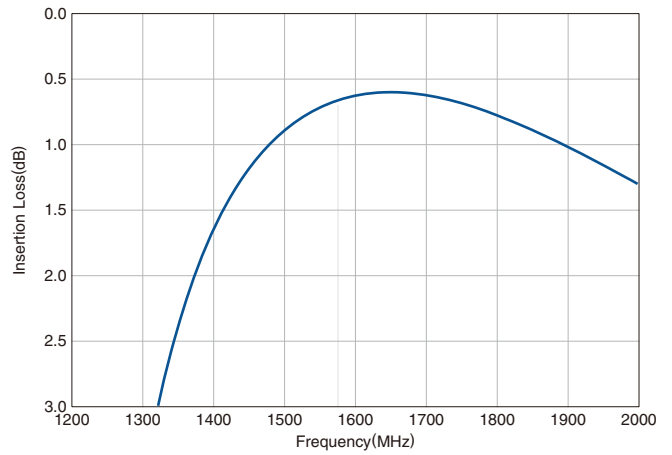


Attenuation

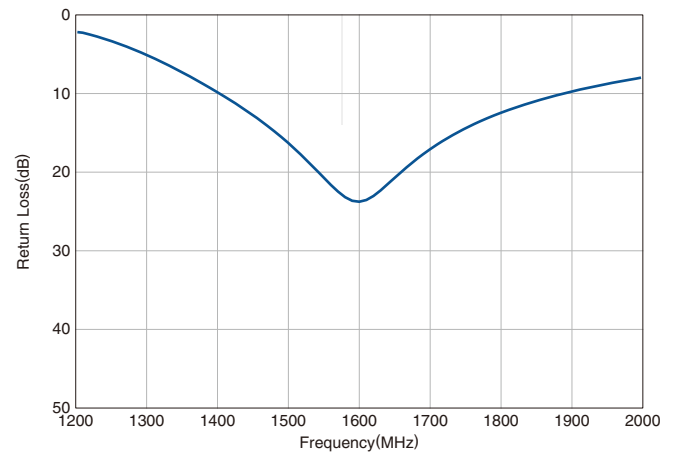


HIGH-BAND

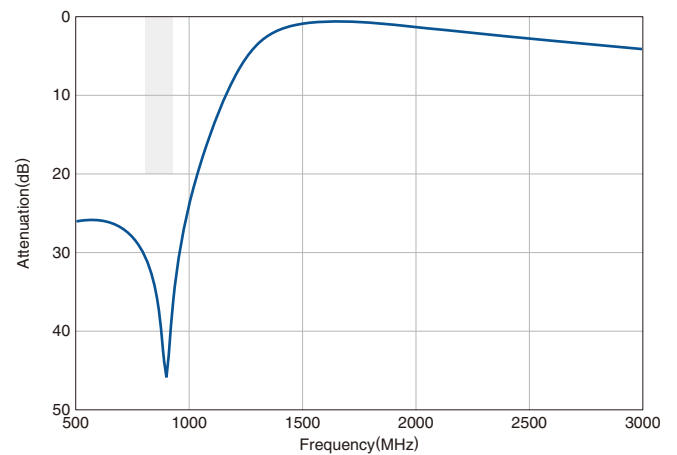
Insertion Loss



Return Loss



Attenuation



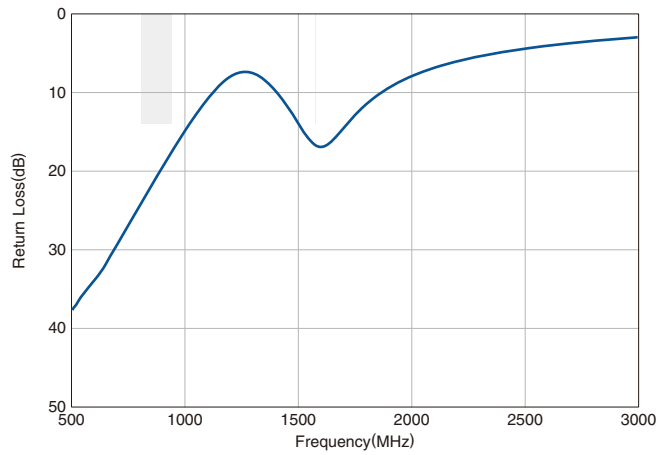
- All specifications are subject to change without notice.
- Before using these products, be sure to request the delivery specifications.

DPX161576DT-8011B1

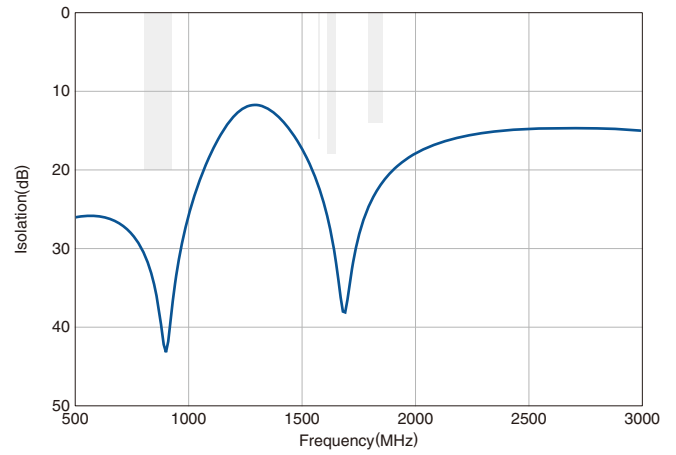
FREQUENCY CHARACTERISTICS

COMMON

Return Loss



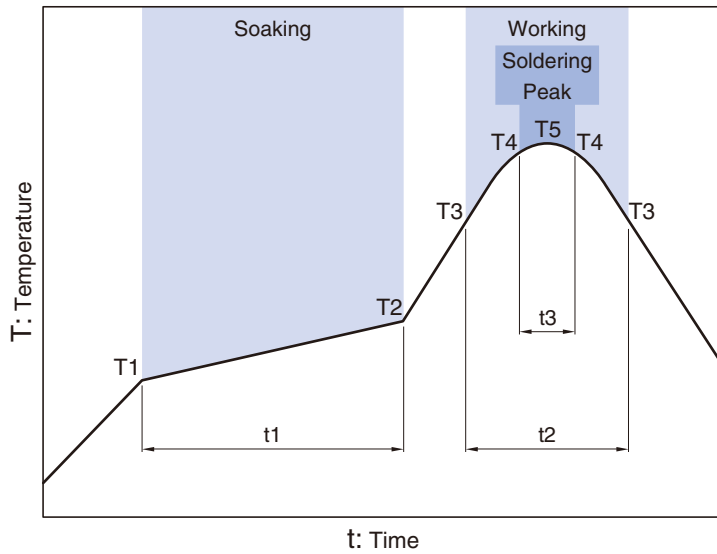
Isolation



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

DPX161576DT-8011B1

RECOMMENDED REFLOW PROFILE



Soaking			Working		Soldering Peak		
Temp.	Temp.	Time	Temp.	Time	Temp.	Time	Temp.
T1	T2	t1	T3	t2	T4	t3	T5
150°C	180°C	60 to 120s	230°C	more than 30s	247 to 253°C	within 10s	260°C max.

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

使用注意事项

在使用本产品前，请务必随附采购规格书。

安全注意事项

使用本产品时，请注意安全事项。

注意

本产品目录中记载的产品是指在通用标准用途意义上使用于一般电子设备（AV 设备，通信设备，家电产品，娱乐设备，计算机设备，个人设备，办公设备，计测设备，工业机器人），并且该一般电子设备要在通常的操作和使用方法下使用。

对于需要高度安全性和可靠性的，或者设备的故障，误动作，运转不良可能会给人的生命，身体及财产等造成损害，以及有可能产生莫大社会影响的以下用途（以下称‘特定用途’）中的适用性，性能发挥，品质，本公司不予保证。

产品被在本产品目录的范围、条件之外，或者在特定用途中使用，本公司对它造成的损害和信赖性不承担任何责任。

- | | |
|-------------------------|--------------------|
| (1) 航天航空设备 | (8) 公共信息处理设备 |
| (2) 交通运输设备（汽车，电动火车，船舶等） | (9) 军事设备 |
| (3) 医疗设备 | (10) 电加热设备、燃烧设备 |
| (4) 发电控制设备 | (11) 防灾 / 预防犯罪设备 |
| (5) 原子能源相关设备 | (12) 安全设备 |
| (6) 海底设备 | (13) 其他不被视为常规用途的用途 |
| (7) 交通控制设备 | |

为了能够更安全地使用产品，对使用本产品目录中所记载产品的设备进行设计时，请确保符合该设备的使用用途及状态的保护回路和装置，并设置备用回路等。