



Multilayer Diplexer

For 824-960MHz / 1710-2170MHz

DPX162170DT-8122B1

1.6x0.8mm [EIA 0603]*

* Dimensions Code JIS[EIA]

Multilayer Diplexer

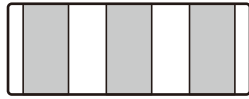
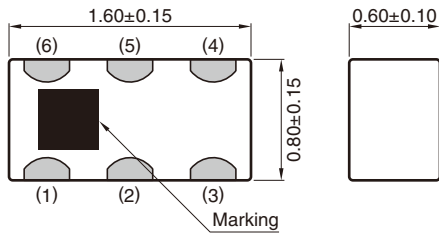
Conformity to RoHS Directive

For 824-960MHz / 1710-2170MHz

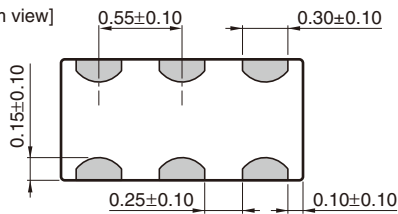
DPX162170DT-8122B1

SHAPES AND DIMENSIONS

[Top view]



[Bottom view]

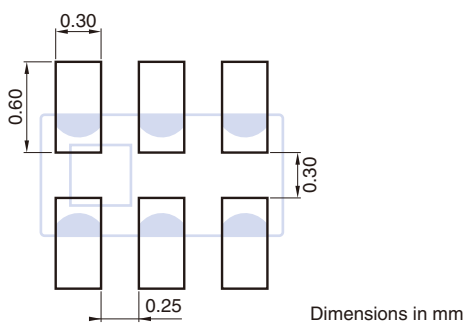


Terminal functions

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

Dimensions in mm

RECOMMENDED LAND PATTERN



Dimensions in mm

○ 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.

DPX162170DT-8122B1

ELECTRICAL CHARACTERISTICS

LOW-BAND

Item	Frequency Range (MHz)	Min.	Typ.	Max.
Insertion Loss (dB)	824 to 960	—	0.31	0.50
	824 to 960	—	—	0.65 (−40 to +85°C)
Return Loss (dB)	824 to 960	13.98	21.2	—
Attenuation (dB)	1710 to 2170	15	19.4	—
Characteristic Impedance (Ω)			50 (Nominal)	

· Ta: +25±5°C

HIGH-BAND

Item	Frequency Range (MHz)	Min.	Typ.	Max.
Insertion Loss (dB)	1710 to 1990	—	0.55	0.70
	2110 to 2170	—	0.33	0.60
	1710 to 1990	—	—	0.90 (−40 to +85°C)
	2110 to 2170	—	—	0.80 (−40 to +85°C)
Return Loss (dB)	1710 to 1990	11.73	16.1	—
	2110 to 2170	11.73	19.7	—
Attenuation (dB)	704 to 960	20	24.2	—
Characteristic Impedance (Ω)			50 (Nominal)	

· Ta: +25±5°C

TEMPERATURE RANGE

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

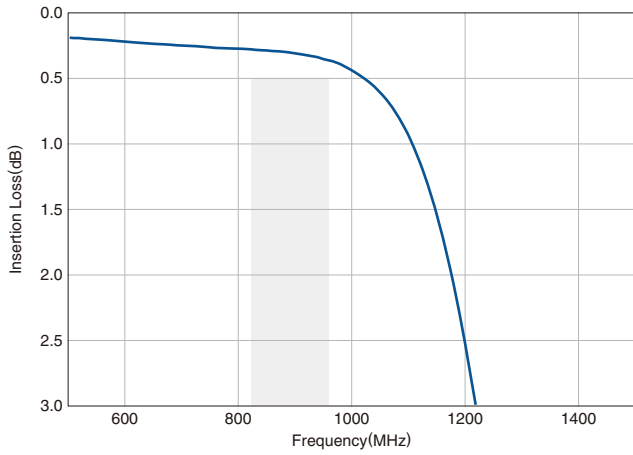
- All specifications are subject to change without notice.
- Before using these products, be sure to request the delivery specifications.

DPX162170DT-8122B1

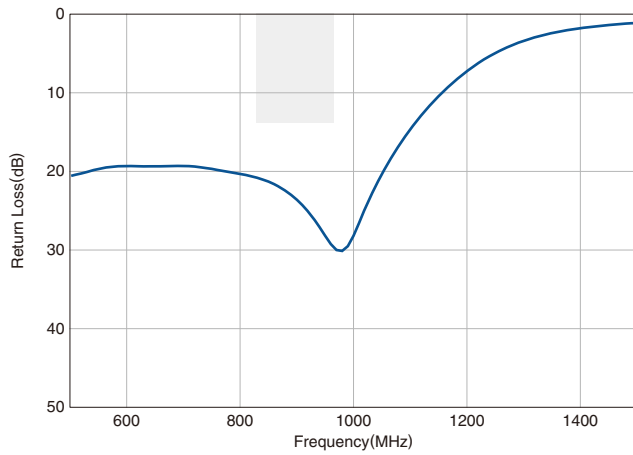
FREQUENCY CHARACTERISTICS

LOW-BAND

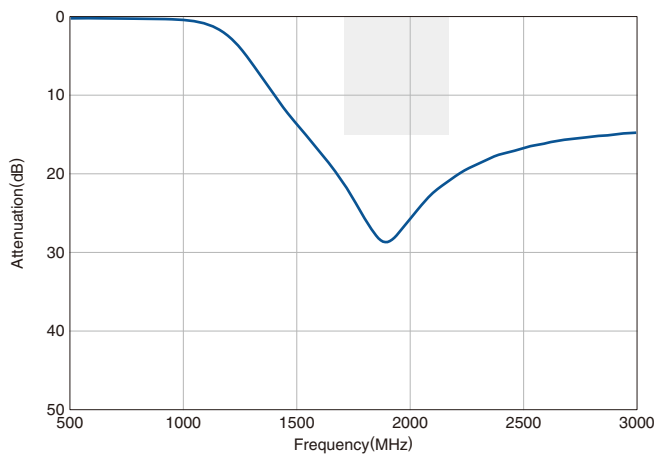
Insertion Loss



Return Loss

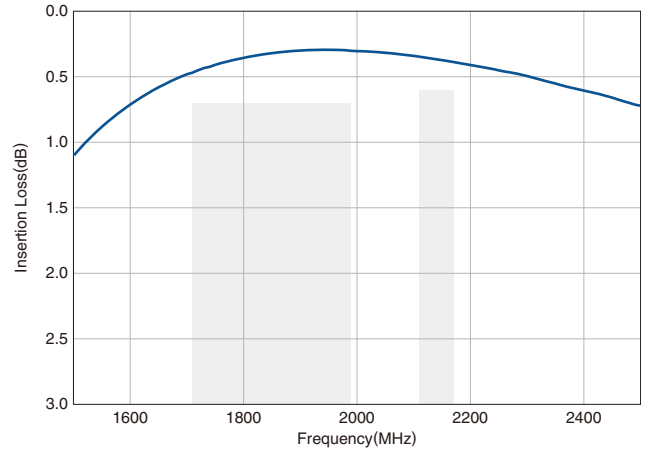


Attenuation

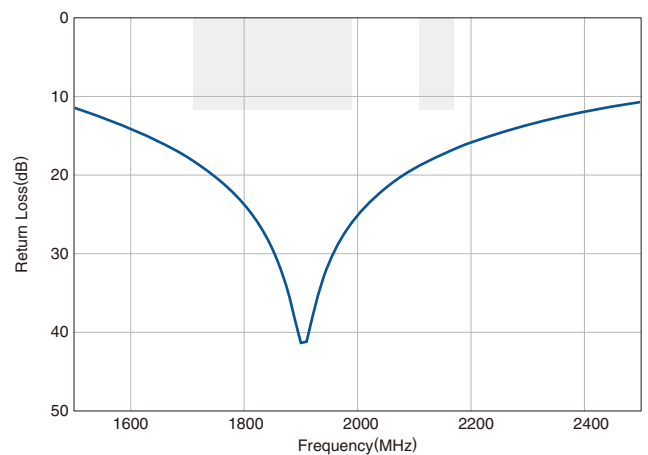


HIGH-BAND

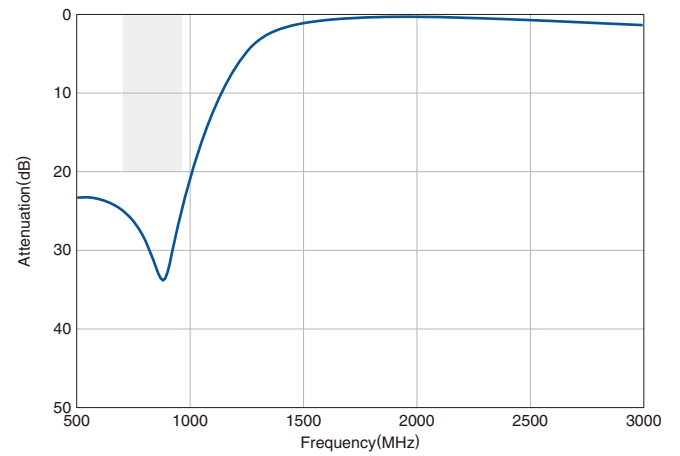
Insertion Loss



Return Loss



Attenuation



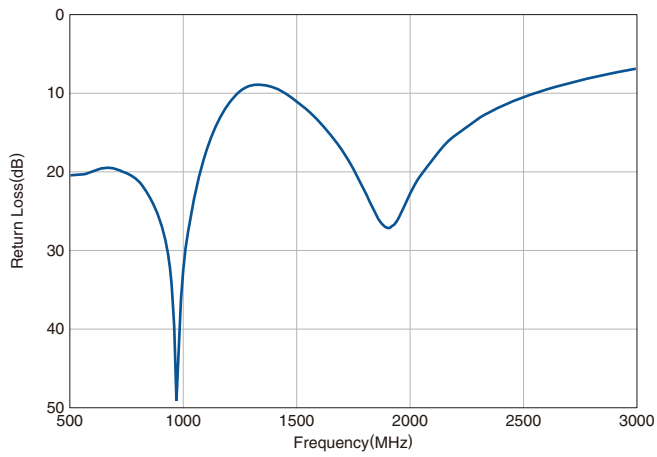
- All specifications are subject to change without notice.
- Before using these products, be sure to request the delivery specifications.

DPX162170DT-8122B1

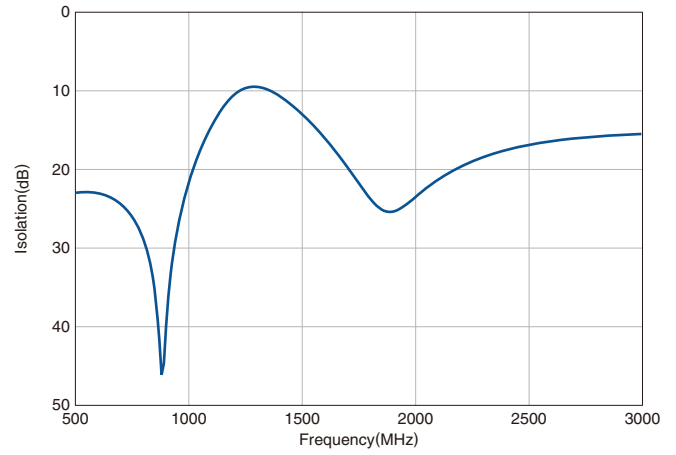
■ FREQUENCY CHARACTERISTICS

□ COMMON

Return Loss



Isolation



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

DPX162170DT-8122B1

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.

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.