



April 2017

Multilayer Diplexer

For 2400-2496MHz / 5150-5950MHz

DPX165950DT-8060C1

1.6x0.8mm [EIA 0603]*

* Dimensions Code JIS[EIA]

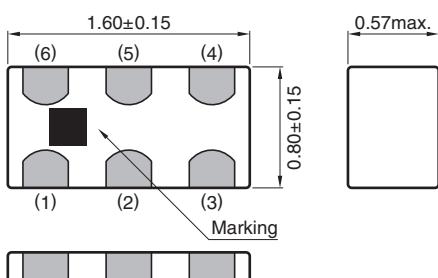
Multilayer Diplexer

Conformity to RoHS Directive

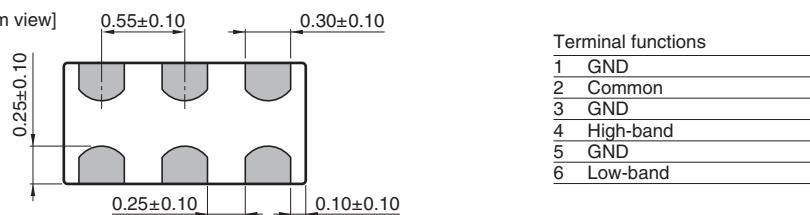
For 2400-2496MHz / 5150-5950MHz

DPX165950DT-8060C1**■ SHAPES AND DIMENSIONS**

[Top view]



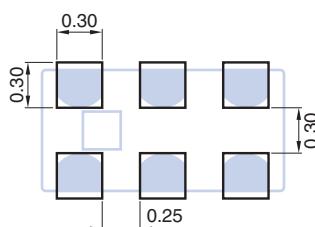
[Bottom view]



Terminal functions

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

DPX165950DT-8060C1

■ ELECTRICAL CHARACTERISTICS

□ LOW-BAND

Item	Frequency Range (MHz)	Min.	Typ.	Max.
Insertion Loss (dB)	2400 to 2496	—	0.50	0.65
Return Loss (dB)	2400 to 2496	10	16	—
Attenuation (dB)	4800 to 5000	32	43	—
Attenuation (dB)	7200 to 7500	15	24	—
Characteristic Impedance (Ω)			50 (Nominal)	

• Ta: +25±5°C

□ HIGH-BAND

Item	Frequency Range (MHz)	Min.	Typ.	Max.
Insertion Loss (dB)	5150 to 5950	—	1.04	1.35
Return Loss (dB)	5150 to 5950	10	17	—
	70 to 2000	35	45	—
	2400 to 2690	35	39	—
Attenuation (dB)	7200 to 7800	18	24	—
	10300 to 11700	26	32	—
	15000 to 18000	10	29	—
Characteristic Impedance (Ω)			50 (Nominal)	

• Ta: +25±5°C

■ TEMPERATURE RANGE

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

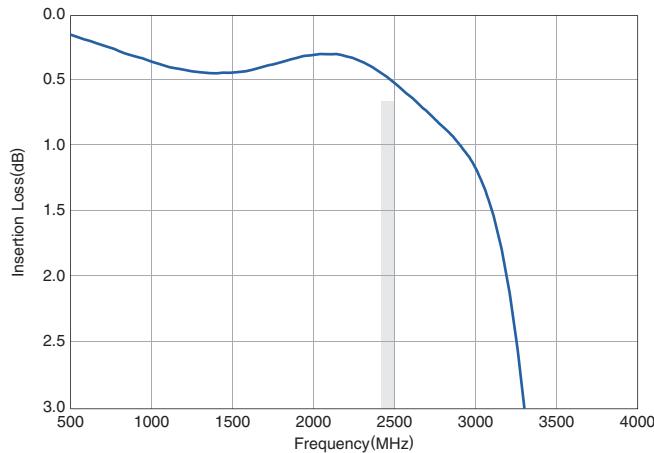
- All specifications are subject to change without notice.
- Before using these products, be sure to request the delivery specifications.

DPX165950DT-8060C1

■ FREQUENCY CHARACTERISTICS

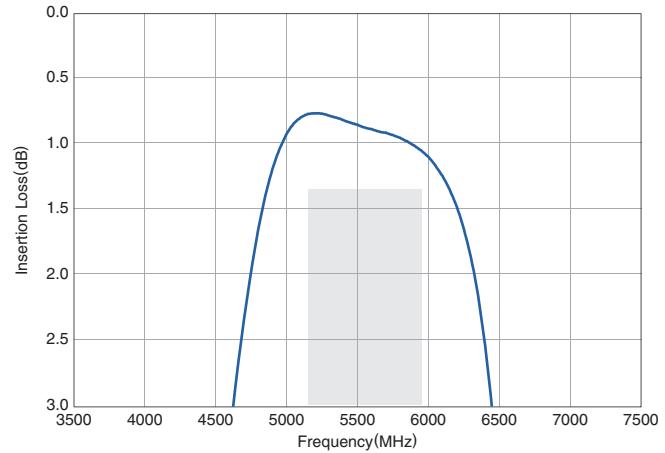
□ LOW-BAND

Insertion Loss

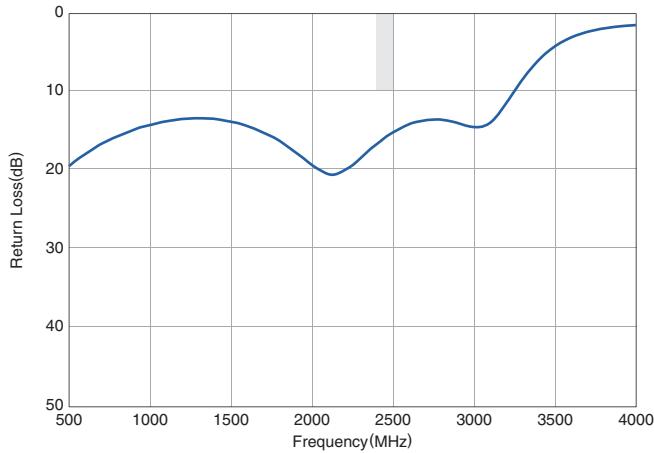


□ HIGH-BAND

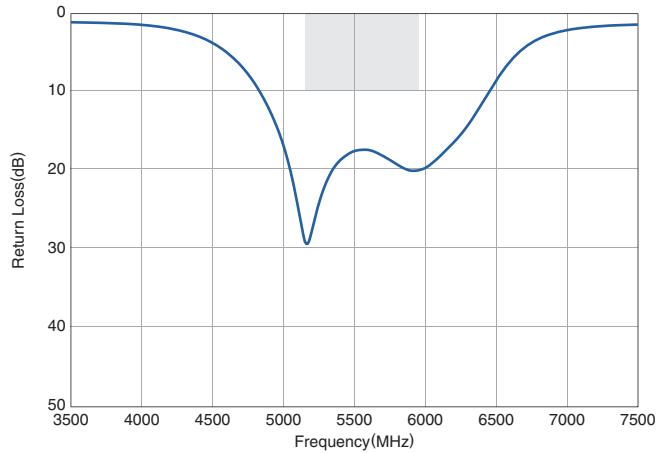
Insertion Loss



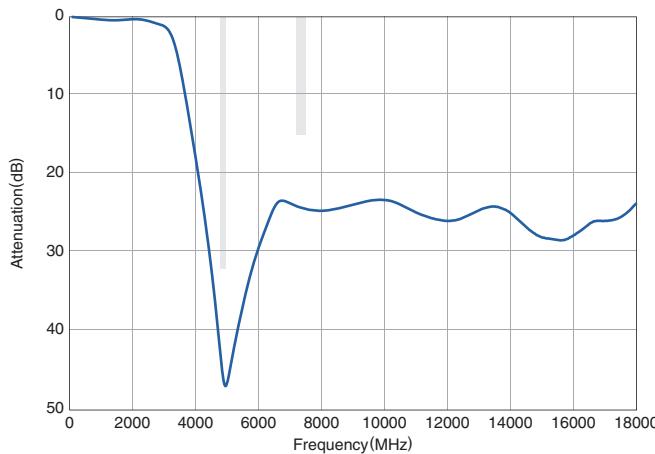
Return Loss



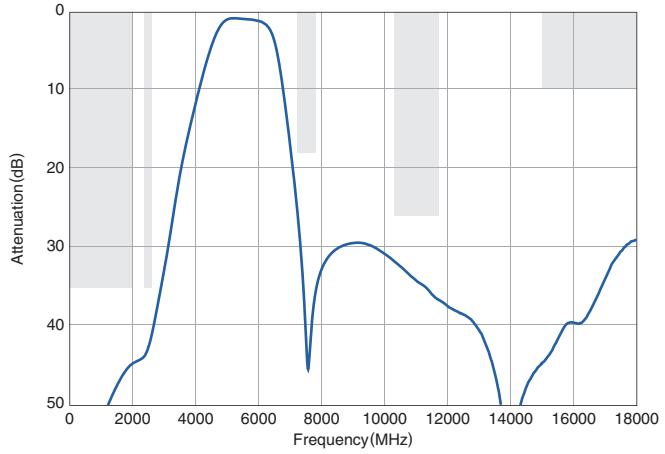
Return Loss



Attenuation



Attenuation



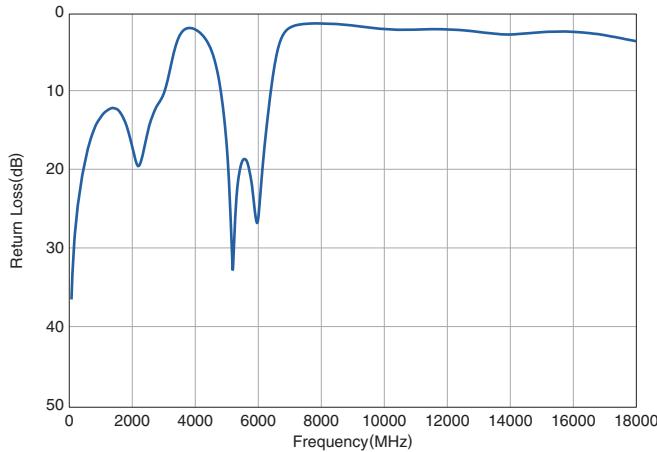
- All specifications are subject to change without notice.
- Before using these products, be sure to request the delivery specifications.

DPX165950DT-8060C1

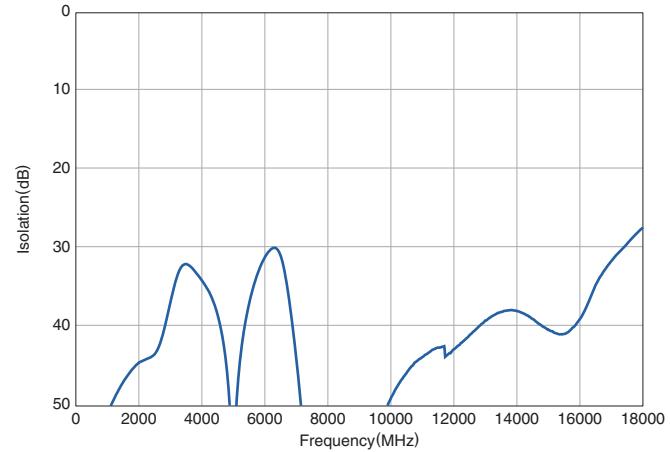
■ FREQUENCY CHARACTERISTICS

□ COMMON

Return Loss



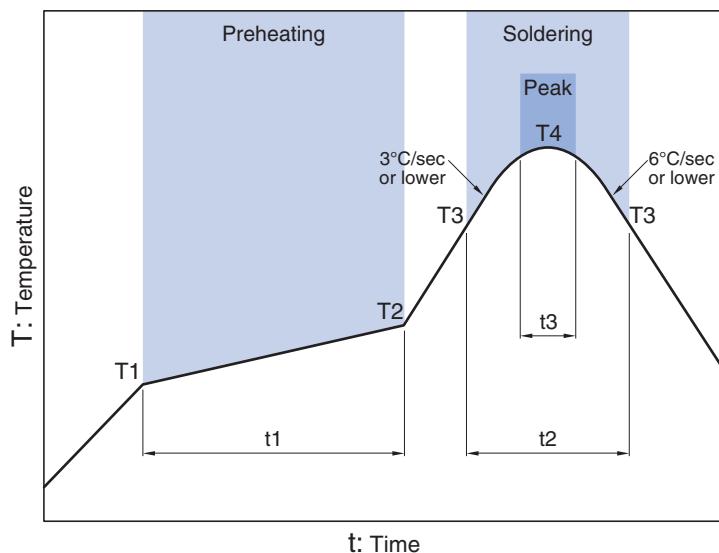
Isolation



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

DPX165950DT-8060C1

■ RECOMMENDED REFLOW PROFILE



Preheating			Soldering		Peak	
			Critical zone (T3 to T4)			
Temp.	Time		Temp.	Time	Temp.	Time
T_1 150°C	T_2 200°C	t_1 60 to 120sec	T_3 217°C	t_2 60 to 120sec	T_4 240 to 260°C	t_3^* 30sec max.

* t_3 : 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	(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.

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

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

TDK:

[DPX165950DT-8060C1](#)