

July 2015

Multilayer Diplexer

For 698-1616MHz / 1920-2700MHz

DPX202700DT-4035B5

2.0x1.25mm [EIA 0805]*

* Dimensions Code JIS[EIA]



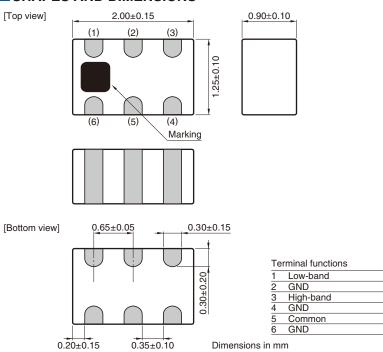
Multilayer Diplexer

For 698-1616MHz / 1920-2700MHz

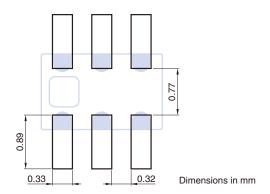
Conformity to RoHS Directive

DPX202700DT-4035B5

SHAPES AND DIMENSIONS



■ RECOMMENDED LAND PATTERN



OROHS 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.



DPX202700DT-4035B5

ELECTRICAL CHARACTERISTICS

□LOW-BAND

Item	Frequency Range (MHz)	Min.	Тур.	Max.
	698 to 960	_	0.31	0.50
	960 to 1572	_	0.57	0.85
Insertion Loss (dB)	1572 to 1578	_	0.57	0.85
	1605 to 1616	_	0.75	1.10
	698 to 960	_		0.60 (-40 to +85°C)
	960 to 1572	_	_	1.05 (-40 to +85°C)
	1572 to 1578	_	_	1.05 (-40 to +85°C)
	1605 to 1616	_	_	1.30 (-40 to +85°C)
Return Loss (dB)	698 to 960	9.54	40.1	_
	960 to 1572	9.54	25.7	_
	1572 to 1578	9.54	24.3	_
	1605 to 1616	9.54	23.1	_
Attenuation (dD)	1920 to 1990	13	22	_
	2010 to 2025	10	16	_
Attenuation (dB)	2110 to 2170	10	15	_
	2300 to 2700	10	14	_
Characteristic Impedance (Ω)			50 (Nominal)	

[•] Ta: +25±5°C

☐HIGH-BAND

Item	Frequency Range (MHz)	Min.	Тур.	Max.
	1920 to 1990	_	0.74	1.10
	2010 to 2025	_	0.54	0.80
Insertion Loss (dB)	2110 to 2170	_	0.52	0.80
	2300 to 2700	_	0.53	0.80
	1920 to 1990	_	_	1.30 (-40 to +85°C)
	2010 to 2025	_	_	1.00 (-40 to +85°C)
	2110 to 2170	_	_	1.00 (-40 to +85°C)
	2300 to 2700	_	_	1.00 (-40 to +85°C)
	1920 to 1990	9.54	18.0	_
Return Loss (dB)	2010 to 2025	9.54	16.8	_
	2110 to 2170	9.54	14.1	_
	2300 to 2700	8.52	11.5	_
Attenuation (dB)	698 to 960	10	14	_
	960 to 1572	10	14	_
	1572 to 1578	18	30	_
	1605 to 1616	13	25	_
Characteristic Impedance (Ω)			50 (Nominal)	

[·] Ta: +25±5°C

■TEMPERATURE RANGE

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

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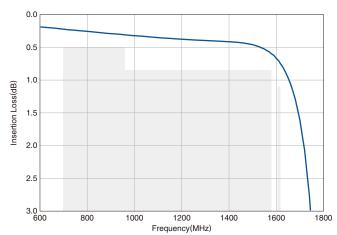


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FREQUENCY CHARACTERISTICS

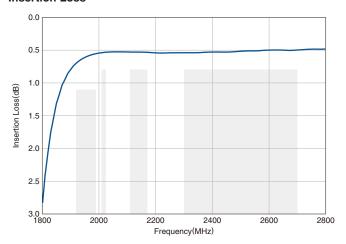
□LOW-BAND

Insertion Loss

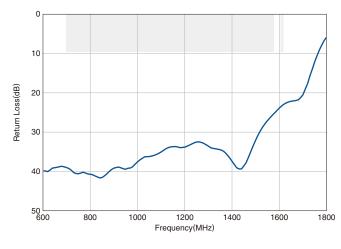


☐HIGH-BAND

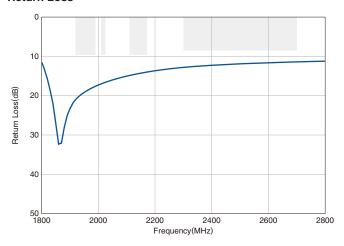
Insertion Loss



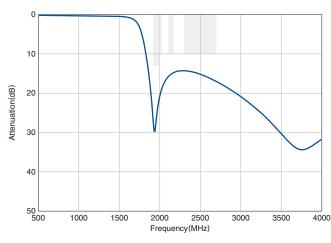
Return Loss



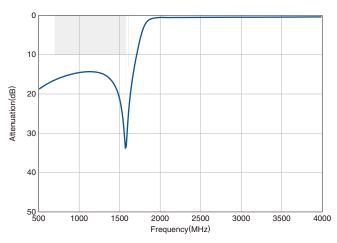
Return Loss



Attenuation



Attenuation



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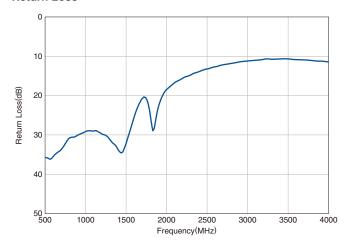


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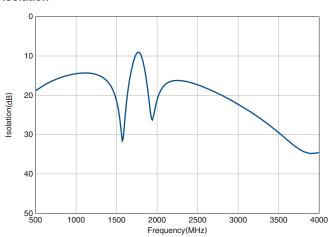
■ FREQUENCY CHARACTERISTICS

□ COMMON

Return Loss



Isolation



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■ RECOMMENDED REFLOW PROFILE



Preheating			Soldering Critical zone (T3 to T4) Peak			
Temp.		Time	Temp.	Time	Temp.	Time
T1	T2	t1	T3	t2	T4	t3*
150°C	200°C	60 to 120sec	217°C	60 to 120sec	240 to 260°C	30sec max.

^{*}t3: Time within 5°C of actual peak temperature

The maximum number of reflow is 3.

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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.

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