

July 2015

# Multilayer Diplexer

For 698-1755MHz / 2110-2170MHz

# DPX162170DT-8039A2

- 1.6x0.8mm [EIA 0603]\*
- \* Dimensions Code JIS[EIA]

# Caution

# The products in this catalog will be or have been stopped production

Discontinue Issue Date	Sep. 20, 2019
Last Purchase Order Date	Sep. 30, 2020
Last Shipment Date	Dec. 31, 2020

Please refer to our Web site about replacement information.



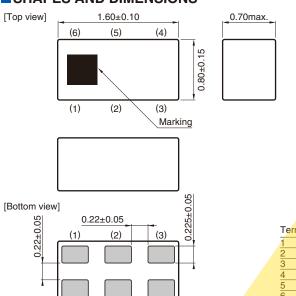
# **Multilayer Diplexer**

For 698-1755MHz / 2110-2170MHz

**Conformity to RoHS Directive** 

# DPX162170DT-8039A2

#### SHAPES AND DIMENSIONS

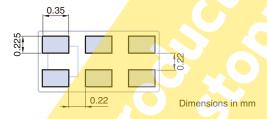


#### Terminal functions

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

Dimensions in mm

#### ■ RECOMMENDED LAND PATTERN



 $0.35 \pm 0.05$ 

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

<sup>•</sup> All specifications are subject to change without notice.

<sup>•</sup> Before using these products, be sure to request the delivery specifications.



## DPX162170DT-8039A2

#### **ELECTRICAL CHARACTERISTICS**

#### □LOW-BAND

Item	Frequency Range (MHz)	Min.	Тур.	Max.
Insertion Loss (dP)	698 to 960	_	0.26	0.50
Insertion Loss (dB)	1710 to 1755	_	0.64	0.90
Deturn Less (dD)	698 to 960	10	34.9	-
Return Loss (dB)	1710 to 1755	10	19.0	_
Attenuation (dB)	2110 to 2170	13	19.0	_
Characteristic Impedance ( $\Omega$ )		50 (Nomir	nal)	

<sup>·</sup> Ta: +25±5°C

#### ☐HIGH-BAND

Item	Frequency Range (MHz)	Min.	Тур.	Max.
Insertion Loss (dB)	2110 to 2170		1.28	1.7
Return Loss (dB)	2110 to 2170	10	15.5	_
Attanuation (dD)	698 to 960	10	15.2	<del>/</del>
Attenuation (dB)	1710 to 1755	13	18.9	_
Characteristic Impedance (Ω)			50 (Nominal)	

<sup>•</sup> Ta: +25±5°C

#### **TEMPERATURE RANGE**

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

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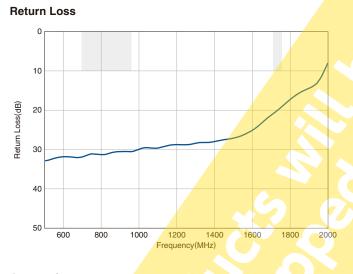
### DPX162170DT-8039A2

#### **■ FREQUENCY CHARACTERISTICS**

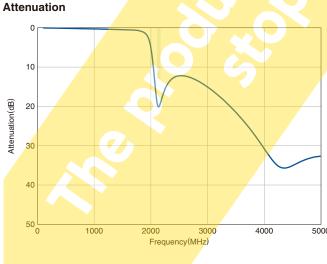
□LOW-BAND

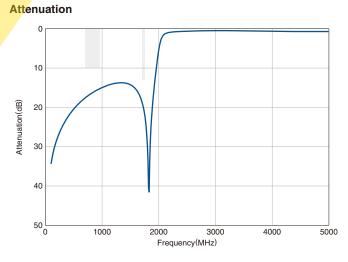
# 1.0 0.5 1.5 2.0 2.5 3.0 600 800 1000 1200 1400 1600 1800 2000 Frequency(MHz)











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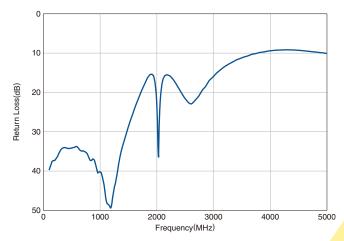


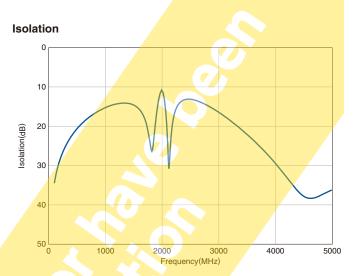
## DPX162170DT-8039A2

#### **■ FREQUENCY CHARACTERISTICS**

#### □ COMMON

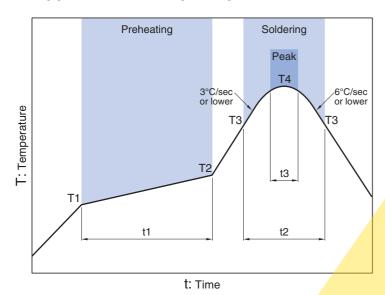






All specifications are subject to change without notice.Before using these products, be sure to request the delivery specifications.

#### ■ RECOMMENDED REFLOW PROFILE



Preheating -		Soldering				
			ne (T3 to T4)	Peak		
Temp.		Time	Temp.	Time	Temp.	Time
T1	T2	t1	Т3	t2	T4	t3*
150°C	200°C	60 to 120sec	217°C	60 to 120se	ec 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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