

June 2015

# Multilayer Band Pass Filter

For 2412-2484MHz

# DEA202450BT-1294C1-H

2.0x1.25mm [EIA 0805]\*

\* Dimensions Code JIS[EIA]



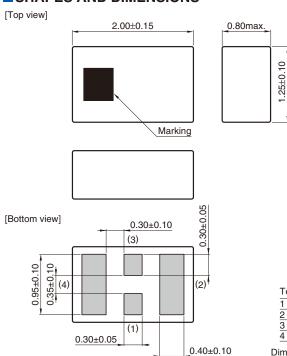
## **Multilayer Band Pass Filter**

For 2412-2484MHz

#### **Conformity to RoHS Directive**

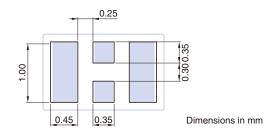
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#### SHAPES AND DIMENSIONS

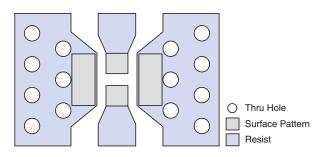


1	rminal functions In		
2	GND		
3	Out		
4	GND		
Dimensions in mm			

#### ■ RECOMMENDED LAND PATTERN



#### **EVALUATION BOARD**



Material & Layer	Thickness
Top resist	-
Cupper surface pattern	0.035mm
FR4	0.10mm
Inner GND	0.018mm
FR4	0.30mm
Cupper bottom GND	0.035mm

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

OROHS 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.



#### **ELECTRICAL CHARACTERISTICS**

Item	Frequency Range (MHz)	Min.	Тур.	Max.
Insertion Loss (dB)	2412 to 2484	_	1.02	1.35
Return Loss (dB)	2412 to 2484	10	22	_
	804 to 828	30	42	_
	1608 to 1656	20	23	_
	3216 to 3312	30	49	_
	4020 to 4140	40	52	_
Attenuation (dB)	4824 to 4968	20	30	_
	5628 to 5796	20	27	_
	6432 to 6624	20	42	_
	7200 to 7500	35	44	_
	7500 to 10000	20	30	_
Characteristic Impedance (Ω)			50 (Nominal)	

<sup>·</sup> Ta: +25±5°C

#### **■TEMPERATURE RANGE**

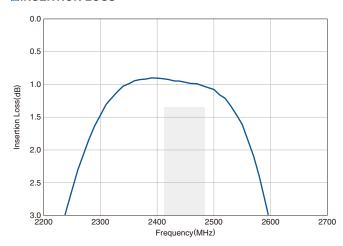
Operating temperature	Storage temperature
(°C)	(°C)
-40 to +85	-40 to +85

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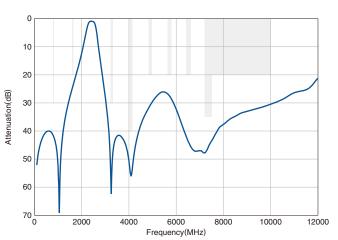


#### **■ FREQUENCY CHARACTERISTICS**

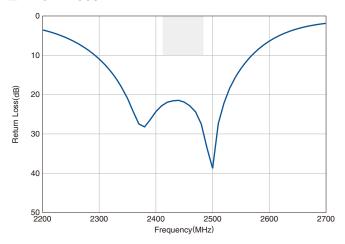
#### □INSERTION LOSS



#### **ATTENUATION**



#### **RETURN LOSS**

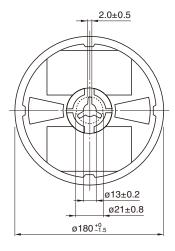


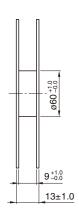
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#### **■PACKAGING STYLE**

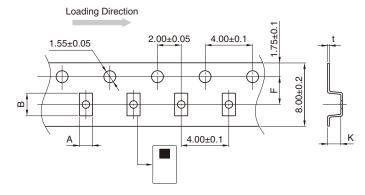
#### □REEL DIMENSIONS





Dimensions in mm

#### **TAPE DIMENSIONS**



Α	A B		t	K
1.45±0.1	2.25±0.1	3.50±0.05	0.25±0.05	1.00±0.05

#### **■PACKAGE QUANTITY**

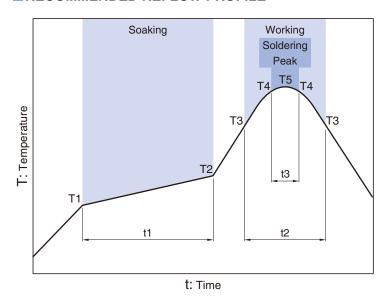
Standard package quantity
(pieces/reel)
2000

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#### ■ RECOMMENDED REFLOW PROFILE



Soaking		Working		Soldering Peak	Soldering Peak		
Temp.		Time	Temp.	Time	Temp.	Time	Temp.
T1	T2	t1	Т3	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.

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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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