

August 2016

# **Multilayer Band Pass Filter**

For 2412-2484MHz

# DEA202450BT-1294C1-H

2.0x1.25mm [EIA 0805]\*

\* Dimensions Code JIS[EIA]

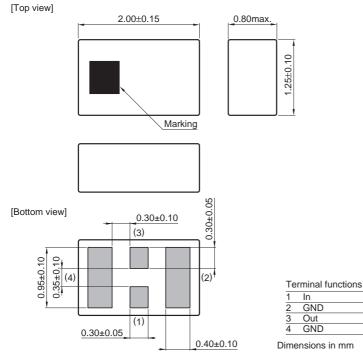
# **Multilayer Band Pass Filter**

**公TDK** 

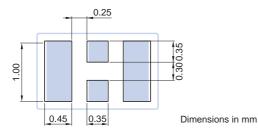
For 2412-2484MHz

# DEA202450BT-1294C1-H

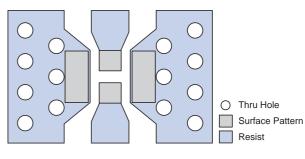
#### SHAPES AND DIMENSIONS



#### RECOMMENDED LAND PATTERN



#### EVALUATION BOARD



Material & Layer	Thickness
Top resist	-
Copper surface pattern	0.035mm
FR4	0.10mm
Inner GND	0.018mm
FR4	0.30mm
Copper 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.https://product.tdk.com/info/en/environment/rohs/index.html

• All specifications are subject to change without notice.

• 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	—
Attenuation (dB)	804 to 828	30	42	—
	1608 to 1656	20	23	_
	3216 to 3312	30	49	_
	4020 to 4140	40	52	
	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)	

• Ta: +25±5°C

#### **TEMPERATURE RANGE**

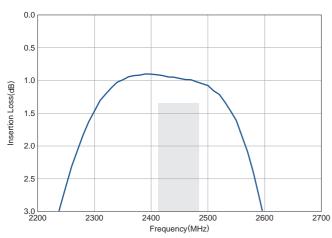
Operating temperature	Storage temperature
(°C)	(°C)
-40 to +85	-40 to +85

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

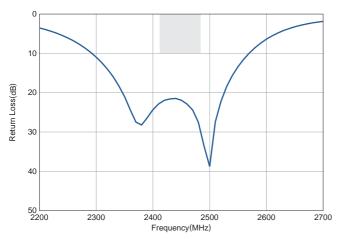
# DEA202450BT-1294C1-H

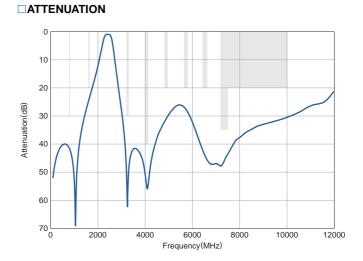
#### FREQUENCY CHARACTERISTICS





**RETURN LOSS** 





#### • All specifications are subject to change without notice.

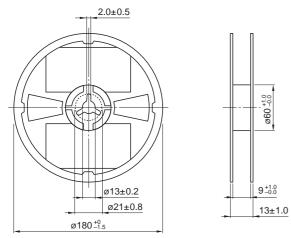
• Before using these products, be sure to request the delivery specifications.

#### **公TDK**

# DEA202450BT-1294C1-H

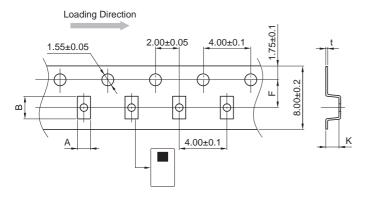
#### PACKAGING STYLE

**REEL DIMENSIONS** 



Dimensions in mm

#### **TAPE DIMENSIONS**



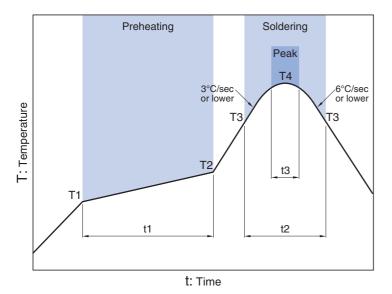
A	В	F	t	К
1.45±0.1	2.25±0.1	$3.50 \pm 0.05$	0.25±0.05	1.00±0.05

#### PACKAGE QUANTITY

Standard package quantity
(pieces/reel)
2000

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

#### RECOMMENDED REFLOW PROFILE



Soldering Preheating Critical zone (T3 to T4) Peak Temp. Time Temp. Time Temp. Time T1 T2 **T**4 t1 ТЗ t2 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.

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
- (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.

• All specifications are subject to change without notice.

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