

June 2015

# **Multilayer Band Pass Filter**

For 2400-2500MHz

# DEA162450BT-2092A1-H

1.6x0.8mm [EIA 0603]\*

\* Dimensions Code JIS[EIA]

# Multilayer Band Pass Filter

**公TDK** 

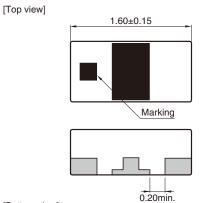
For 2400-2500MHz

# DEA162450BT-2092A1-H

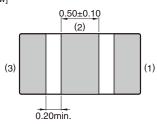
0.60max.

0.80±0.15

#### SHAPES AND DIMENSIONS



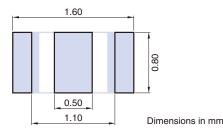
[Bottom view]



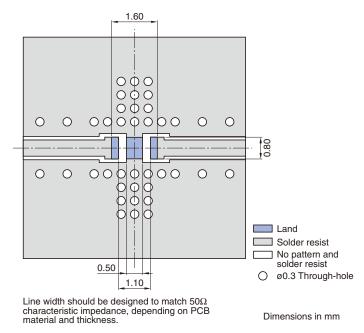
| Terminal functions |     |  |  |  |  |
|--------------------|-----|--|--|--|--|
| 1                  | IN  |  |  |  |  |
| 2                  | GND |  |  |  |  |
| 3                  | OUT |  |  |  |  |
|                    |     |  |  |  |  |

Dimensions in mm

#### RECOMMENDED LAND PATTERN



#### EVALUATION BOARD



O 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.

# DEA162450BT-2092A1-H

#### **ELECTRICAL CHARACTERISTICS**

| Item                         | Frequency Range<br>(MHz) | Min. | Тур.         | Max.               |
|------------------------------|--------------------------|------|--------------|--------------------|
| Incortion Loop (dP)          | 2400 to 2500             | —    | 2.74         | 3.2                |
| Insertion Loss (dB)          | 2400 to 2500             | —    | —            | 3.5 (–40 to +85°C) |
| Return Loss (dB)             | 2400 to 2500             | 10   | —            | —                  |
|                              | 880 to 915               | 40   | _            | _                  |
|                              | 1710 to 1850             | 40   | —            | —                  |
|                              | 1850 to 1910             | 40   | —            | —                  |
| Attenuation (dB)             | 1920 to 1990             | 40   | —            | _                  |
|                              | 2110 to 2170             | 35   | —            | _                  |
|                              | 4800 to 5000             | 30   | _            | _                  |
|                              | 7200 to 7500             | 30   | _            | _                  |
| Characteristic Impedance (Ω) |                          |      | 50 (Nominal) |                    |

• Ta: +25±5°C

#### **TEMPERATURE RANGE**

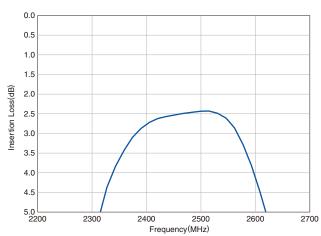
| Operating temperature | Storage temperature |  |  |
|-----------------------|---------------------|--|--|
| (°C)                  | (°C)                |  |  |
| -40 to +85            | -40 to +85          |  |  |

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

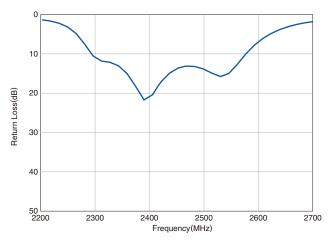
# DEA162450BT-2092A1-H

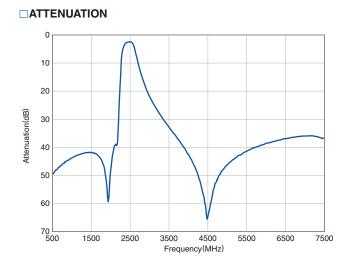
#### FREQUENCY CHARACTERISTICS





**RETURN LOSS** 



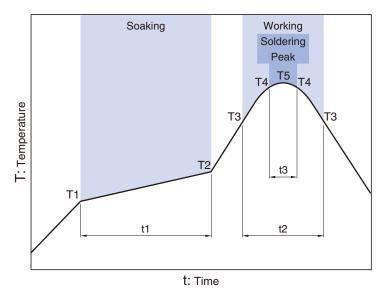


• All specifications are subject to change without notice.

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

## DEA162450BT-2092A1-H

#### RECOMMENDED REFLOW PROFILE



| Soaking |       | Working    |       | 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. |

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.