

# Multilayer Low Pass Filter

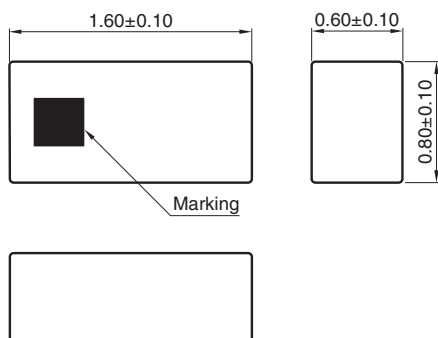
## For 698-960MHz

Conformity to RoHS Directive

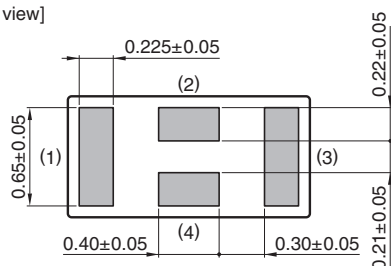
# DEA160960LT-5059A1

## SHAPES AND DIMENSIONS

[Top view]



[Bottom view]

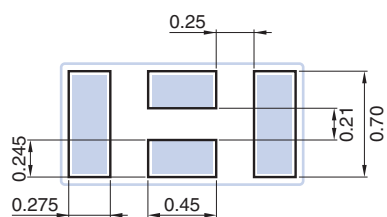


Terminal functions

|   |        |
|---|--------|
| 1 | IN/OUT |
| 2 | GND    |
| 3 | OUT/IN |
| 4 | GND    |

Dimensions in mm

## RECOMMENDED LAND PATTERN



Dimensions in mm

○ RoHS 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.

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## ELECTRICAL CHARACTERISTICS

| Item                                  | Frequency Range (MHz) | Min. | Typ.         | Max.                |
|---------------------------------------|-----------------------|------|--------------|---------------------|
| Insertion Loss (dB)                   | 698 to 960            | —    | 0.28         | 0.35                |
|                                       | 698 to 960            | —    | —            | 0.45 (–40 to +90°C) |
| Return Loss (dB)                      | 698 to 960            | 16   | 19.6         | —                   |
|                                       | 1574 to 1605          | 12   | 23.6         | —                   |
|                                       | 1648 to 1698          | 16   | 35.4         | —                   |
|                                       | 1760 to 1830          | 21   | 26.9         | —                   |
|                                       | 2472 to 2494          | 30   | 40.4         | —                   |
|                                       | 2495 to 2547          | 13   | 39.5         | —                   |
|                                       | 2640 to 2745          | 18   | 34.1         | —                   |
|                                       | 3296 to 3396          | 16   | 32.6         | —                   |
|                                       | 3520 to 3660          | 21   | 32.9         | —                   |
|                                       | 4120 to 4245          | 33   | 36.4         | —                   |
|                                       | 4400 to 4575          | 34   | 39.3         | —                   |
|                                       | 4944 to 5094          | 41   | 54.2         | —                   |
|                                       | 5280 to 5490          | 32   | 42.1         | —                   |
|                                       | 5768 to 5943          | 26   | 36.0         | —                   |
|                                       | 6160 to 6405          | 22   | 32.3         | —                   |
| Attenuation (dB)                      | 6592 to 6792          | 22   | 30.1         | —                   |
|                                       | 7040 to 7320          | 19   | 27.9         | —                   |
|                                       | 7416 to 7614          | 14   | 26.9         | —                   |
|                                       | 7920 to 8235          | 4    | 24.9         | —                   |
| Power Handling (W)                    | 698 to 960            | —    | —            | 4 (CW Duty 50%)     |
| Characteristic Impedance ( $\Omega$ ) |                       |      | 50 (Nominal) |                     |

• Ta: +25±5°C

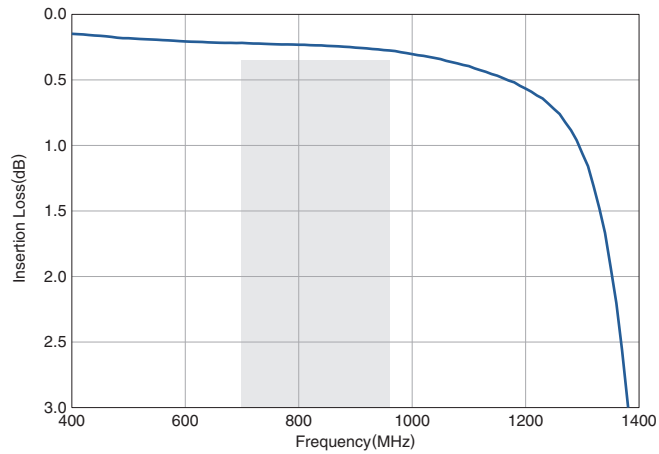
## TEMPERATURE RANGE

| Operating temperature (°C) | Storage temperature (°C) |
|----------------------------|--------------------------|
| –40 to +90                 | –40 to +90               |

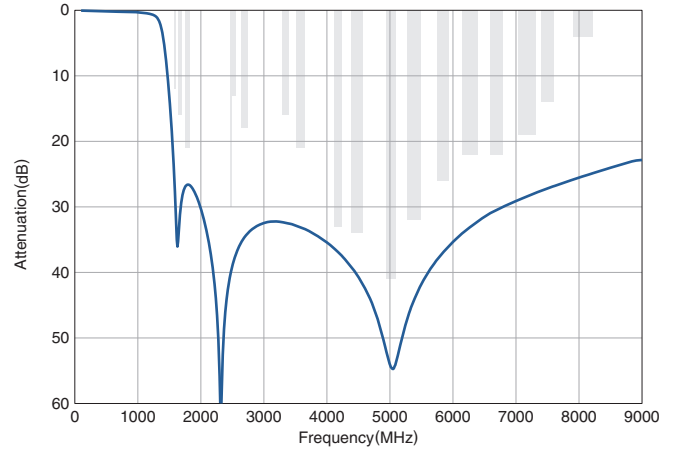
## DEA160960LT-5059A1

## FREQUENCY CHARACTERISTICS

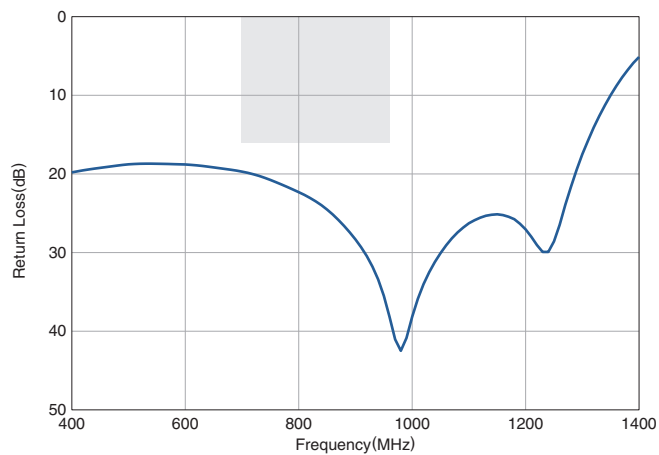
## INSERTION LOSS



## ATTENUATION



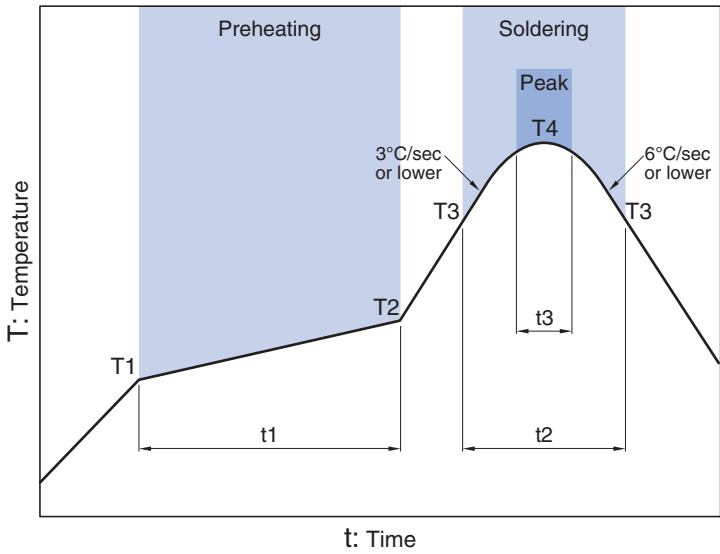
## RETURN LOSS



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RECOMMENDED REFLOW PROFILE



| Preheating |       |      | Soldering                |      |              |      |
|------------|-------|------|--------------------------|------|--------------|------|
| Temp.      |       |      | Critical zone (T3 to T4) |      | Peak         |      |
| T1         | T2    | Time | T3                       | Time | T4           | Time |
| 150°C      | 200°C | t1   | 217°C                    | t2   | 240 to 260°C | t3*  |

\* 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                                  | (8) Public information-processing equipment                                  |
| (2) Transportation equipment (cars, electric trains, ships, etc.) | (9) Military equipment   |
| (3) Medical equipment   | (10) Electric heating apparatus, burning equipment                           |
| (4) Power-generation control equipment                            | (11) Disaster prevention/crime prevention equipment                          |
| (5) Atomic energy-related equipment                               | (12) Safety equipment  |
| (6) Seabed equipment  | (13) Other applications that are not considered general-purpose applications |
| (7) Transportation control equipment                              |  |

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.