

Multilayer Low Pass Filter

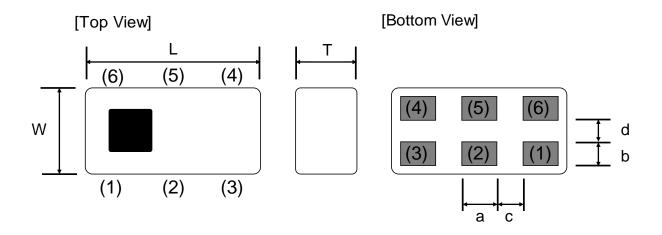
For 700-3800MHz

DEA Series 1.0x0.5mm [EIA 0402] TYPE

P/N: **DEA103800LT-6328B3**

DEA103800LT-6328B3

SHAPES AND DIMENSIONS



Dimensions (mm)

| | | (| | | | |
|---------|---------|------|---------|---------|---------|---------|
| L | W | Т | а | | | d |
| 1.00 | 0.50 | 0.40 | 0.18 | 0.125 | 0.18 | 0.15 |
| +/-0.05 | +/-0.05 | Max | +/-0.05 | +/-0.05 | +/-0.05 | +/-0.05 |

Terminal functions

| | · orriniar rariotionio | | | |
|-----|------------------------|--|--|--|
| (1) | NC | | | |
| (2) | GND | | | |
| (3) | NC | | | |

| (4) | Output Port | | | |
|-----|-------------|--|--|--|
| (5) | GND | | | |
| (6) | Input Port | | | |

■ TEMPERATURE RANGE



| Operating temperature | Storage temperature |
|------------------------------|---------------------|
| –40 to +85 °C | –40 to +85 °C |

| Material |
|----------|
| Au plate |

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ELECTRICAL CHARACTERISTICS

(Measurement)

| Parameter | Frequency (MH: | | /MU-) | TDK Target Spec | | |
|--------------------------------|----------------|-----|----------|-----------------|-------|------|
| Farameter | Freque | псу | (IVITIZ) | Min. | Тур. | Max. |
| Insertion Loss (dB) | 700 | to | 2700 | - | 0.33 | 0.50 |
| | 3400 | to | 3600 | - | 0.99 | 1.60 |
| | 3600 | to | 3800 | - | 2.04 | 3.80 |
| Insertion Loss (dB) | 700 | to | 2700 | - | - | 0.60 |
| | 3400 | to | 3600 | - | - | 1.90 |
| (–40 to +85 °C) | 3600 | to | 3800 | - | - | 4.60 |
| Return Loss (dB) | 700 | to | 2700 | 10 | 19 | - |
| | 3400 | to | 3600 | 10 | 20 | - |
| | 3600 | to | 3800 | 4 | 10 | - |
| Attenuation (dB) | 5150 | to | 5850 | 28 | 34 | - |
| | | | | | | |
| Input Power Rating (W) | 700 | to | 2700 | - | - | 4 |
| (50% duty) | 3400 | to | 3800 | - | - | 2 |
| Characteristic Impedance (ohm) | | | • | 50 | (Nomi | nal) |

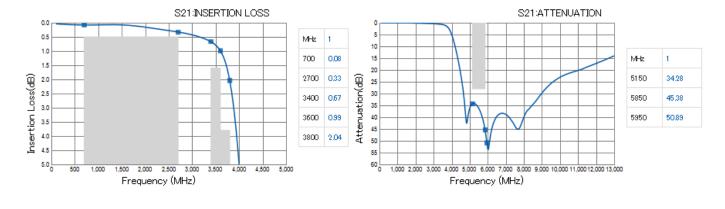
Ta = +25 + /-5°C

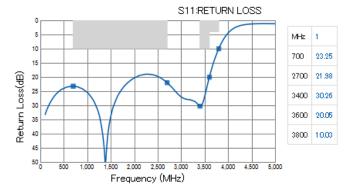


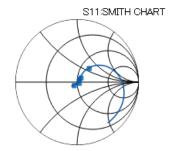
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FREQUENCY CHARACTERISTICS

(Measurement)



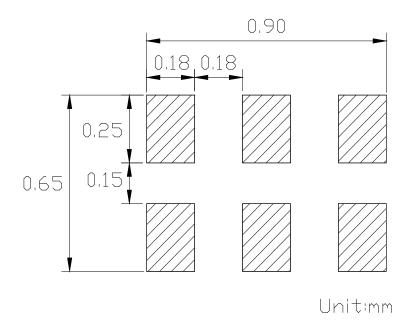




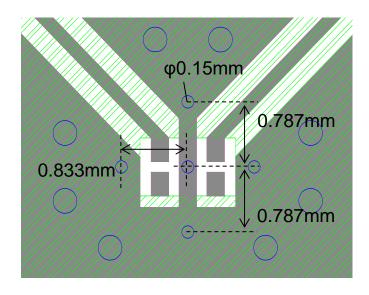
| 1 |
|---------------|
| Re / Im |
| 0.03 / 0.06 |
| -0.06 / -0.05 |
| 0.03 / -0.01 |
| 0.06 / 0.08 |
| 0.2 / 0.24 |
| |

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EVALUATION LAND PATTERN



EVALUATION BOARD



| \bigcirc | Thru Hole |
|------------|-----------------|
| | Resist |
| | Surface Pattern |

| Material & Layer | Thickness |
|------------------------|-----------|
| Top Resist | - |
| Copper Surface Pattern | 0.035mm |
| FR-4 | 0.10mm |
| Inner GND | 0.018mm |
| FR-4 | 0.30mm |
| Copper Bottom Pattern | 0.035mm |



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SOLDERING INFORMATION

Metal Mask

Thickness: 80um

Opening to Land Pattern: 100%

Solder Paste

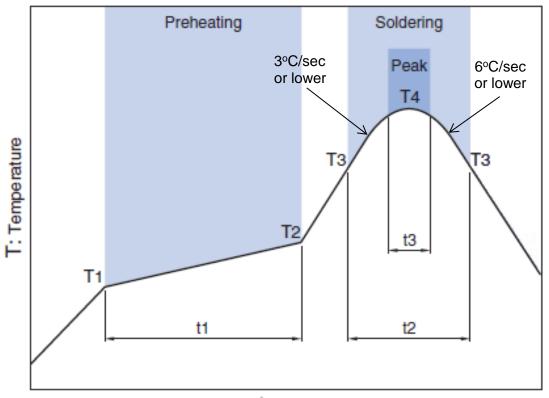
SAC; Sn-3.0Ag-0.5Cu (TDK evaluation)

ENVIRONMENT INFORMATION

RoHS Statement RoHS Compliance

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RECOMMENDED REFLOW PROFILE



t: Time

| | Probacting | | Soldering | | | | | |
|------------|------------|--------------|--------------|--------------|--------------|------------|--|--|
| Preheating | | Critical zon | e (T3 to T4) | Peak | | | | |
| Tei | mp. | Time | Temp. | Time | Temp. | Time | | |
| T1 | T2 | t1 | Т3 | t2 | T4 | t3 * | | |
| 150°C | 200°C | 60 to 120sec | 217°C | 60 to 120sec | 240 to 260°C | 30 sec Max | | |

* t3 : Time within 5°C of actual peak temperature The maximum number of reflow is 3.

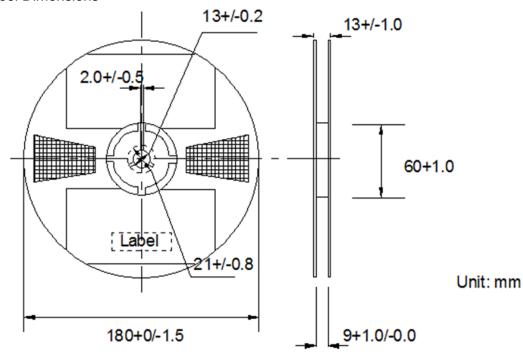
Note: Lead free solder is recommended.

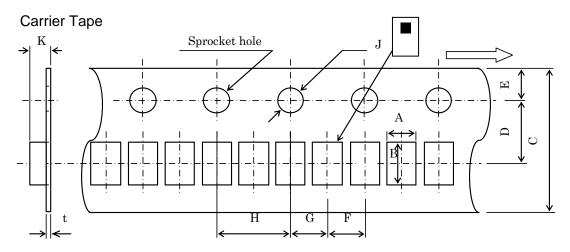
Recommended solder is Sn-3.0Ag-0.5Cu. (M705 by Senju Metal Industry)

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PACKAGING STYLE

Reel Dimensions





Dimensions (mm)

| Α | В | C | D | Е | F | G | Н | J | K | t |
|---------|---------|--------|---------|--------|---------|---------|---------|---------|------|---------|
| 0.62 | 1.12 | 8.0 | 3.5 | 1.75 | 2.0 | 2.0 | 4.0 | 1.5 | 0.48 | 0.25 |
| +/-0.05 | +/-0.05 | +/-0.2 | +/-0.05 | +/-0.1 | +/-0.05 | +/-0.05 | +/-0.05 | +0.1/-0 | MAX | +/-0.05 |

| ST | ANDARD PACKAGE QUANTITY |
|----|-------------------------|
| | (pieces/reel) |
| | 10,000 |



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.

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- (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.

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