

High Frequency Ceramic Solutions

6.3 GHz Band Pass Filter

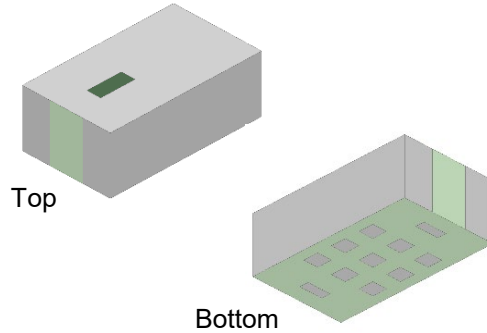
Global P/N: 6300BP44A120001E

Detail Specification: 4/4/2023

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General Specifications

| | | | |
|-----------------------------------|-------------------------|--|-----------------------------------------------------------------------------------------------------------------------------------------|
| Part Number | 6300BP44A120001E | | |
| Operating Frequency (MHz) | 5700 - 6900 | | |
| Insertion Loss (dB) | 2.0 max. | | |
| Return Loss (dB) | 10 min. | | |
| Attenuation (dB) | 37 min. @DC - 4500MHz | | |
| | 32 min. @4500 - 5000MHz | | |
| | 14 min. @5000 - 5460MHz | | |
| | 14 min. @7250 - 8000MHz | | |
| | 32 min. @8000 - 9000MHz | | |
| Power Capacity (W) | 3 max. (CW) | | Recommended Storage Conditions and Period for Unused Product on T&R +5 to +35°C Humidity 45 - 75% RH 18 months max. |
| Operating Temperature (°C) | -40 to +85 | | |
| Reel Quantity (pcs./reel) | 1,000 | | |

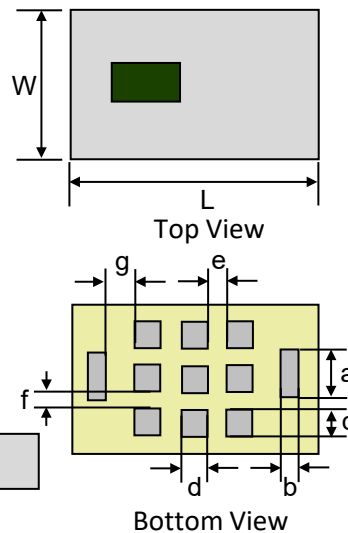


Part Number Explanation

| | | | | |
|-------------------|-------------------------|-------------------------------|-------------|-------------------------|
| P/N Suffix | Packing Style | Bulk (loose pcs.) | Suffix = B | E.g. 6300BP44A120001B |
| | | T & R (7" Reel Embossed Tape) | Suffix = E | E.g. 6300BP44A120001E |
| | Evaluation Board | Non-Conductive Bags | Suffix = C | E.g. 6300BP44A120001CE1 |
| | | Assembled PCB 1 (50Ω SMA) | Suffix = E1 | |

Mechanical Dimensions

| | in | mm |
|----------|---------------|-------------|
| L | 0.217 ± 0.008 | 5.50 ± 0.20 |
| W | 0.126 ± 0.008 | 3.20 ± 0.20 |
| T | 0.087 max | 2.20 max |
| a | 0.031 ± 0.008 | 0.80 ± 0.20 |
| b | 0.012 ± 0.008 | 0.30 ± 0.20 |
| c | 0.020 ± 0.008 | 0.50 ± 0.20 |
| d | 0.020 ± 0.008 | 0.50 ± 0.20 |
| e | 0.020 ± 0.008 | 0.50 ± 0.20 |
| f | 0.020 ± 0.008 | 0.50 ± 0.20 |
| g | 0.028 ± 0.008 | 0.70 ± 0.20 |
| h | 0.047 ± 0.008 | 1.20 ± 0.20 |



Terminal Configuration

| No. | Function |
|-----|----------------|
| 1 | INPUT / OUTPUT |
| 2 | OUTPUT / INPUT |
| 3 | GND |



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Ver. 1.1

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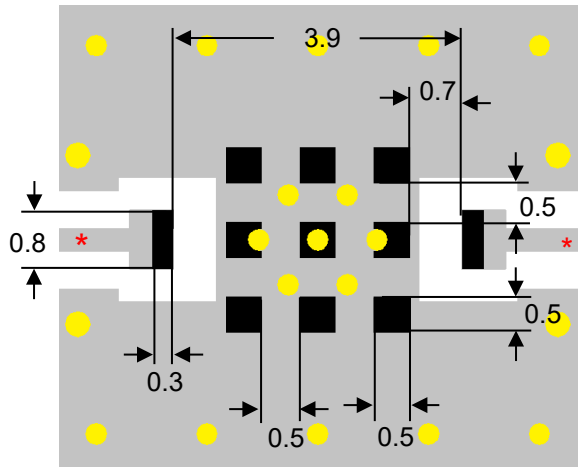
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Mounting Considerations

Mount device with colored mark facing up.



Units: mm

■ Solder Resist

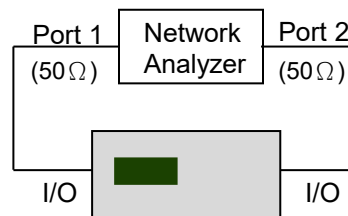
■ Land

○ Through-hole (ϕ 0.3/0.35)

* Transmission line width should be designed to match 50 Ω characteristic impedance, depending on PCB material and thickness.

For reference design package and PCB CAD files, please contact us at:
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Measuring Diagram



Port 1: Filter IN/OUT
Port 2: Filter IN/OUT

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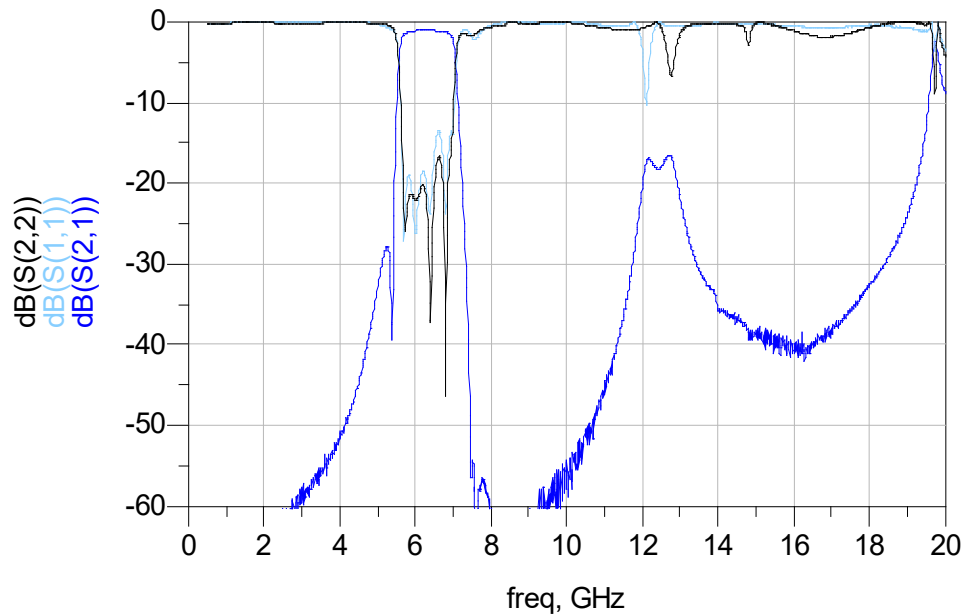
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Typical Electrical Characteristics (T=25°C)

Insertion Loss and Return Loss



Do you need the S-parameter file of the above? Send us a message at:
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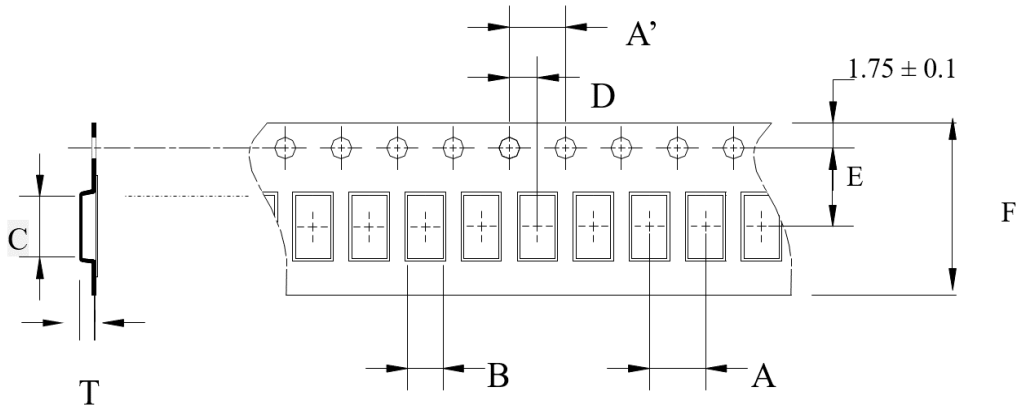
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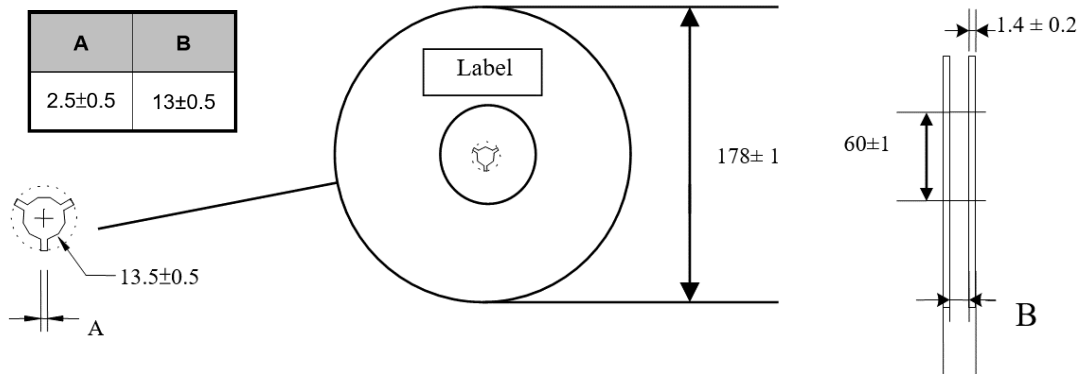
Taping Specification

Tape dimensions in mm



| A | A' | B | C | D | E | F | T | Quantity/per reel | Tape material |
|---------|---------|----------|----------|---------|---------|----------|----------|-------------------|--------------------|
| 8.0±0.1 | 4.0±0.1 | 3.50±0.1 | 5.80±0.1 | 2.0±0.1 | 5.5±0.1 | 12.0±0.1 | 2.2±0.10 | 1,000pcs | Plastic (Embossed) |

Reel dimensions in mm



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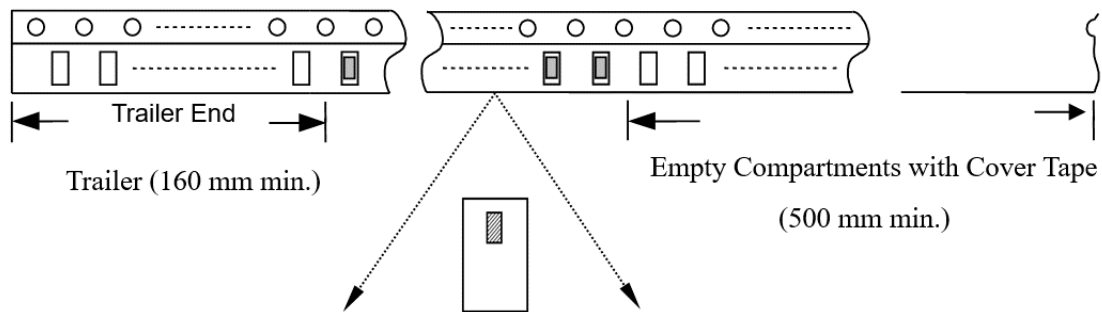
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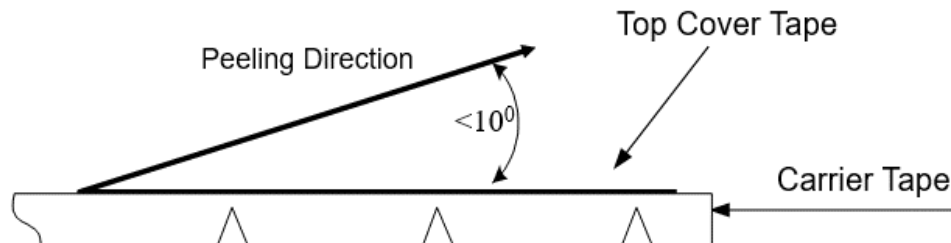
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Taping Specification (continued)

Leader and trailer dimensions in mm



Peel-off force



0.2 – 1.2N at a peel-off speed of 300 ± 10 mm/min.

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For more Band Pass Filters and to Download Measured S-parameters, go to:

<https://www.johansontechnology.com/band-pass-filters>

Packaging Information

<https://www.johansontechnology.com/tape-reel-packaging>

Soldering Information

<https://www.johansontechnology.com/ipcsoldering-profile>

MSL Info

<https://www.johansontechnology.com/msl-rating>

Recommended Storage Condition and Max Shelf Life

<https://www.johansontechnology.com/recommended-storage-conditions>

RoHS Compliance

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