

**Multilayer Balanced Band Pass Filter**

**Part Number : DEA202450BT-7099A1**

**[FEATURES]**

- Miniature Balanced Band Pass Filter
- Matched to CSR BC04 IC
- Package size: 2.0 x 1.25mm
- Low Profile : 0.8mm max. height

**[PIN CONFIGURATION]**

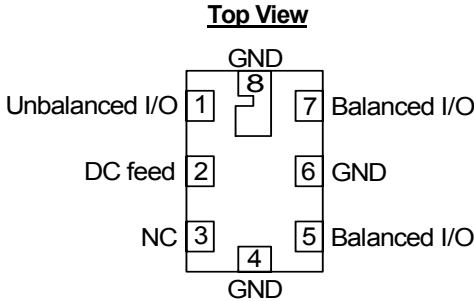


Fig 1

**[MECHANICAL DIMENSIONS]**

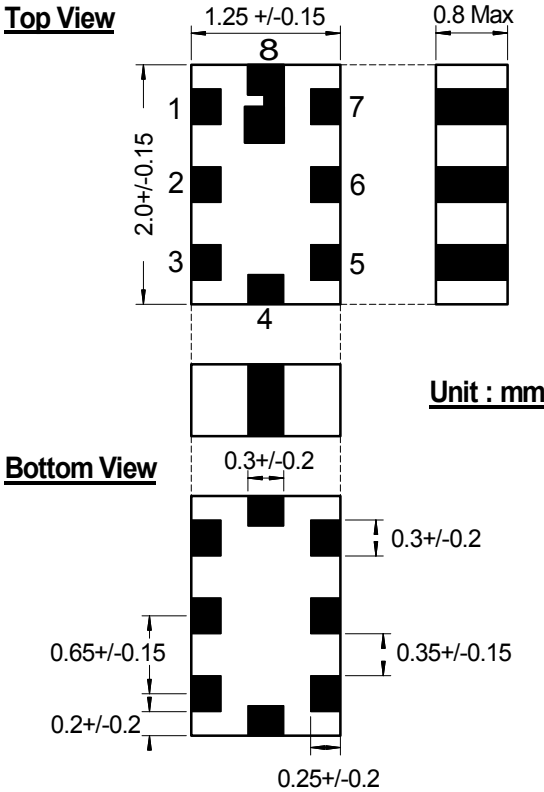


Fig 2

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## [ELECTRICAL PERFORMANCE]

Temperature +25°C unless otherwise specified

Parameter	Freq. (MHz)	Performance	Unit
Insertion Loss	2402 – 2480	3.0 max	dB
Single ended port characteristic impedance	-	50 (Nominal)	ohm
Balanced ports impedance, nominal value	-	Matched to CSR BC04 IC	ohm
Return Loss: Unbalanced port	2402 – 2480	8.5 min.	dB
Return Loss: Balanced port (with respect to nominal balanced impedance)		8.5 min.	dB
Attenuation	880 – 960	35 min.	dB
	1710 – 1880	22 min.	dB
	1880 – 1910	20 min.	dB
	2110 – 2170	-	dB
	4804 – 4960	18 min.	dB
Phase Difference at Balanced Port	2402 – 2480	180 ± 10.0	Deg.
Amplitude Imbalance at Balanced Port	2402 – 2480	0 ± 2	dB

Storage Temperature : -40°C to +85°C

## [RESPONSE DATA]

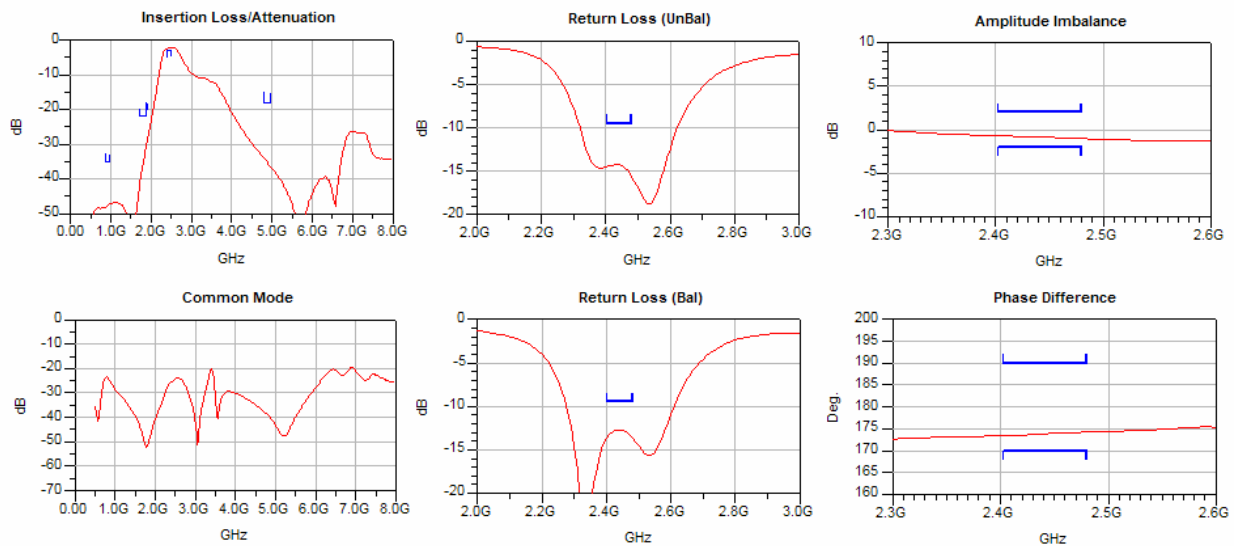


Fig 3

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**[LAND PATTERN (TDK Recommended)]**

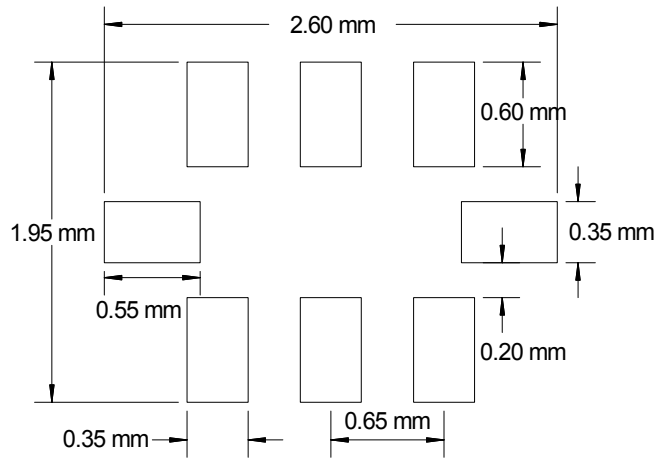


Fig 4

**Note1:** Pin 2 of the filter provides a DC feed connection to the balanced ports. In the event that this function is used, Pin 2 should be connected to ground using a de-coupling capacitor.

**Note2:** In the event that the pin 2 function is not used, the pin should be left unconnected.

**[PCB TOP METAL LAYER]**

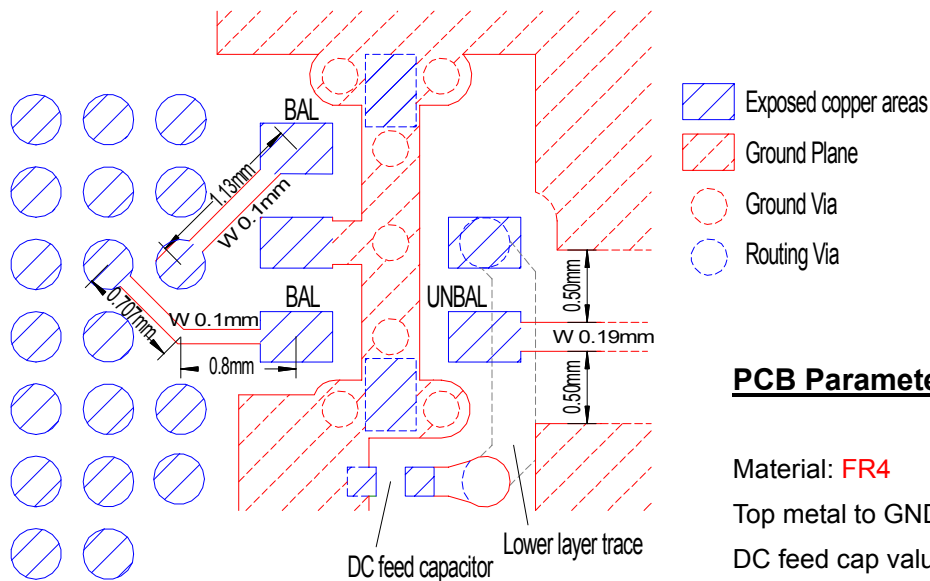


Fig 5

**PCB Parameters:**

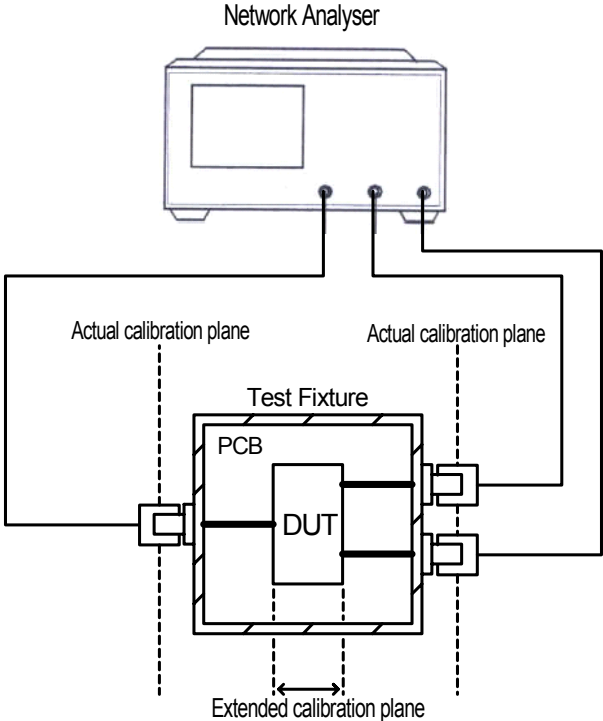
Material: **FR4**

Top metal to GND layer height: **0.1mm**

DC feed cap value: **15pF**

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[EVALUATION SETUP]



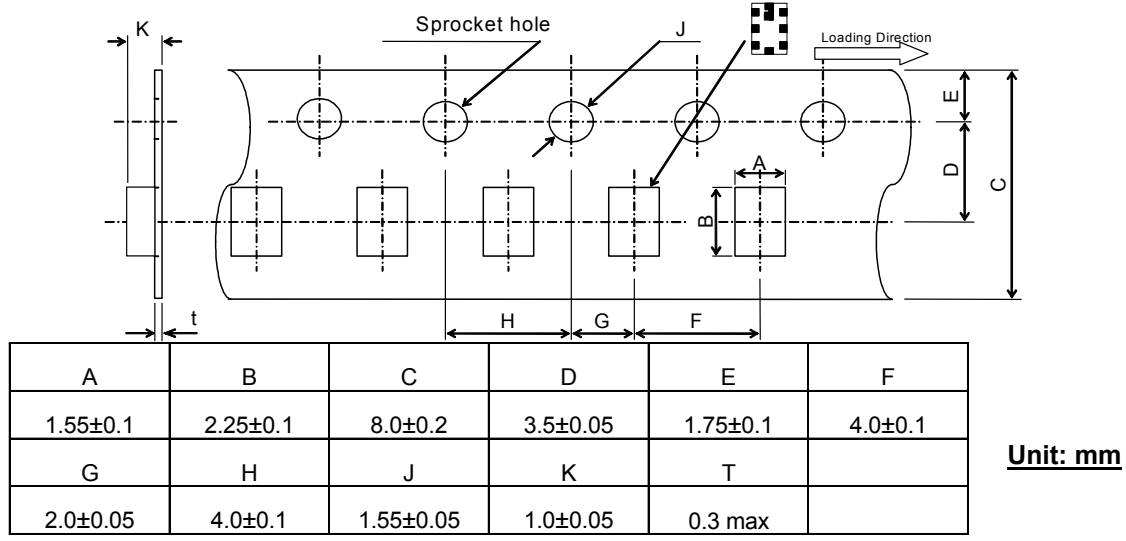
**Note 1:** The Port Extension function on the Network Analyser is used to extend the calibration plane to the DUT terminals.

**Note 2:** Loss in the PCB traces is compensated for by measurement data taken on a PCB Thru' line.

Fig 6

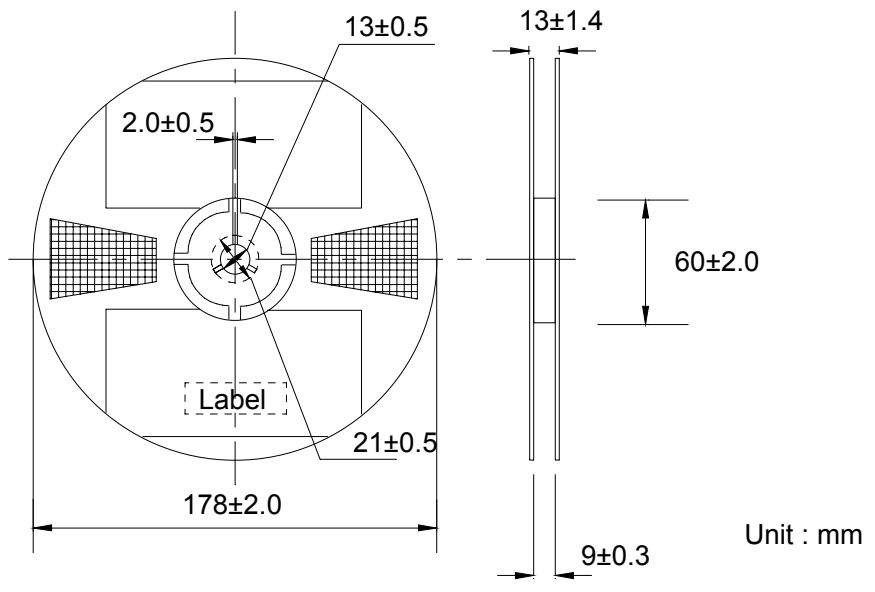
**[TAPE & REEL INFORMATION]**

**Carrier Tape**



**Fig 7**

**Reel Dimensions**



Standard package quantities: 2000pcs/reel

**Fig 8**

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## **[RoHS STATEMENT]**

*“In conformity with EU directive 2002/95/EC, lead, cadmium, mercury, hexavalent chromium and specific bromine-based flame retardants, PBB and PBDE, have not been used in the materials of this part.”*

## **[CONTACT INFORMATION]**

Any inquiries about this part can be addressed to the following TDK sales representatives:

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**[END OF DOCUMENT]**

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