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[DEA252450BT-7046A1](#)

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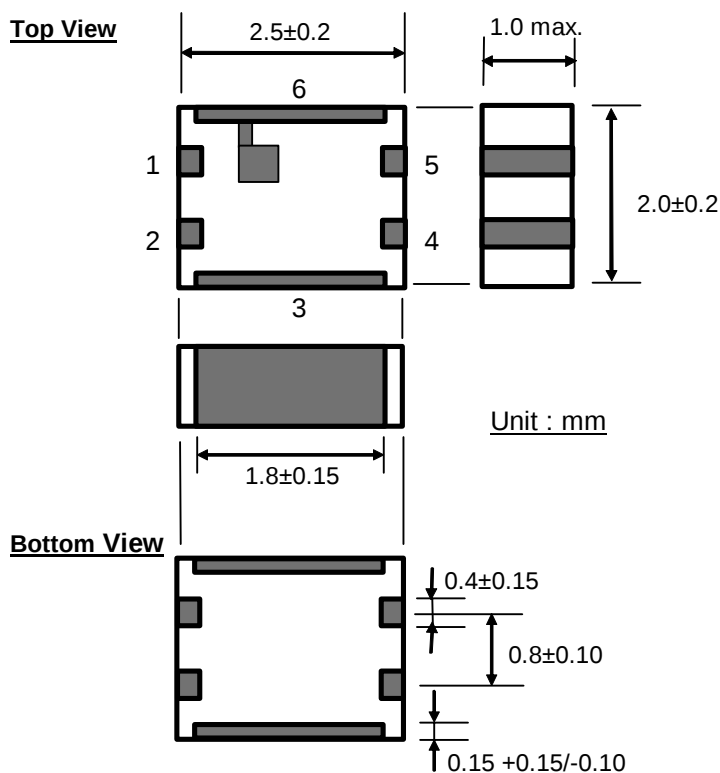
sales@integrated-circuit.com

Multilayer Band Pass Filter (Balance output type)

P/N : **DEA252450BT-7046A1**

For Bluetooth

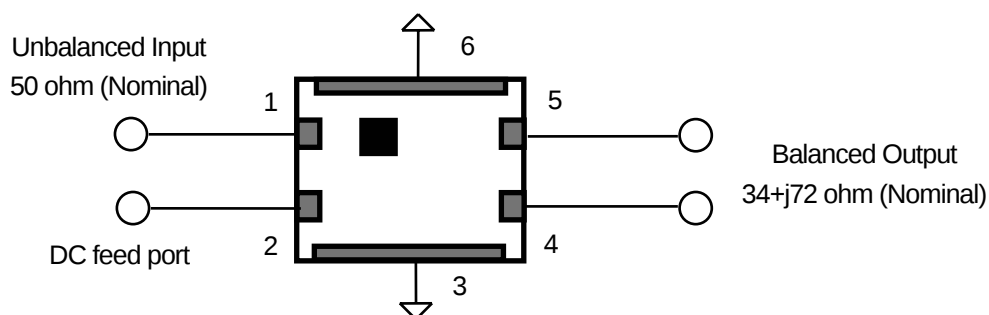
MECHANICAL DIMENSIONS



PIN CONFIGURATION

PIN ASSIGNMENT	PIN No.
Unbalanced	1
Balanced	4,5
GND	3,6
DC feed or RF GND	2

Note : Internal DC path from Pin 2 to balanced ports.



ELECTRICAL CHARACTERISTICS (Ta=25±5 °C)

Parameter		Specification	Typical Value	Unit
Frequency Range (Pass Band)		2400 – 2500	-	MHz
Unbalanced Port Characteristics Impedance		50 (Nominal)	-	Ω
Balanced Port Characteristics Impedance		34+j72 (Nominal)	-	Ω
Unbalanced Port Return Loss		8.0 min.	10.3	dB
Insertion Loss (Pass Band)		3.0 max.	2.6	dB
Attenuation	880 - 960 MHz	50 min.	60	dB
	1710 - 1880 MHz	48 min.	51	dB
	1880 - 1990 MHz	38 min.	43	dB
	4800 - 5000 MHz	25 min.	31	dB
	7200 - 7500 MHz	10 min.	27	dB
Amplitude Imbalance at Balanced Port		1.0 max.	0.1	dB
Phase Difference at Balanced Port	+25 °C	180 ± 8	180	Deg.
	-40 ~ +85 °C	180 ± 10	-	Deg.

TEMPERATURE RANGE

Storage Temperature : -40 ~ +85 °C

Operating Temperature : -40 ~ +85 °C

FREQUENCY RESPONSE

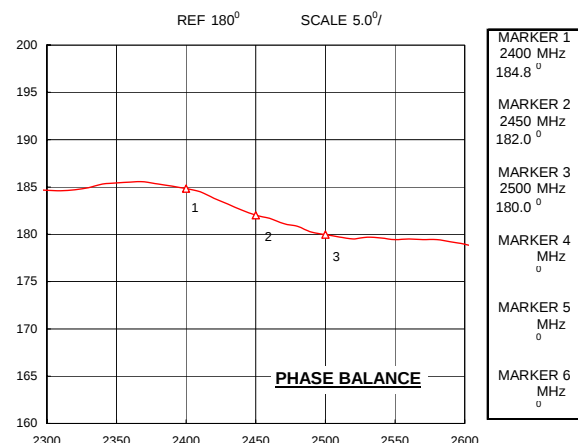
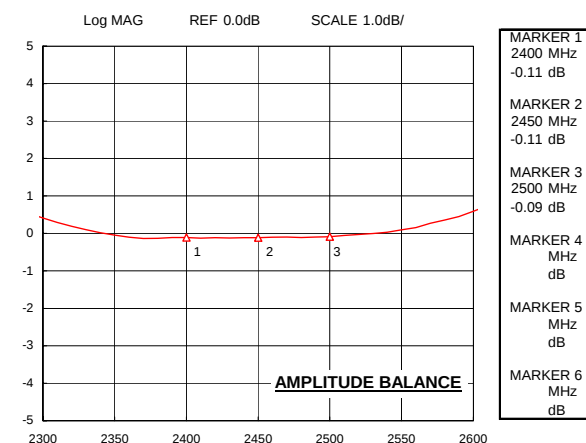
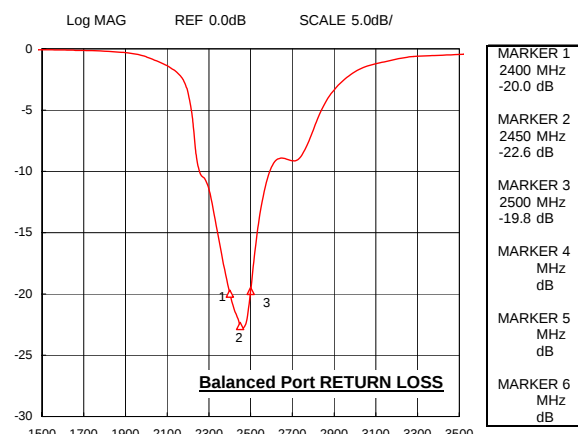
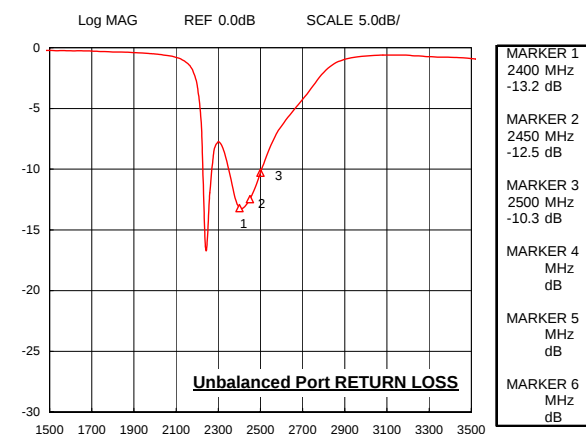
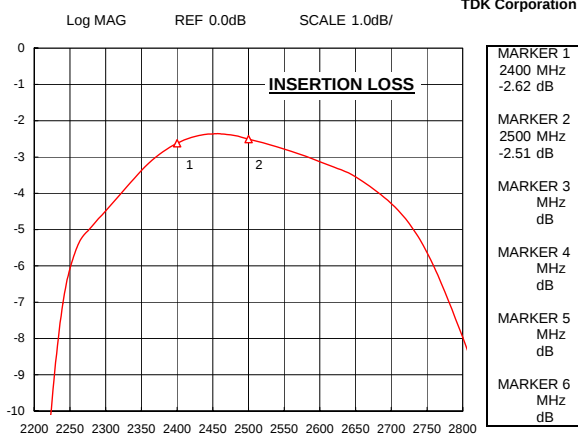
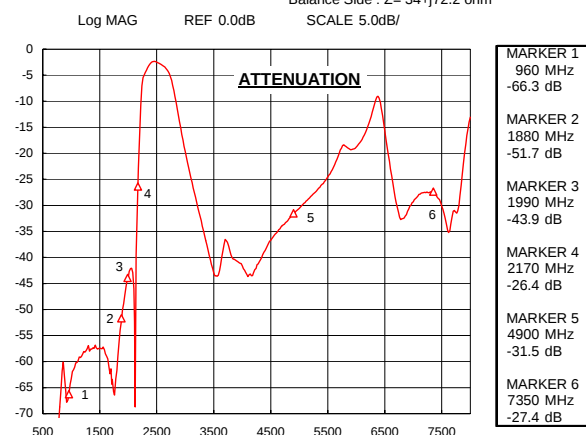
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Unbalance Side : Z= 50 ohm
Balance Side : Z= 34+j72.2 ohm

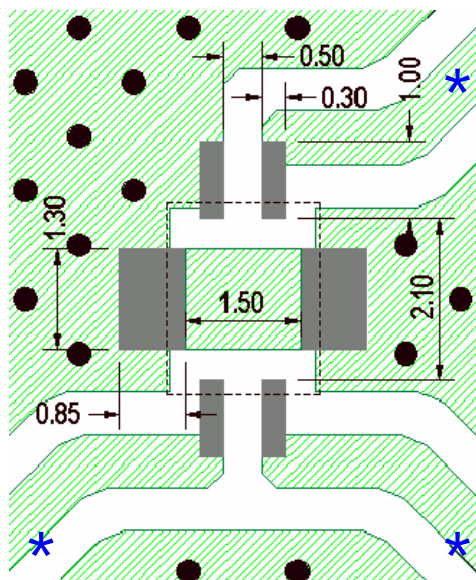
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23/Jan/2005

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RECOMMENDED PCB PATTERN



Unit : mm

- Land
- Solder Resist
- No pattern and Solder Resist
- Through Hole (0.3mm)

* Coplanar waveguide (Line width and Gap of Line to GND) to be designed to match 50ohm characteristic impedance , depending on PCB material and thickness.