TDK

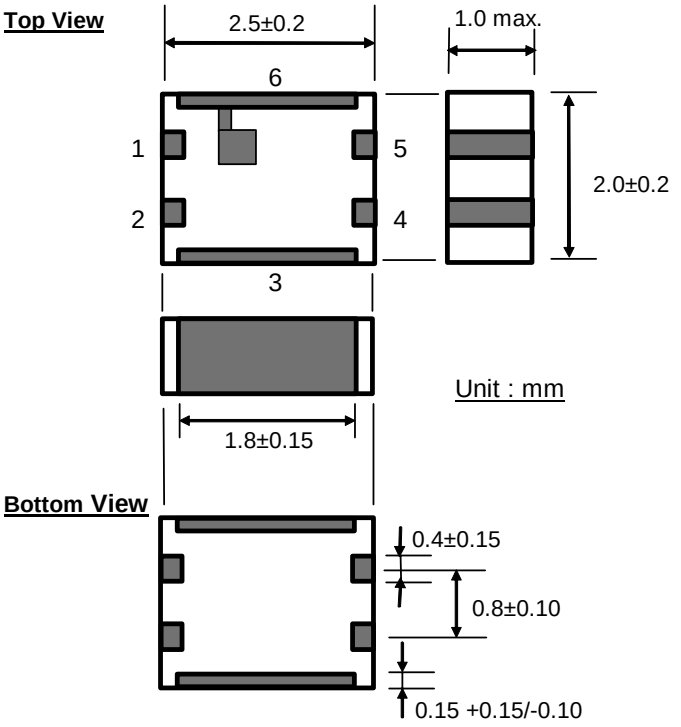
Feb. / 2007 Ver. 2.1

Multilayer Band Pass Filter (Balance output type)

P/N : DEA252450BT-7046A1

For Bluetooth

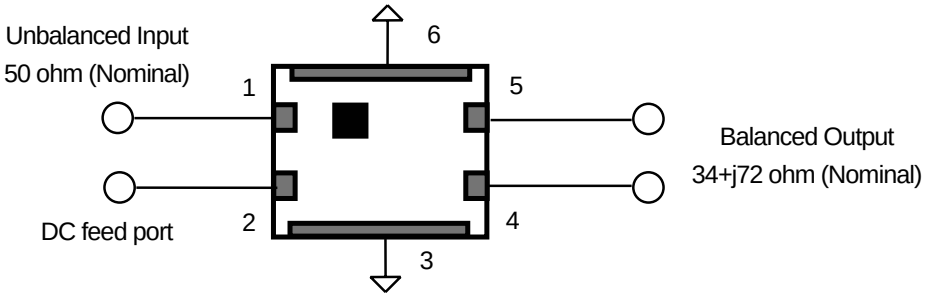
MECHANICAL DIMENSIONS



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.



Note: All specifications are subject to change and are not guaranteed.

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

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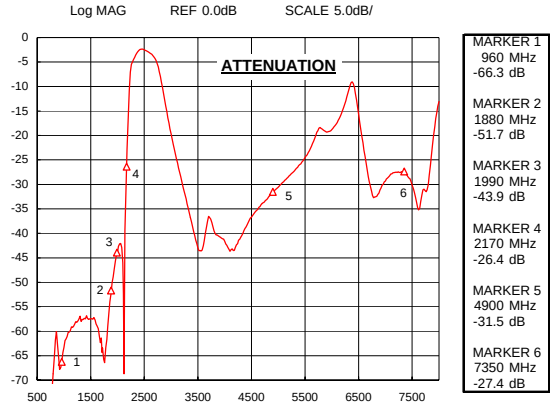
FREQUENCY RESPONSE

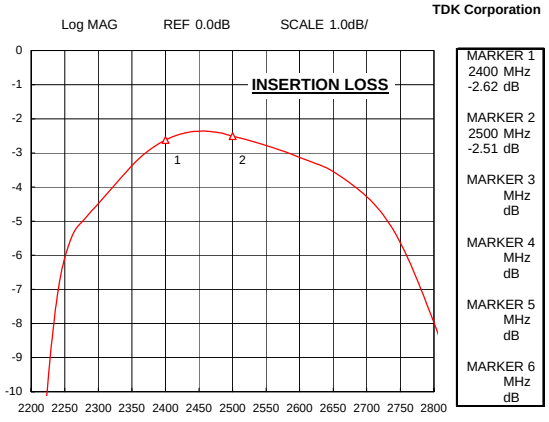
DEA252450BT-7046A1

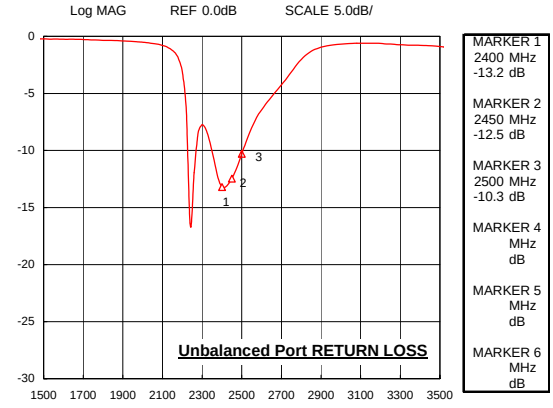
Unbalance Side : Z= 50 ohm
Balance Side : Z= 34+j72.2 ohm

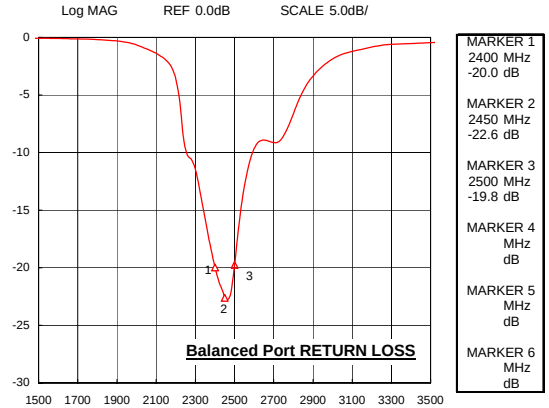
15

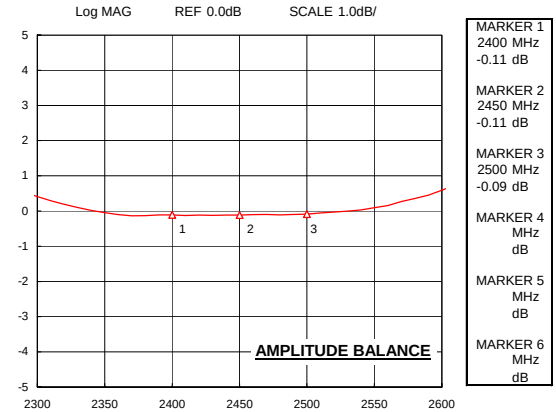
23/Jan/2005
TDK Corporation

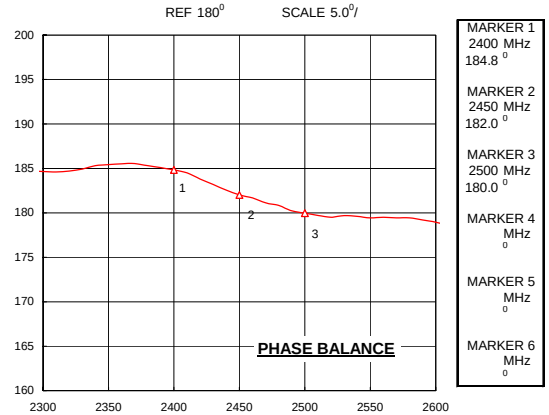












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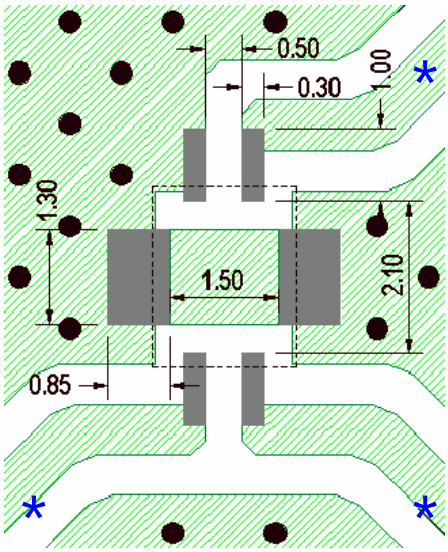
RECOMMENDED PCB PATTERN



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.

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