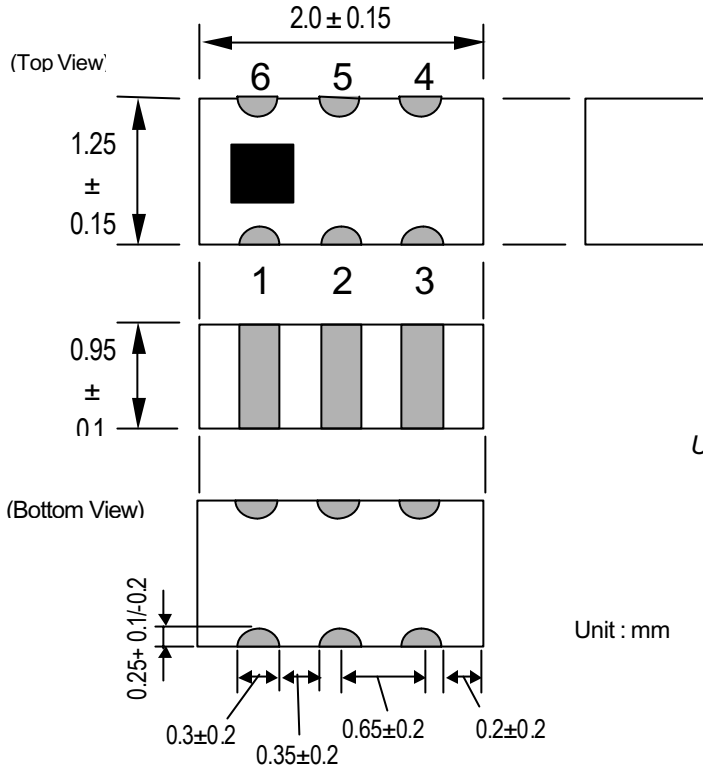


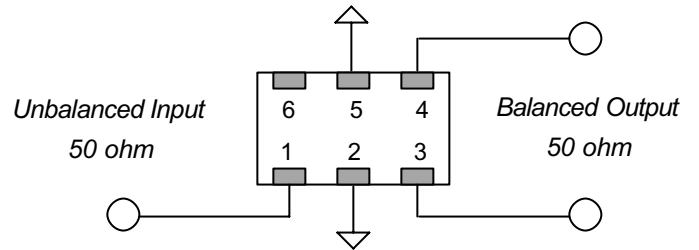
**MULTILAYER BALUN SPECIFICATION**  
 P/N: **HHM1517** For Bluetooth & IEEE802.11b/g

**[MECHANICAL DIMENSIONS]**



**Pin configuration**

- 1 Unbalanced Port
- 2 GND or DC feed + RF GND
- 3 Balanced Port
- 4 Balanced Port
- 5 GND
- 6 N.C.



**[ELECTRICAL CHARACTERISTICS]**

Unbalanced Impedance	50 ohm
Balanced Impedance	50 ohm
Frequency Range	2400-2500MHz
Unbalanced Port Return Loss	10 dB Min.
Phase Imbalance at Balanced Port	$180 \pm 10$ deg.
Amplitude Imbalance at Balanced Port	$0 \pm 2.0$ dB
Insertion Loss	1.2dB Max.

**[TEMPERATURE RANGE]**

Storage Temperature	$-40^{\circ}\text{C} \sim +85^{\circ}\text{C}$
Operating Temperature	$-40^{\circ}\text{C} \sim +85^{\circ}\text{C}$

**[STANDARD PACKAGING QUANTITIES]**

2000pcs. /reel

Notes : All the technical data and information contained herein are subject to change without prior notice.

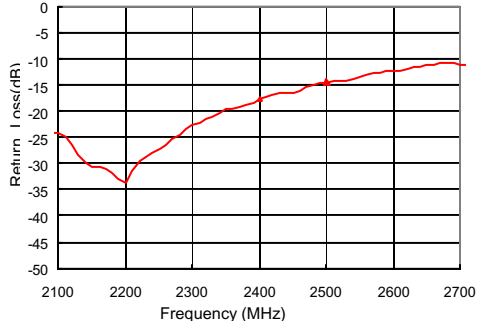
# PRELIMINARY

## [ Frequency response ]

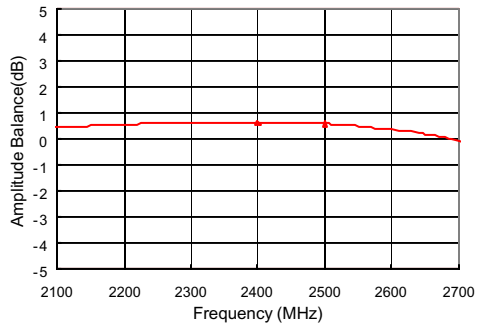
HHM1517 (UNBALANCE 50ohm/BALANCE 50ohm)

TDK Corporation

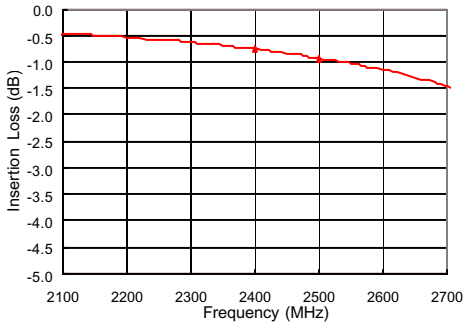
Return Loss



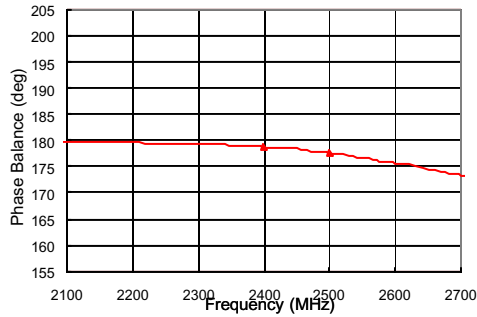
Amplitude Balance



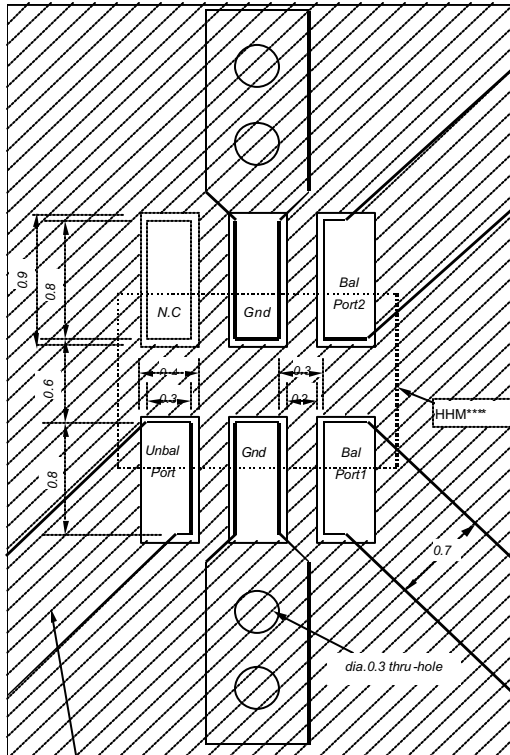
Insertion Loss



Phase Balance



## [ Recommended PCB Pattern ]



This width is 50ohm.  
Micro-strip line for 0.4mm thick glass-epoxy substrate.

Notes : All the technical data and information contained herein are subject to change without prior notice.