

Multilayer Balun Transformers

For UWB

HHM Series

Type: **HHM1583B1 (2.0×1.25×0.95mm)**
 HHM1595A1 (2.0×1.25×0.95mm)
 HHM1596A1 (2.0×1.25×0.95mm)

Issue date: December 2010

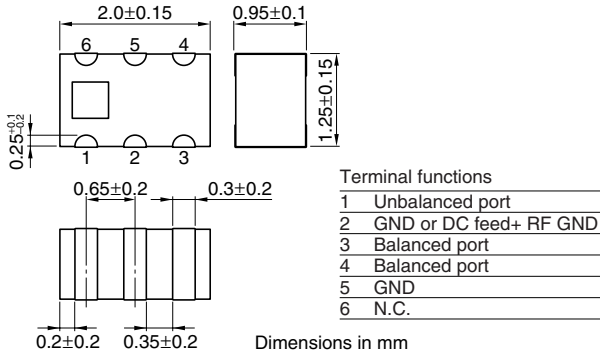
- All specifications are subject to change without notice.
 - Conformity to RoHS Directive: This means that, in conformity with EU Directive 2002/95/EC, lead, cadmium, mercury, hexavalent chromium, and specific bromine-based flame retardants, PBB and PBDE, have not been used, except for exempted applications.
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Multilayer Chip Baluns For UWB

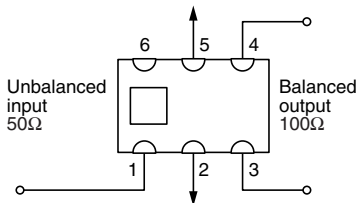
Conformity to RoHS Directive

HHM Series HHM1583B1

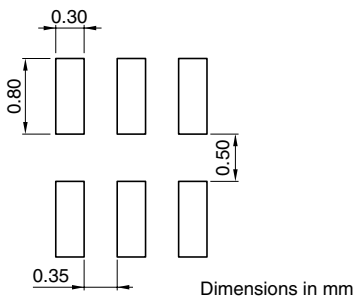
SHAPES AND DIMENSIONS



CIRCUIT DIAGRAM



RECOMMENDED PC BOARD PATTERNS



ELECTRICAL CHARACTERISTICS

Unbalanced impedance	50Ω
Balanced impedance	100Ω
Frequency range	3100 to 4900MHz
Unbalanced port return loss	10.0dB min.
Phase imbalance at balanced port	180±10deg.
Amplitude imbalance at balanced port	0±1.5dB
Insertion loss	1.0dB max.
Temperature range	Operating -40 to +85°C
	Storage -40 to +85°C
Packaging style and quantities	2000pieces/reel

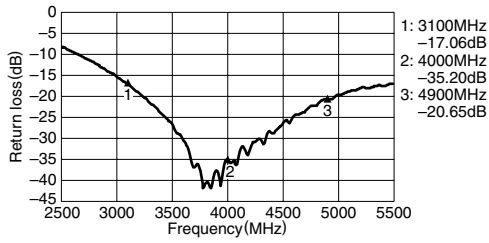
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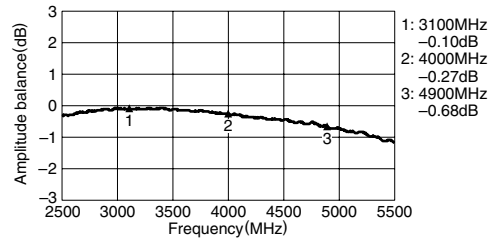
FREQUENCY CHARACTERISTICS

Unbalance 50Ω/Balance 100Ω

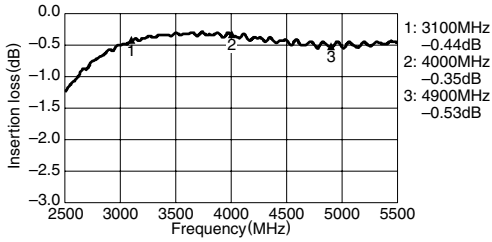
RETURN LOSS



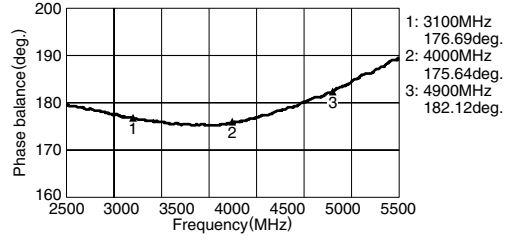
AMPLITUDE BALANCE



INSERTION LOSS



PHASE BALANCE

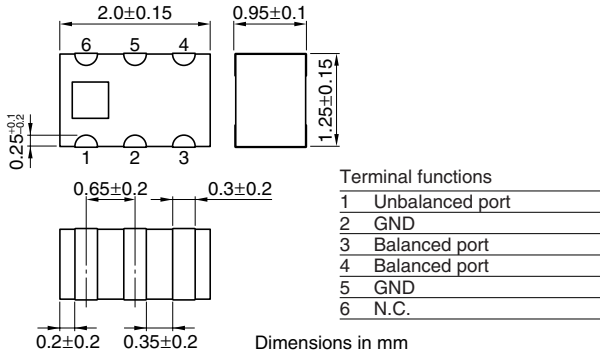


Multilayer Chip Baluns For UWB

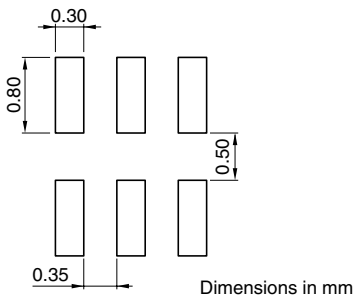
Conformity to RoHS Directive

HHM Series HHM1595A1

SHAPES AND DIMENSIONS



RECOMMENDED PC BOARD PATTERNS



ELECTRICAL CHARACTERISTICS

Unbalanced impedance	50Ω	
Balanced impedance	100Ω	
Frequency range	3000 to 8000MHz	
Unbalanced port return loss	8.0dB min.	
Phase imbalance at balanced port	180±20deg.	
Amplitude imbalance at balanced port	0±2.5dB	
Insertion loss	1.5dB max.	
Temperature range	Operating	-40 to +85°C
	Storage	-40 to +85°C
Packaging style and quantities	2000pieces/reel	

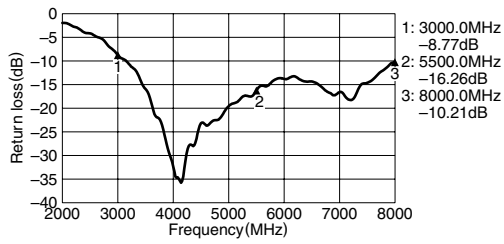
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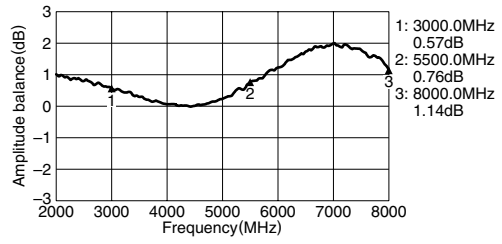
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Unbalance 50Ω/Balance 100Ω

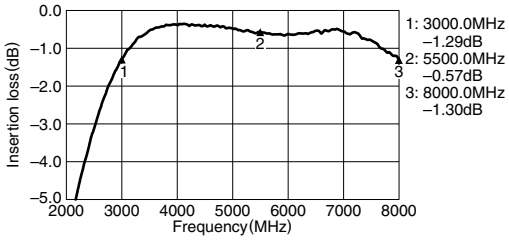
RETURN LOSS



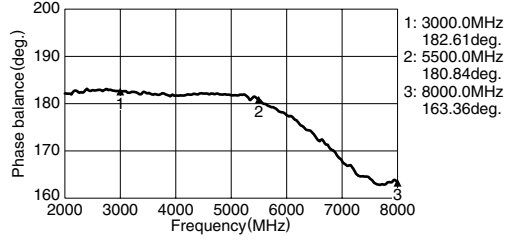
AMPLITUDE BALANCE



INSERTION LOSS



PHASE BALANCE

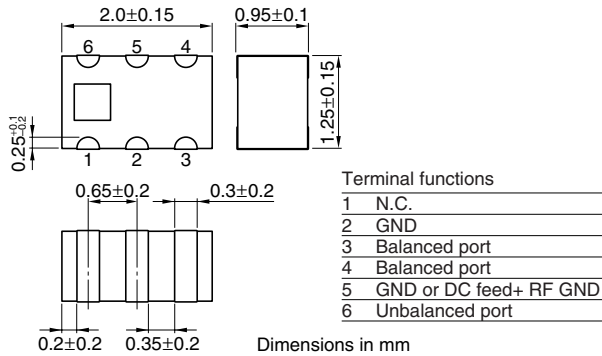


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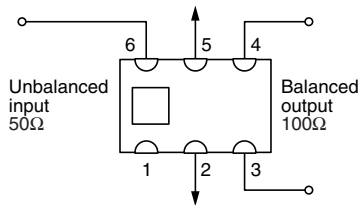
Conformity to RoHS Directive

HHM Series HHM1596A1

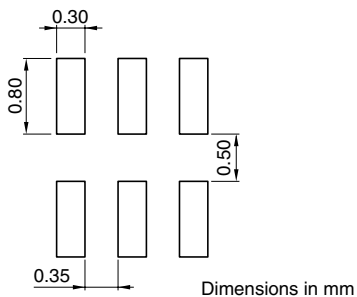
SHAPES AND DIMENSIONS



CIRCUIT DIAGRAM



RECOMMENDED PC BOARD PATTERNS



ELECTRICAL CHARACTERISTICS

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Balanced impedance	100Ω
Frequency range	3100 to 4900MHz
Unbalanced port return loss	10dB min.
Phase imbalance at balanced port	180±15deg.
Amplitude imbalance at balanced port	0±2.0dB
Insertion loss	1.0dB max.
Temperature range	Operating -40 to +85°C
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Packaging style and quantities	2000pieces/reel

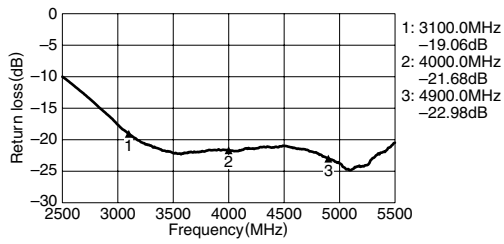
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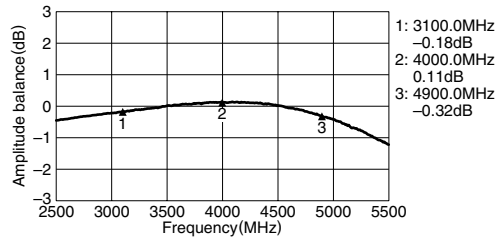
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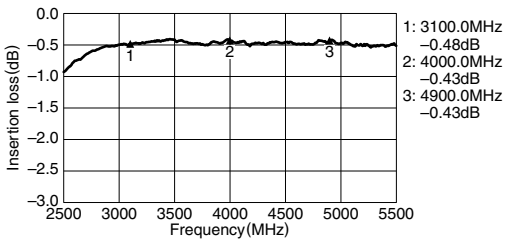
RETURN LOSS



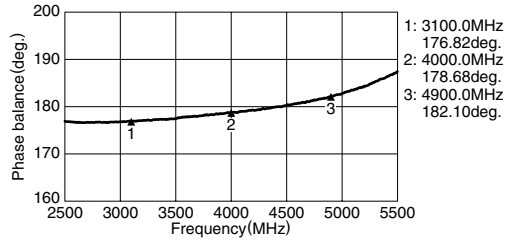
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