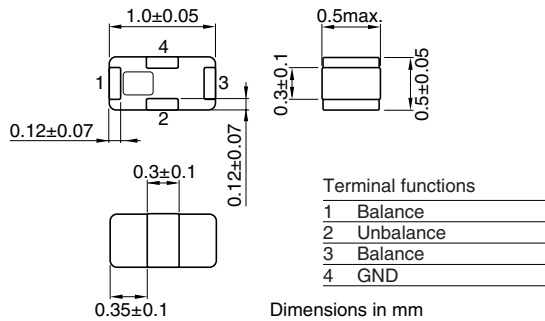


Multilayer Chip Baluns For Bluetooth & 2.4GHz W-LAN

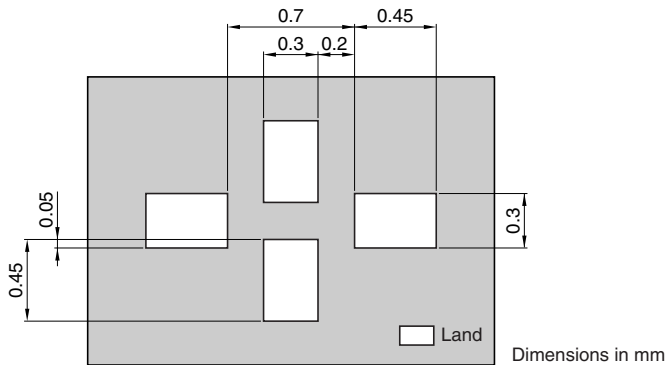
Conformity to RoHS Directive

HHM Series HHM1903A1

SHAPES AND DIMENSIONS



RECOMMENDED PC BOARD PATTERNS



ELECTRICAL CHARACTERISTICS

| | | |
|--------------------------------------|-----------|-----------------|
| Unbalanced impedance | | 50Ω |
| Balanced impedance | | 100Ω |
| Frequency range | | 2400 to 2500MHz |
| Unbalanced port return loss | | 10dB min. |
| Phase imbalance at balanced port | | 180±10deg |
| Amplitude imbalance at balanced port | | 0±2.0dB |
| Insertion loss | | 1.0dB max. |
| Temperature range | Operating | -40 to +85°C |
| | Storage | -40 to +85°C |

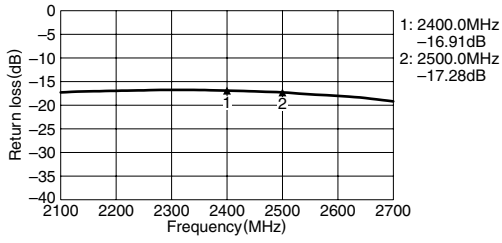
• Conformity to RoHS Directive: This means that, in conformity with EU Directive 2002/95/EC, lead, cadmium, mercury, hexavalent chromium, and specific bromine-based flame retardants, PBB and PBDE, have not been used, except for exempted applications.

• All specifications are subject to change without notice.

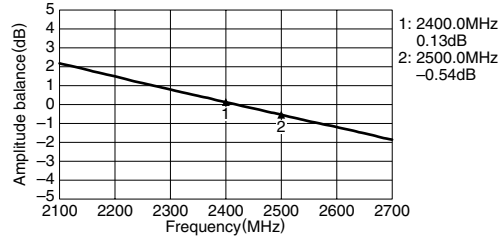
FREQUENCY CHARACTERISTICS

Unbalance 50Ω/Balance 100Ω

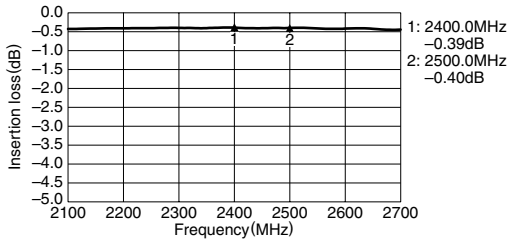
RETURN LOSS



AMPLITUDE BALANCE



INSERTION LOSS



PHASE BALANCE

