

Multilayer Balun Transformers

For GSM900 Tx & Rx

HHM Series

Type: **HHM1515B2 (2.0×1.25×0.95mm)**
 HHM1522B1 (2.0×1.25×0.95mm)
 HHM1523C1 (2.0×1.25×0.95mm)
 HHM1524B1 (2.0×1.25×0.95mm)

Issue date: December 2010

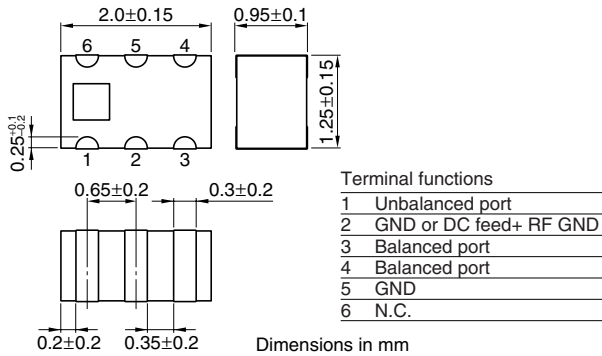
- All specifications are subject to change without notice.
 - Conformity to RoHS Directive: This means that, in conformity with EU Directive 2002/95/EC, lead, cadmium, mercury, hexavalent chromium, and specific bromine-based flame retardants, PBB and PBDE, have not been used, except for exempted applications.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

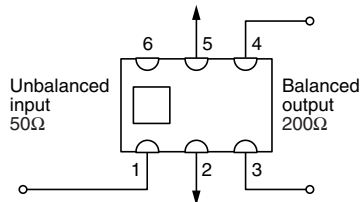
Conformity to RoHS Directive

HHM Series HHM1515B2

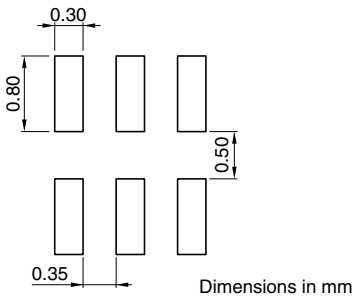
SHAPES AND DIMENSIONS



CIRCUIT DIAGRAM



RECOMMENDED PC BOARD PATTERNS



ELECTRICAL CHARACTERISTICS

| | | |
|--------------------------------------|-----------------|--------------|
| Unbalanced impedance | 50Ω | |
| Balanced impedance | 200Ω | |
| Frequency range | 880 to 960MHz | |
| Unbalanced port return loss | 10dB min. | |
| Phase imbalance at balanced port | 180±10deg. | |
| Amplitude imbalance at balanced port | 0±1.0dB | |
| Insertion loss | 1.0dB max. | |
| Temperature range | Operating | -40 to +85°C |
| | Storage | -40 to +85°C |
| Packaging style and quantities | 2000pieces/reel | |

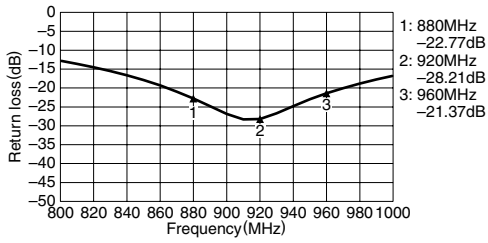
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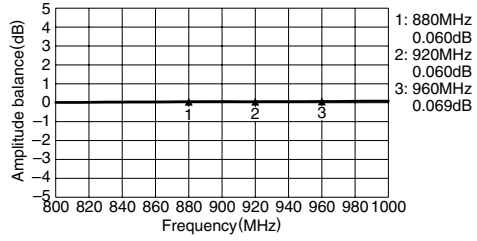
FREQUENCY CHARACTERISTICS

Unbalance 50Ω/Balance 200Ω

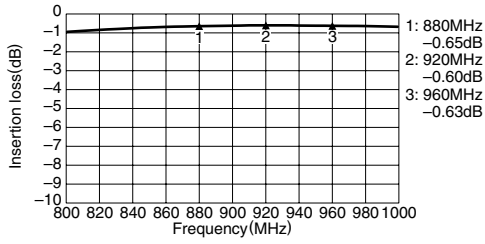
RETURN LOSS



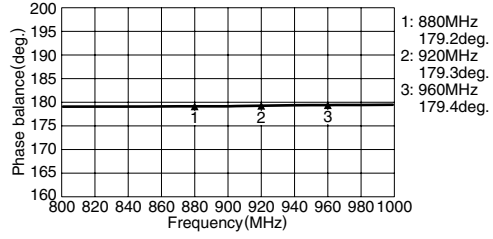
AMPLITUDE BALANCE



INSERTION LOSS



PHASE BALANCE



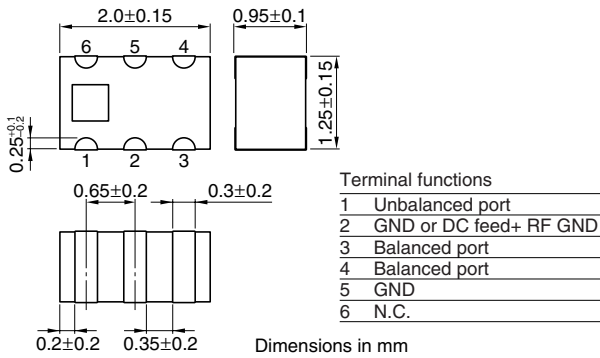
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Multilayer Chip Baluns For EGSM/Tx & Rx

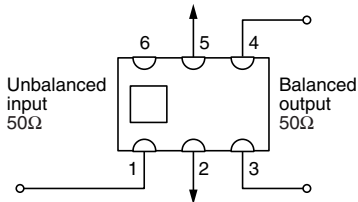
Conformity to RoHS Directive

HHM Series HHM1522B1

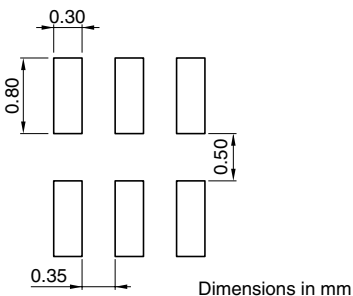
SHAPES AND DIMENSIONS



CIRCUIT DIAGRAM



RECOMMENDED PC BOARD PATTERNS



ELECTRICAL CHARACTERISTICS

| | | |
|--------------------------------------|-----------------|--------------|
| Unbalanced impedance | 50Ω | |
| Balanced impedance | 50Ω | |
| Frequency range | 880 to 960MHz | |
| Unbalanced port return loss | 12dB min. | |
| Phase imbalance at balanced port | 180±10deg. | |
| Amplitude imbalance at balanced port | 0±1.0dB | |
| Insertion loss | 1.3dB max. | |
| Temperature range | Operating | -40 to +85°C |
| | Storage | -40 to +85°C |
| Packaging style and quantities | 2000pieces/reel | |

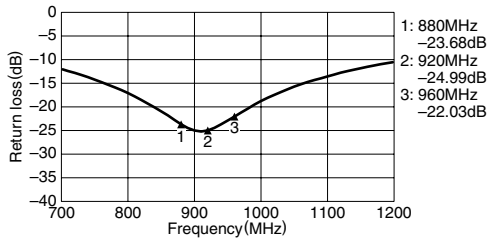
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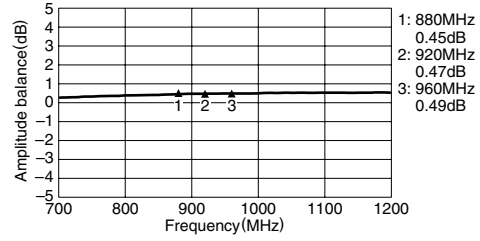
FREQUENCY CHARACTERISTICS

Unbalance 50Ω/Balance 50Ω

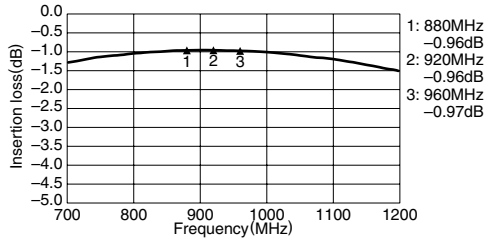
RETURN LOSS



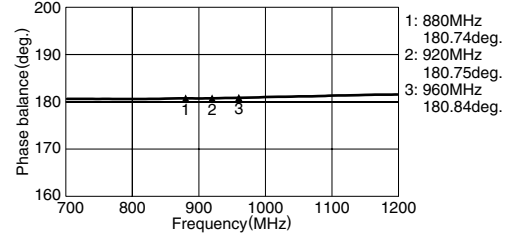
AMPLITUDE BALANCE



INSERTION LOSS



PHASE BALANCE



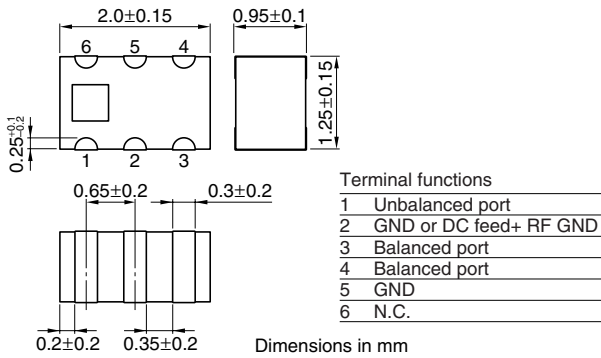
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Multilayer Chip Baluns For EGSM/Tx & Rx

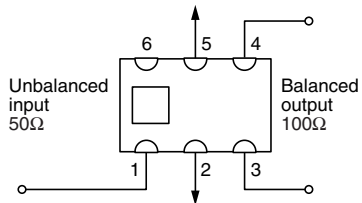
Conformity to RoHS Directive

HHM Series HHM1523C1

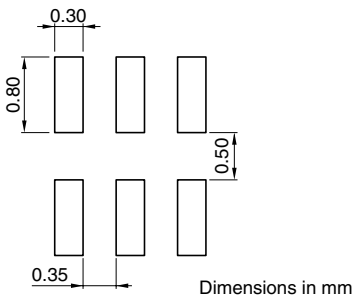
SHAPES AND DIMENSIONS



CIRCUIT DIAGRAM



RECOMMENDED PC BOARD PATTERNS



ELECTRICAL CHARACTERISTICS

| | |
|--------------------------------------|------------------------|
| Unbalanced impedance | 50Ω |
| Balanced impedance | 100Ω |
| Frequency range | 880 to 960MHz |
| Unbalanced port return loss | 10dB min. |
| Phase imbalance at balanced port | 180±10deg. |
| Amplitude imbalance at balanced port | 0±1.0dB |
| Insertion loss | 1.1dB max. |
| Temperature range | Operating -40 to +85°C |
| | Storage -40 to +85°C |
| Packaging style and quantities | 2000pieces/reel |

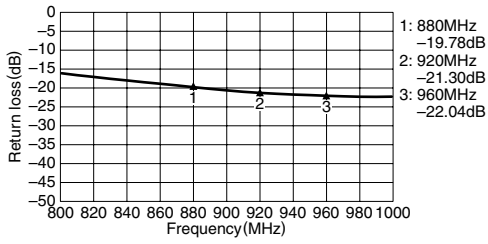
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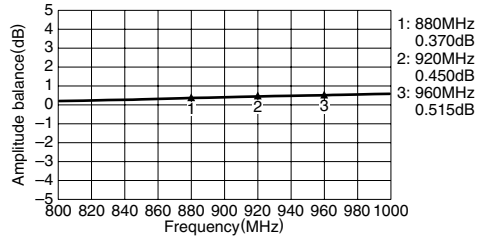
FREQUENCY CHARACTERISTICS

Unbalance 50Ω/Balance 100Ω

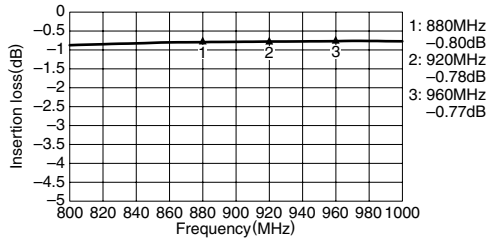
RETURN LOSS



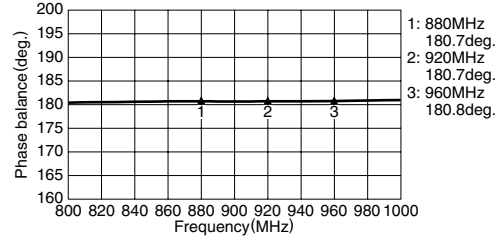
AMPLITUDE BALANCE



INSERTION LOSS



PHASE BALANCE



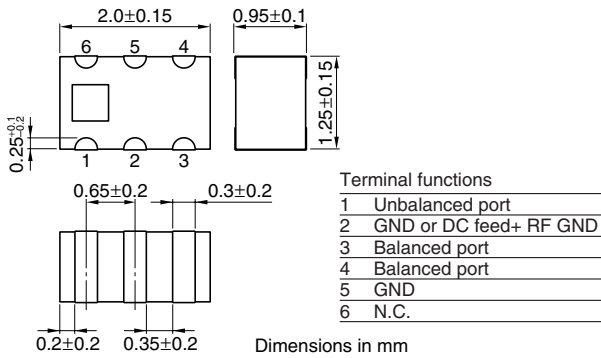
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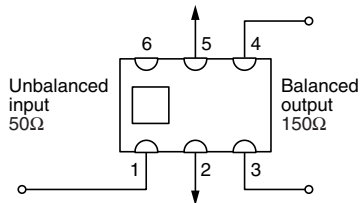
Conformity to RoHS Directive

HHM Series HHM1524B1

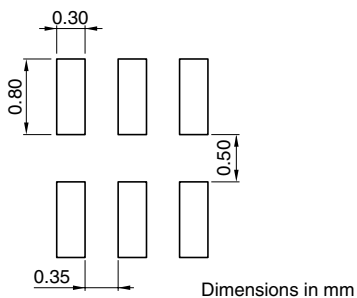
SHAPES AND DIMENSIONS



CIRCUIT DIAGRAM



RECOMMENDED PC BOARD PATTERNS



ELECTRICAL CHARACTERISTICS

| | |
|--------------------------------------|------------------------|
| Unbalanced impedance | 50Ω |
| Balanced impedance | 150Ω |
| Frequency range | 880 to 960MHz |
| Unbalanced port return loss | 10dB min. |
| Phase imbalance at balanced port | 180±10deg. |
| Amplitude imbalance at balanced port | 0±1.0dB |
| Insertion loss | 1.0dB max. |
| Temperature range | Operating -40 to +85°C |
| | Storage -40 to +85°C |
| Packaging style and quantities | 2000pieces/reel |

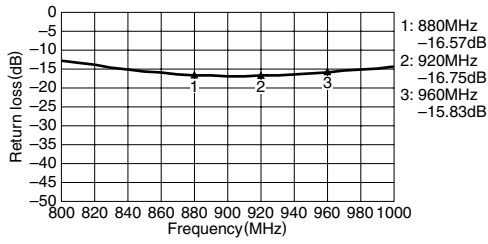
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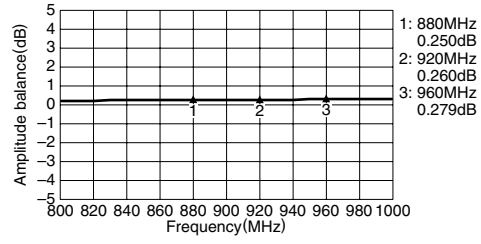
FREQUENCY CHARACTERISTICS

Unbalance 50Ω/Balance 150Ω

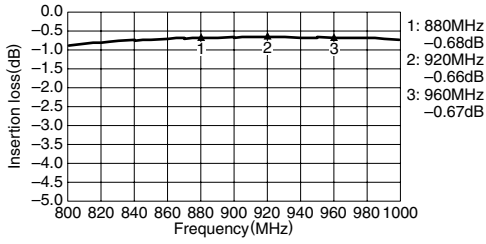
RETURN LOSS



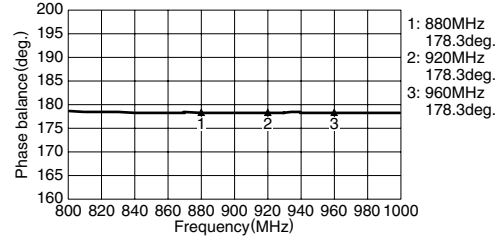
AMPLITUDE BALANCE



INSERTION LOSS



PHASE BALANCE



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Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



Как с нами связаться

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Факс: 8 (812) 320-02-42

Электронная почта: org@eplast1.ru

Адрес: 198099, г. Санкт-Петербург, ул. Калинина, дом 2, корпус 4, литера А.