

4-way Passive L-band Splitter/Combiner



COM04L1P-2524 is a 4-way passive L-band splitter/combiner with DC pass between port 1 and the common port and DC block on all other ports.

This component is available with the following RF connector options: 50 Ω SMA, N-type, BNC and 75 Ω BNC or F-type.

Summary table for RF performance over L-band operation, 850 MHz to 2150 MHz

| Model Numbers | RF PORTS | Insertion Loss* (dB) | | Isolation Typical (dB) | Return Loss (dB) | | Phase & Amplitude Misalignment | |
|--------------------|--------------------|----------------------|-----|------------------------|------------------|-----|--------------------------------|---------|
| | | Typ. | Max | | Typ. | Min | Φ | Amp(dB) |
| COM04L1P-2524-S5S5 | 50 Ω SMA | 0.8 | 1.2 | 23 | 18 | 12 | 1° | 0.2 |
| COM04L1P-2524-N5N5 | 50 Ω N-type | 0.8 | 1.3 | 23 | 18 | 12 | 1° | 0.2 |
| COM04L1P-2524-B5B5 | 50 Ω BNC | 1.0 | 1.6 | 23 | 16 | 12 | 1.5° | 0.3 |
| COM04L1P-2524-B7B7 | 75 Ω BNC | 1.0 | 1.8 | 23 | 14 | 10 | 3° | 0.5 |
| COM04L1P-2524-F7F7 | 75 Ω F-type | 1.6 | 2.2 | 23 | 14 | 8 | 5° | 0.7 |

* The quoted insertion loss is loss above theoretical due to power split. For 4-way splitters theoretical value is 6dB. 10 MHz insertion loss is 3dB max above the theoretical. Typical values may vary between different production batches.

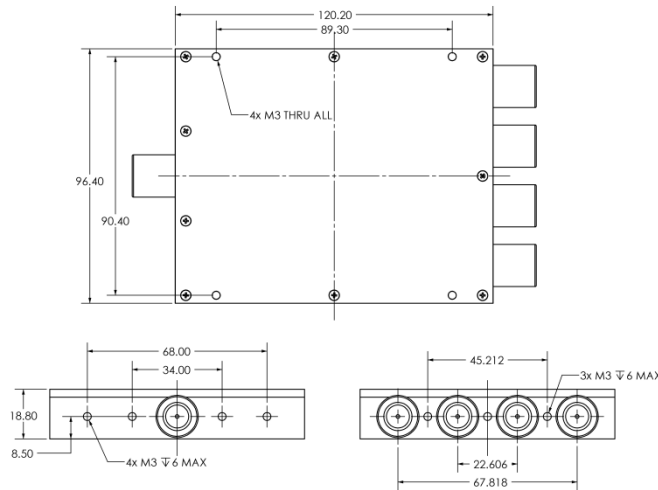
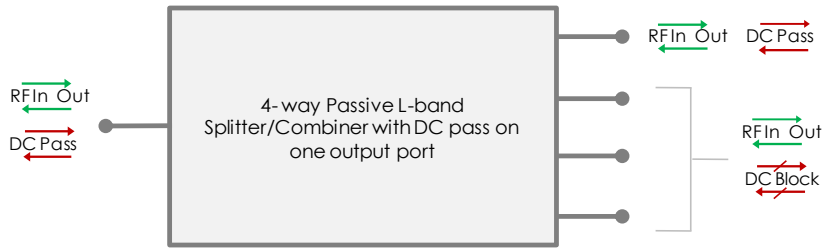
Maximum acceptable operating parameters for reliable and safe operation

| Parameter | Value | Comment |
|-----------------------|----------------|--|
| Input RF power | +37 dBm (5W) | Max total RF power |
| DC Voltage | 50V / 500mA | Any RF port : 3A Max if SMA or F type connector |
| Operating temperature | 0 to 45 C | Indoor use only |
| Storage Temperature | -20 C to +75 C | |
| Humidity | 85% | Non-condensing |

! Operation beyond these limits may cause instantaneous and permanent damage.



Vector diagram & physical dimensions



N.B: The housing and fixing holes may vary from time to time. This would be to expedite delivery by using an alternative suitable, similar housing. If this is a concern please advise with your order.

Feature set for some alternative 4-way Passive L-band splitters/combiners

| Model Number | DC Pass/Block | 10 MHz Pass/Block | Other features |
|---------------|--|--|------------------------------|
| COM04L1P-2504 | DC pass on ALL ports | 10MHz pass on all ports | |
| COM04L1P-2520 | DC block between outputs, DC pass to common port | | |
| COM04L1P-2521 | DC block on all other ports | | LNB injection on common port |
| COM04L1P-2524 | DC block between outputs, DC pass on one port only | | |
| COM04L1P-2525 | DC block on all ports | | |
| COM04L1P-2532 | | 10MHz pass on all ports | DC injection |
| COM04L1P-2540 | DC block on one port, DC pass on all other ports | | |
| COM04L1P-2554 | DC pass on one port, DC block on all other ports | | For DC & 10MHz pass see 2563 |
| COM04L1P-2563 | DC pass on one port, DC block on all other ports | 10MHz pass on port one & blocked on all other s. | |
| COM04L1P-2578 | DC pass on one port, DC block on all other ports | | |



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ETL Systems design, develop and manufacture specialist equipment for satellite ground stations.

