

## 3-way Passive L-band Splitter/Combiner



COM03L1P-2590 L-band 3-way passive splitter or combiner with 10MHz and DC pass on port 1 and 10MHz and DC block on ports 2 and 3.

This component is available with the following RF connector options: 50  $\Omega$  SMA, N-type, BNC and 75  $\Omega$  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	$\Phi$	Amp(dB)
COM03L1P-2590-S5S5	50 $\Omega$ SMA	0.5	0.9	23	18	14	0.5°	0.1
COM03L1P-2590-N5N5	50 $\Omega$ N-type	0.6	1.0	23	18	14	0.5°	0.1
COM03L1P-2590-B5B5	50 $\Omega$ BNC	0.7	1.1	20	15	12	1°	0.3
COM03L1P-2590-B7B7	75 $\Omega$ BNC	1.0	1.3	20	14	10	2°	0.4
COM03L1P-2590-F7F7	75 $\Omega$ F-type	1.5	2.2	18	10	6	5°	0.8

\* The quoted insertion loss is loss above theoretical due to power split. For 3-way splitters theoretical value is 4.7dB. 10 MHz insertion loss is 3dB max above the theoretical. Typical values may vary between different production batches.

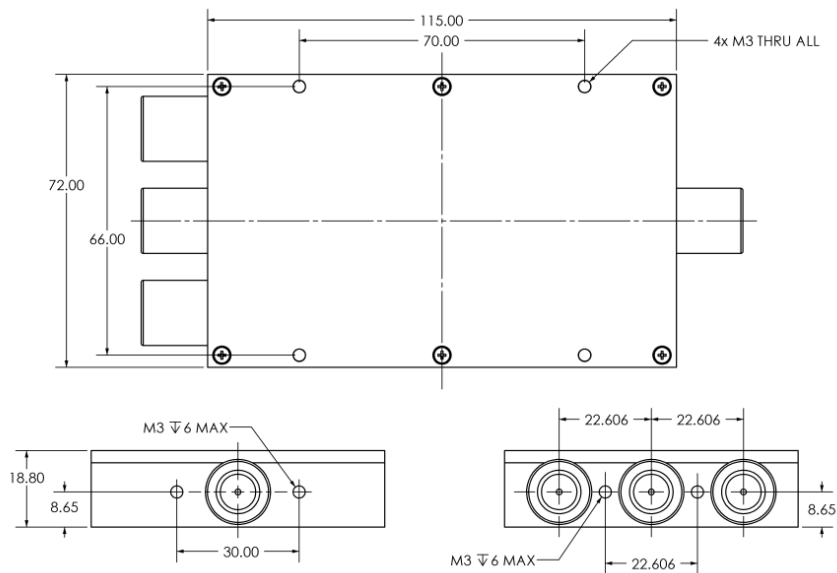
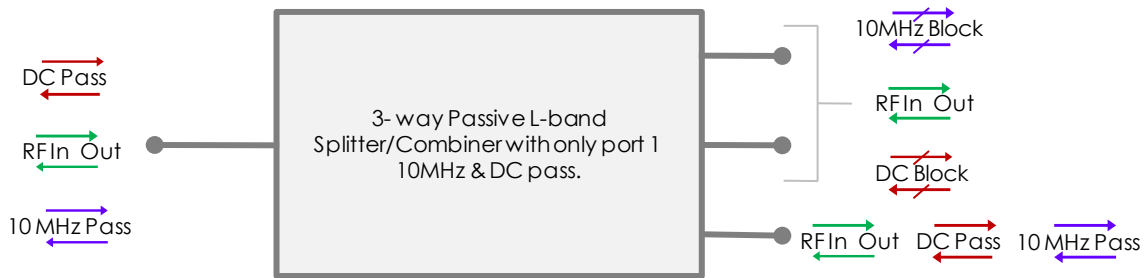
Maximum acceptable operating parameters for reliable and safe operation

Parameter	Value	Comment
Input RF power	+37 dBm (5W)	Max total RF power
DC Voltage	24V / 500mA	
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



### Feature set for alternative 3-way Passive L-band splitters/combiners

Model Number	DC Pass/Block	10 MHz Pass/Block	Other features
COM03L1P-2528	DC pass on all ports	10Mhz pass on all ports	Customised options are available
COM03L1P-2555	DC block on port 1, DC pass between common and ports 2 & 3	10MHz response is not characterised	Customised options are available
COM03L1P-2573	DC pass on TWO ports, DC block on one port	10MHz pass on ONE port (DC blocked port)	Customised options are available
COM03L1P-2590	DC pass on port 1, DC block on ports 2 & 3	10MHz pass on port 1, 10MHz block on ports 2 & 3	Customised options are available