

4-way Passive L-band Splitter/Combiner



COM04L1P-2578 is a 4-way passive L-band splitter/combiner with 10MHz and DC pass from port 1 to 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-2578-S5S5	50Ω SMA	0.8	1.2	23	18	12	1°	0.2
COM04L1P-2578-N5N5	50Ω N-type	0.8	1.3	23	18	12	1°	0.2
COM04L1P-2578-B5B5	50Ω BNC	1.0	1.6	23	16	12	1.5°	0.3
COM04L1P-2578-B7B7	75Ω BNC	1.0	1.8	23	14	10	3°	0.5
COM04L1P-2578-F7F7	75Ω F-type	1.6	2.2	23	12	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.

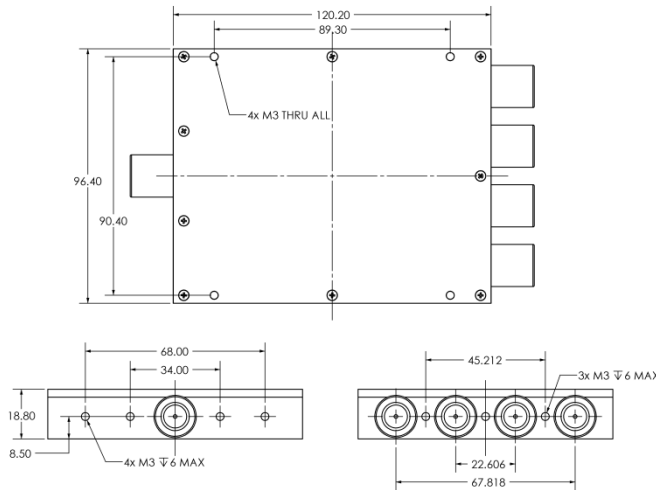
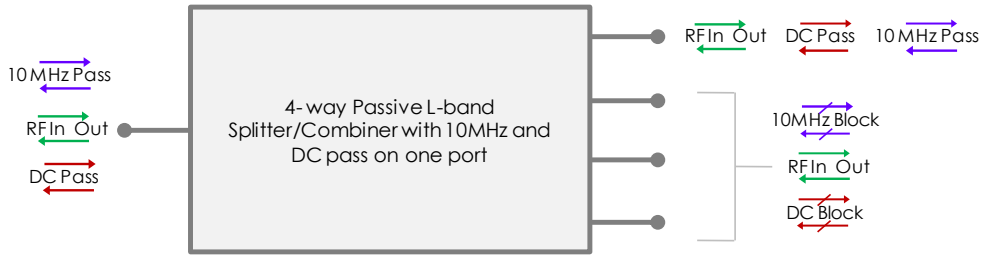
Maximum acceptable operating parameters for reliable and safe operation

Parameter	Value	Comment
Input RF power	+37 dBm (5W)	Max total RF power
DC Voltage	50V / 5A	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



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		