

10dB L-band Directional Coupler



10dB L-band directional coupler with DC and 10MHz pass between input and transmit ports. The coupled port is DC blocked.

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	Thru Path Insertion Loss (dB)		Coupling Factor Typical (dB)	Return Loss (dB)		Directivity Typical (dB)
		Typical	Max		Typical	Min	
CPL10L1P-4307-S5S5	50 Ω SMA	1.0	1.5	10 \pm 1.8	20	15	14
CPL10L1P-4307-N5N5	50 Ω N-type	1.0	1.5	10 \pm 1.8	18	14	14
CPL10L1P-4307-B5B5	50 Ω BNC	1.0	1.5	10 \pm 1.8	18	14	14
CPL10L1P-4307-B7B7	75 Ω BNC	1.0	1.5	10 \pm 1.8	16	12	14
CPL10L1P-4307-F7F7	75 Ω F-type	1.0	1.5	10 \pm 1.8	15	10	14

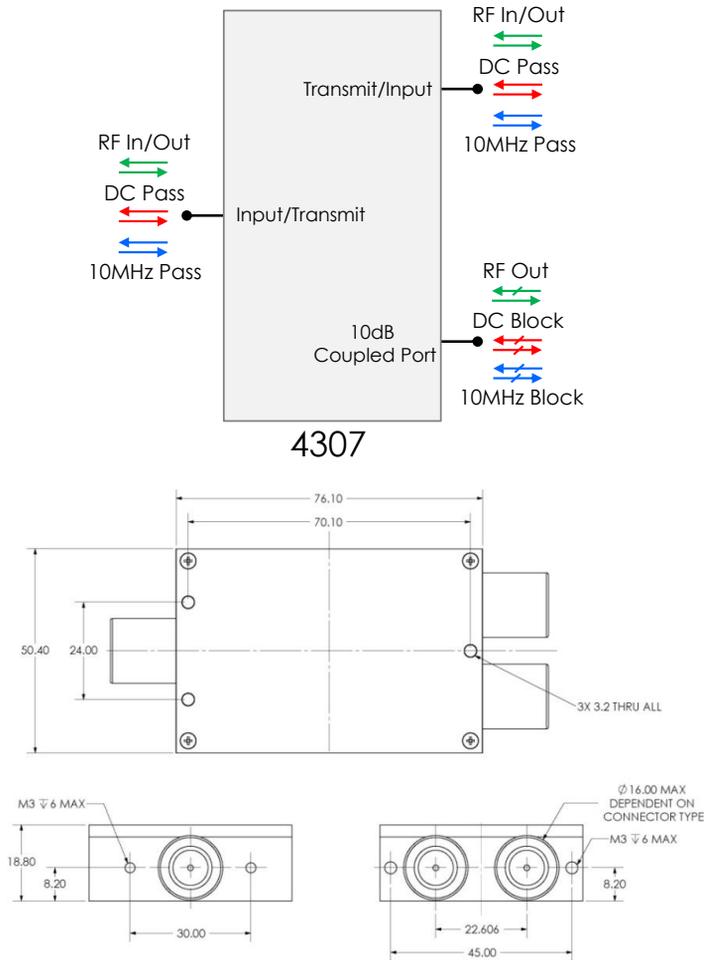
Maximum acceptable operating parameters for reliable and safe operation

Parameter	Value	Comment
Input RF power	+37 dBm (5W)	Max total RF power
DC Voltage	50V	Any RF port
DC Current	3.5A max	5A max if N-type connectors
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 L band couplers and DC blocks

Model Number	DC Pass/Block	Other features
CPL20-L1P-4301	DC block on ALL ports	20dB proximity coupler
CPL10-L1P-4303	DC block on ALL ports	10dB proximity coupler
CPL20-L1P-4304	Thru port - DC pass Coupled port - DC blocked	20dB proximity coupler
CPL10-L1P-4305	Thru port - DC pass Coupled port - DC blocked	10dB proximity coupler
CPL20-L1P-4306	Thru port - DC pass Coupled port - DC blocked	20dB directional coupler
CLP10 L1P-4307	Thru port - DC pass Coupled port - DC blocked	10dB directional coupler
DCBLK-L1-4302	DC block with L-band and 10MHz pass	10 MHz to 2500MHz DC block
DCBLK-L1-4308	DC & 10 MHz block	



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