Attenuators

Bias-Ts

Calibration Kits for VNA

DC Blocks

Filters

Limiters

Low Noise Amplifiers

Power Amplifiers

Terminators

LiConn

EST. 2008 • USA

LiConn designs, develops, and manufactures high performance, high quality, and cost competitive RF/Microwave interconnection modules. Our products cover frequency bands from a few kHz up to 27 GHz, including cellular, PCS, 3G, C, X, and Ku bands.

We are dedicated to serve dynamic needs of telecommunication, fiber optics, medical and defense industries globally.

COMMITMENT

- OEM Grade Performance and Quality
- Small Quantity Always In Stock
- Very Competitive Price
- Total Customer Satisfaction

KEY ADVANTAGES

- Super Wide Band, Low Noise Figure and Exceptional VSWR
- *Speedy* Turnaround for both Standard and Custom Products
- Flexible Order Quantity: Low or High Volume
- Made In USA

QUALITY

- Designed to meet MIL-STD-202g
- Precision Machined Housing
- RoHS Compliant
- 100% Tested
- Made in USA
- 3-Year Warranty

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ATTENUATORS

Part Number	Frequency (GHz)	Attenuation (dB)	VSWR Input	VSWR Output	RF Input Power Max. (W)	RF Output Power Max. (W)
LATTN04A	DC ~ 4.0	8.3	1.10:1	1.25:1	20	10
LATTN03C	DC ~ 3.0	10.0	<1.22:1	<1.22:1	**200**	**200**
LATTN03E	DC ~ 3.0	30.0	<1.22:1	<1.22:1	**200**	**200**
LATTN06B	DC ~ 6.0	50.0	1.25:1	1.25:1	10 dBm	10 dBm
LATTN18A	DC ~ 18.0	4.5	1.5:1	1.5:1	4	4

BIAS TS

Part Number	Frequency (GHz)	Insertion Loss Max. (dB)	RF/DC Isolation (dB)	RF Average Power Max.(W)	VSWR Max.	V_{dd} Max. (V)	I_{dd} Max. (mA)
LBST001A	5 ~ 500 MHz	0.5	40	20	1.5:1	50	220
LBST001B	0.1 ~ 100MHz	0.3	40	20	1.25:1	50	170
LBST009A	0.1 ~ 9.0	0.6	40	50	1.35:1	50	170
LBST0727A	0.7 ~ 2.7	0.5	60	100	1.25:1	50	400
LBST0760A	0.7 ~ 6.0	0.4	40	50	1.2:1	100	220
LBST013A	0.2 ~ 12.7	0.8	40	20	1.3:1	50	240
LBST020A	0.02 ~ 20.0	1.0	40	20	1.5:1	16	250
LBST020B	0.03 ~ 20.0	1.0	40	20	1.5:1	25	500
LBST020C	0.02 ~ 20.0	1.0	40	20	1.5:1	50	250
LBST024A	0.02 ~ 24.0	1.0	40	20	1.5:1	16	250
LBST024B	0.03 ~ 24.0	0.8	40	20	1.5:1	25	500
LBST024C	0.02 ~ 24.0	1.0	40	20	1.5:1	50	250
LBST027C	0.02 ~ 26.5	1.0	40	20	1.5:1	50	500
LBST00204000A	0.02 ~ 4.0	1.5	40	20	1.5:1	32	5,000
LBST00250512A	25 ~ 512 MHz	0.6	40	200	1.35:1	50	20,000
LBST09502150B	0.95 ~ 2.15	0.5	40	200	1.5:1	50	6,000

DC BLOCKS

Part Number	Frequency (MHz)	Insertion Loss (dB)	RF Power Dissipation Max.(W)	VSWR Max.	V_{dd} Max.(V)
LDCB020A	10 ~ 20,000	1.0	10	1.5:1	16
LDCB024A	10 ~ 24,000	1.0	10	1.5:1	16

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LIMITERS

Part Number	Frequency (MHz)	Insertion Loss (dB)	RF CW Input Power Max. (W)	P_{sat} Max. (dBm)	VSWR
LLDB009A	3 ~ 90	<0.2	2	10	<1.22:1
LLDB004A	100 ~ 3,500	<0.5	2	22	<1.25:1
LLTR00020088A	2 ~ 88	0.2	20	15	1.15:1
LLTR00300500A	30 ~ 500	0.2	20	19	1.15:1

TERMINATORS

Part Number	Frequency (GHz)	RF CW Power(W)	VSWR Input/Output Max.
LR010A	DC ~ 6	10	1.22:1
LR010C	DC ~ 15	10	1.5:1
LR020A	DC ~ 6	20	1.22:1
LR020C	DC ~ 15	20	1.5:1
LR018A	DC ~ 18	5	1.5:1
LR018B	DC ~ 18	10	1.5:1
LR01A	DC ~ 1	**200**	1.22:1
LR03A	DC ~ 3	**200**	1.22:1

GPS BAND PASS FILTER

Part Number	Frequency (MHz)	Offband Rejection (dB) DC - 1,465 MHz 1,685 – 2,500 MHz	Pass Band Insertion Loss (dB)	VSWR Input/Output	RF Input Power Max. (W)
LBPF1575A	1,575 ± 10	40	2.0 ± 0.5	1.5:1	1

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LOW NOISE AMPLIFIERS

Part Number	Frequency (MHz)	Gain (dB)	Gain Flatness (dB)	NF (dB)	P_{1dB} (dBm)	IP_3 (dBm)	VSWR Input/Output	V_{dd} (V)	I_{dd} (mA)
LNA00300530A	30 ~ 530	24	1.0	0.8	24	36	1.5:1/2.0:1	12	140
LNA05004000A	500 ~ 4,000	26	1.0	1.2	14	27	1.8:1/1.5:1	5	65
LNA06002500A	600 ~ 2,500	30	1.5	1.0	14	26	1.4:1	5	50
LNA02004000A	200 ~ 4,000	29	0.5	1.3	13	26	1.6:1	5	50
LNA09001300B	900 ~ 1,300	18	0.5	0.6	15	30	1.5:1	5	50
LNA20002600A	2,000 ~ 2,600	26	0.75	0.7	12.5		1.4:1	5	55
LNA20006000B	2,000 ~ 6,000	25	1.0	1.0	12	22	1.8:1/1.5:1	5, 12	40
LNA08001400A	800 ~ 1,400	35	1.0	0.6	20	30	1.35:1	5	85
LNA08001400B	800 ~ 1,400	35	1.0	0.6	20	30	1.35:1	12	85
LNA00203500A	20 ~ 3,500	15	1.0	1.2	12	26	1.35:1	12	25
LNA12001600A	1,200 ~ 1,600	33	0.7	0.5	7	17	1.3:1	12	25
LNA50007000A	5,000 ~ 7,000	22	1.0	0.9	10	21	1.35:1/1.3:1	12	40
LNA800018000A	8,000 ~ 18,000	21	1.0	2.2	10		1.8:1/1.5:1	12	60
LNA01006000A	100 ~ 6,000	14		1.1	15	27	1.25:1/1.5:1	5	30
LNA100012000A	1,000 ~ 12,000	13	2.0	3.1	17	27	1.35:1/1.25:1	5	65
LNA12009000A	1,200 ~ 9,000	24	3.0	3.0	17.5	29	1.43:1/1.7:1	5	110

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POWER AMPLIFIERS

Part Number	Frequency (MHz)	Gain (dB)	Gain Flatness (±dB)	NF (dB)	P_{1dB} (dBm)	IP_3 (dBm)	VSWR Input/Output Max.	V_{dd} (V)	I_{dd} (mA)
LPA00010150B	0.1 ~ 150	17	0.2	3.0	30	45	2.0:1	12	200
LPA00010150A	1 ~ 150	17	0.2	3.0	30	45	2.0:1	12	200
LPA00010600A	1 ~ 600	16	0.5	3.0	30	45	2.0:1	12	200
LPA00011500A	1 ~ 1,500	14	0.5	5.0	29	45	2.2:1	12	200
LPA04700960A	470 ~ 960	31	0.5	3.0	35	49	1.5:1	10	950
LPA600018000A	6,000 ~ 18,000	12	1.0	4.5	19	28	2.2:1/2.0:1	12	110

Part Number	Frequency (MHz)	Gain (dB)	NF (dB)	P_{sat} (dBm)	VSWR Input/Output Max.	V_{dd} (V)	I_{dd} (mA)
LPA00206000A	20 ~ 6,000	18	3.5	33	2.4:1	28	120
LPA0860A	800 ~ 6,000	18	3.5	33	2.4:1	28	120
LPA1060A	1,000 ~ 6,000	18	3.5	33	2.4:1	28	120
LPA00206000M	20 ~ 6,000	35	3.0	3 W	1.5:1	28	250

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DC ~ 6 GHz Vector Network Analyzer (VNA)
SOLT Calibration Kit

High precision SMA calibration Kits **LCAL06A** (Female Connector) and **LCAL06B** (Male Connector) for the calibration of DC-6GHz Vector Network Analyzer (VNA). The calibration kit can be used for:

- Short-Open-Load-Thru
- Line-Reflect-Match (LRM)
- Full-Two-Port Calibration

Dimension: 4.12" x 3.45" x 1.5"
Material: Oak

Dimension: 2.56" x 2.56" x 0.5"
Material: ESD Plastic

Summary of the electrical specifications of a sample LCAL06A at 21°C:

Index	Testing Item	Symbol	Test Constraints	Min.	Nom.	Max.	Unit
1	Load Return Loss	$S_{11,L}$	DC – 3.0 GHz	40			dB
			3.0 – 6.0 GHz	35			dB
2	Thru Return Loss	$S_{11,T}$	DC – 3.0 GHz	40			dB
			3.0 – 6.0 GHz	35			dB
3	Thru Insertion Loss	$S_{21,T}$	DC – 6.0 GHz			0.05	dB
4	Thru Offset	T_{to}			55.70		pS
5	Load Offset	T_{Lo}			0		pS
6	Short Offset	T_{So}			55.70		pS
7	Open Offset	T_{oo}			55.70		pS
8	Open Capacitances	C_0			45		10^{-15} F
		C_1			6		10^{-27} F/Hz
		C_2			-2.5		10^{-36} F/Hz^2
		C_3			0		10^{-45} F/Hz^3

** Each Calibration Kit will be measured for its own parameters * Made In USA*

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DC ~ 9 GHz Vector Network Analyzer (VNA)
SOLT Calibration Kit

High precision SMA calibration Kits **LCAL09A** (Female Connector) for the calibration of DC-6GHz Vector Network Analyzer (VNA). The calibration kit can be used for:

- Short-Open-Load-Thru
- Line-Reflect-Match (LRM)
- Full-Two-Port Calibration

Dimension: 4.12" x 3.45" x 1.5"
Material: Oak

Dimension: 2.56" x 2.56" x 0.5"
Material: ESD Plastic

Summary of the electrical specifications of a sample LCAL09A at 21°C:

Index	Testing Item	Symbol	Test Constraints	Min.	Nom.	Max.	Unit
1	Load Return Loss	S11, L	DC – 3.0 GHz	40			dB
			3.0 – 9.0 GHz	35			dB
2	Thru Return Loss	S11, T	DC – 3.0 GHz	40			dB
			3.0 – 9.0 GHz	35			dB
3	Thru Insertion Loss	S21, T	DC – 9.0 GHz			0.10	dB
4	Thru Offset	Tto	(L020)		56.57		pS
5	Load Offset	TLo	With L020		0		pS
6	Short Offset	TSo	With L020		56.57		pS
7	Open Offset	Too	With L020		56.57		pS
8	Open Capacitances	C0			45		10^{-15} F
		C1			6		10^{-27} F/Hz
		C2			-2.5		10^{-36} F/Hz^2
		C3			0		10^{-45} F/Hz^3

** Each Calibration Kit will be measured for its own parameters * Made In USA*

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