RF Components

L-band Amplifiers

850 to 2150MHz

Model Number:
A-GABL1-3110 to 3114

- DC block between the input port and output port
- Gain options of +10, +15 and +20, +25 and +28 dB
- Requires 8-24V external DC powering.

Available with RF connector options:

- 50 Ω SMA
- 50 Ω N-type
- 50 Ω BNC
- 75 Ω BNC
- 75 Ω F-type

8-24V
External DC powering

850-2150 MHz
Operating frequency range.

Compact
Housed in rugged compact enclosure

Flexible Mounting
Tapped screw & through hole mounting options

RF Parameters						
A-GABL1-3111-xxxx		S5S5	N5N5	B5B5	B7B7	F7F7
Frequency Range		850-2150 MHz				
RF Connectors		50Ω SMA	50Ω N-Type	50Ω BNC	75Ω BNC	75Ω F-Type
Gain (dB)		10 ±1.5	10 ±1.5	10 ±1.5	10 ±1.5	10 ±1.5
Gain vs Frequency Variation (dB)	Typ.	±0.4	±0.4	±0.6	±0.8	±0.9
	Max.	±0.8	±0.8	±1.0	±1.2	±1.5
Input Return Loss (dB)	Typ.	17	17	15	14	12
	Max	12	10	10	8	8
Output Return Loss (dB)	Typ.	17	17	15	14	12
	Max	12	12	12	10	8
Output P1dB GCP** (dB)	Typ.	12	12	12	12	12
	Max	10	10	10	10	10
Output IP3 (dBm)	Typ.	22	22	22	22	22
Noise Figure (dB)	Typ.	10	10	10	10	10

**1dB Gain Compression Point (1dB GCP) is in relation to output power.
Gain measured at centre of frequency band

Broadcast


Marine Oil & Gas


SNG & VSAT


Satellite Teleport


RF Components

Model Number:
A-GABL1-3110 to 3114
L-band Amplifiers

RF Parameters						
A-GABL1-3112		S5S5	N5N5	B5B5	B7B7	F7F7
Frequency Range		850-2150 MHz				
RF Connectors		50Ω SMA	50Ω N-Type	50Ω BNC	75Ω BNC	75Ω F-Type
Gain (dB)		15±1.0	15±1.5	15±1.5	15±1.5	15±1.5
Gain vs Frequency Variation (dB))	Typ.	±0.5	±0.5	±0.5	±0.7	±1.0
	Max	±0.8	±0.8	±1.0	±1.0	±1.25
Input Return Loss (dB)	Typ.	17	17	16	12	10
	Min	13	13	13	10	8
Output Return Loss (dB)	Typ.	18	18	17	14	10
	Min	14	14	12	10	8
Output P1dB GCP** (dB)	Typ.	13	13	13	13	13
	Min	10	10	10	10	10
Output IP3 (dBm)	Typ.	22	22	22	22	22
Noise Figure (dB)	Typ.	9	9	9	9	9

RF Parameters						
A-GABL1-3110		S5S5	N5N5	B5B5	B7B7	F7F7
Frequency Range		850-2150 MHz				
RF Connectors		50Ω SMA	50Ω N-Type	50Ω BNC	75Ω BNC	75Ω F-Type
Gain (dB)		20±1.0	20±1.5	20±1.5	20±1.5	20±1.5
Gain vs Frequency Variation (dB)	Typ.	±0.5	±0.5	±0.5	±0.7	±1.0
	Max	±0.7	±0.7	±0.8	±1.0	±1.25
Input Return Loss (dB)	Typ.	18	18	16	14	14
	Min	14	14	14	12	10
Output Return Loss (dB)	Typ.	20	20	20	14	12
	Min	16	16	16	10	8
Output P1dB GCP** (dB)	Typ.	15	15	15	15	15
	Min	12	12	12	12	12
Output IP3 (dBm)	Typ.	25	25	25	25	25
Noise Figure (dB)	Typ.	8	8	8	8	8

Broadcast

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RF Components

Model Number:
A-GABL1-3110 to 3114
L-band Amplifiers

RF Parameters						
A-GABL1-3113		S5S5	N5N5	B5B5	B7B7	F7F7
Frequency Range		850-2150 MHz				
RF Connectors		50Ω SMA	50Ω N-Type	50Ω BNC	75Ω BNC	75Ω F-Type
Gain (dB)		25±1.5	25±1.5	25±1.5	25±1.5	25±2.0
Gain vs Frequency Variation (dB)	Typ.	±0.5	±0.5	±0.6	±0.8	±1.0
	Max	±0.7	±0.7	±0.8	±1.0	±1.25
Input Return Loss (dB)	Typ.	17	17	16	14	14
	Min	15	15	15	13	10
Output Return Loss (dB)	Typ.	20	20	20	16	14
	Min	16	16	16	14	12
Output P1dB GCP** (dB)	Typ.	11	11	11	11	11
	Min	9	9	9	9	9
Output IP3 (dBm)	Typ.	18	18	18	18	18
Noise Figure (dB)	Typ.	8	8	8	8	8

RF Parameters						
A-GABL1-3114		S5S5	N5N5	B5B5	B7B7	F7F7
Frequency Range		850-2150 MHz				
RF Connectors		50Ω SMA	50Ω N-Type	50Ω BNC	75Ω BNC	75Ω F-Type
Gain (dB)		30±2	30±2	30±2	30±2	30±2.5
Gain vs Frequency Variation (dB)	Typ.	±0.7	±0.5	±0.6	±0.8	±1.0
	Max	±0.9	±0.7	±0.8	±1.0	±1.25
Input Return Loss (dB)	Typ.	15	15	14	12	10
	Min	12	12	12	10	6
Output Return Loss (dB)	Typ.	16	16	16	12	10
	Min	12	12	12	8	6
Output P1dB GCP** (dB)	Typ.	15	15	15	15	15
	Min	12	12	12	12	12
Output IP3 (dBm)	Typ.	25	25	25	25	25
Noise Figure (dB)	Typ.	8	8	8	8	8

Broadcast

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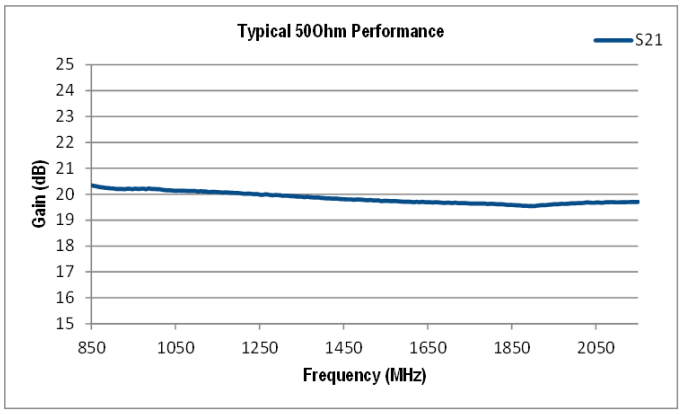
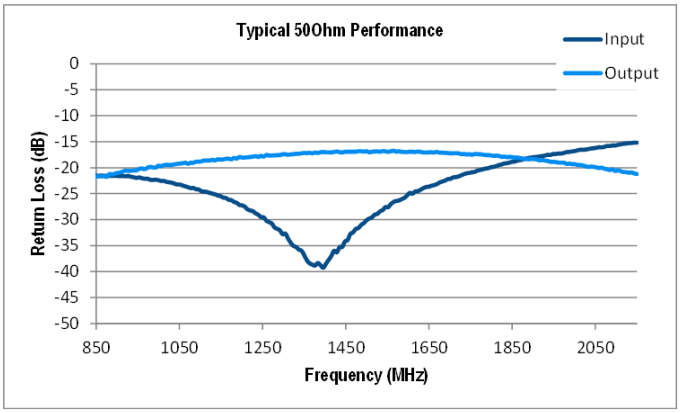
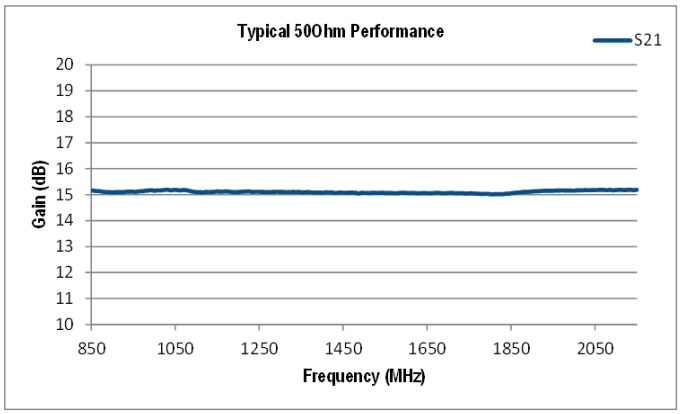
RF Components

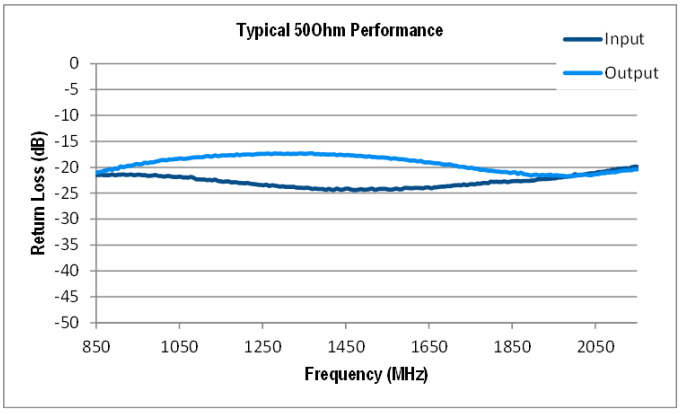
A-GABL1-3110





A-GABL1-3112





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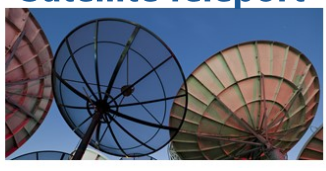


RF Components

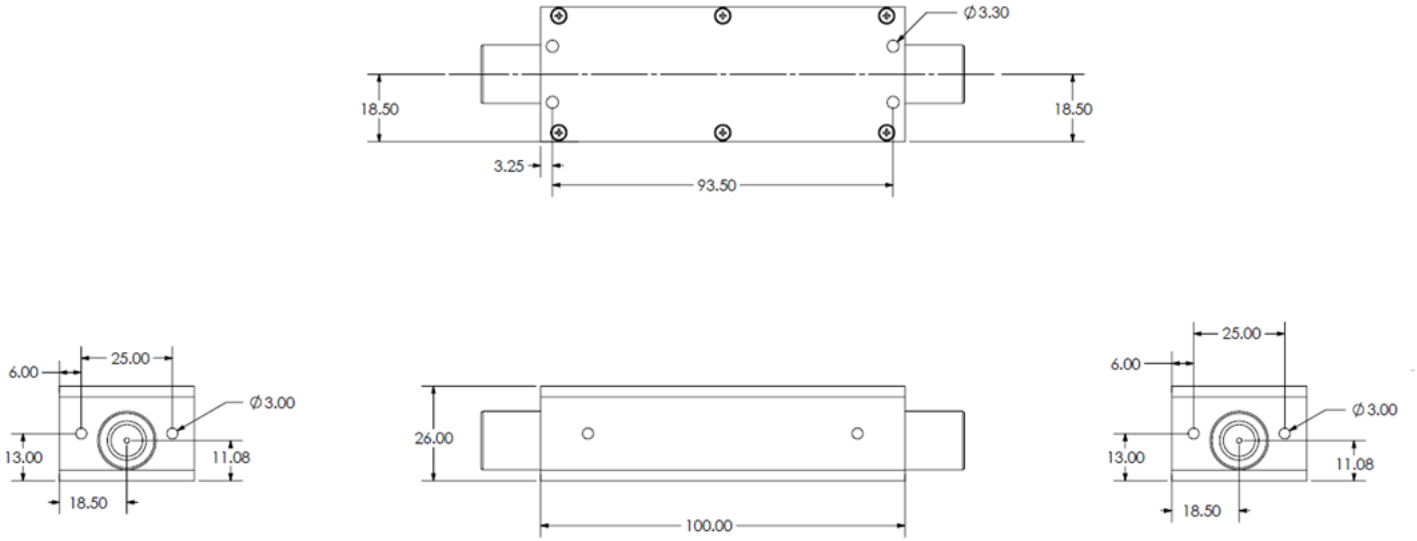
Model Number:
A-GABL1-3110 to 3114
L-band Amplifiers

Environmental		
Operating Temperature		0˚C to +55˚C
Storage Temperature		-20˚C to +75˚C
Location		Indoor use Only
Humidity	Max	85% non-condensing
Altitude	Max	10,000 feet

Max Operating Parameters	
Input RF Power	+16 dBm (40mW)
Max Voltage: RF Ports	28V
Max voltage: DC bias input	28V

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

Physical Dimensions (mm)



Note: The specification is subject to regular reviews and will be updated from time to time as part of our continuing product development and improved specification accuracy.

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