Amphenol
Broadband Solutions

Data Plus IPA2000DSL2-VFA MoCA Amplifier Series

Description:

Data Plus Amplifiers include unique design features to increase reliability and decrease installation time. The unique DataComm™ feature set allows MoCA communication between the passive data port and all active output ports on the 2000 series Infinity Premise Amplifiers. CrossTalk™ allows MoCA to freely communicate between all RF outputs. Technicians no longer need to worry where they connect MoCA devices.

Features & Benefits:

- Uninterrupted VoIP Service
- 1-Passive VoIP / Cable Modem Data Port
- Power Failure Impeadance Protection
- No Mechanical Switches
- Unity Gain Forward and Reverse
- MoCA 2.0
- MoCA Communications between Data Port and all RF Outputs
- Built-in MoCA Filter
- Powder Coated True Flex Housing
- UL Approved

Applications:

Premise, Multi-Dwelling Units (MDU) and Business.

Additional Info:

Specifications

Forward	Units	Condition	IPA2004DSL2-RSVFA	IPA2008DSL2-RSVFA
Ports			4	8
Frequency Range	MHz		54 to 1002	54 to 1002
Gain	dB	54 MHz	0.0±1.0	0.0±1.0
Gain	dB	1002 MHz	0.0±1.0	0.0±1.0
Slope	dB	54 - 1002MHz	0.0±1.0	0.0±1.0
Frequency Response	dB p-p	54 - 1002MHz	≤1.0	≤1.0
Return Loss (Output)	dB	54 - 1002MHz	≥20	≥20
Return Loss (Input)	dB	54 - 1002MHz	≥20 (Power On or Off)	≥20 (Power On or Off)
Isolation	dB	54 - 860MHz	≥25	≥25
Channel Loading		54 - 1002MHz	77 NTSC analog + Noise (551-1002MHz) @ -6dB	
Rated Input Level	dBmV	Flat	10	10
CTN	-dBc	10 dBmV in	≥55	≥55
CTB	-dBc	10 dBmV in	≥75	≥75
CSO	-dBc	10 dBmV in	≥65	≥65
XMOD	-dBc	10 dBmV in	≥75	≥75
Rated Output Level	dBmV	@CTB73, CSO62, XM65 dBC	≥18	≥18
HUM Modulation	-dBc	54 - 1002MHz	≥80	≥80
Noise Figure	dB	Input NF less input losses	≤5	≤5
Group Delay	ns	ch. 2 (-3.58 MHz span)	≤20	≤20
Group Delay	ns	ch. 3 (-3.58 MHz span)	≤10	≤10
Group Delay	ns	ch. 4+ (-3.58 MHz span)	≤5	≤5
RF-to-Power Port Isolation	dB	5 - 1002MHz	≥60	≥60
2nd Harmonic	-dBc	54-84 MHz @60dBmV	≥80	≥80

Reverse	Units	Condition	IPA2004DSL2-RSVFA	IPA2008DSL2-RSVFA
Frequency Range	MHz		5 MHz to 42 MHz	5 MHz to 42 MHz
Gain	dB	5-42 MHz	0.0±1.0	0.0±1.0
Frequency Response	dB p-p	5-42 MHz	≤1.0	≤1.0
Return Loss	dB	5-42 MHz	≥20	≥20
Isolation	dB	5-42 MHz	≥25	≥25
DSO @ 6 or 32 MHz	-dBc	55 dBmV Out @ 13&19 MHz	≥55	≥55
DTO @ 7 or 25 MHz	-dBc	55 dBmV Out @ 13&19 MHz	≥60	≥60
Rated Output Level	dBmV	@DSO55, DTO60 -dBc	≥55	≥55
Noise Figure	dB	Output NF less output losses	≤5	≤5
Group Delay	ns	5-6 MHz 1.0 MHz span	≤20	≤20
Group Delay	ns	6-10 MHz 1.0 MHz span	≤15	≤15
Group Delay	ns	10-36 MHz 1.0 MHz span	≤5	≤5
Group Delay	ns	36-42 MHz 1.0 MHz span	≤20	≤20

Additional Info:

Specifications

Passive Data Port	Units	Condition	IPA2004DSL2-RSVFA	IPA2008DSL2-RSVFA
Frequency Range	MHz		5 MHz to 1002 MHz	5 MHz to 1002 MHz
Frequency Response	dB p-p	5-870 MHz	≤0.8	≤0.8
Frequency Response	dB p-p	871-1002 MHz	≤0.8	≤0.8
Insertion Loss	dB	5-550 MHz	≤3.8	≤3.8
Insertion Loss	dB	551-870 MHz	≤4.6	≤4.6
Insertion Loss	dB	871-1002MHz	≤5.6	≤5.6
Insertion Loss	dB	1125-1675 MHz	≥35	≥35
Return Loss	dB	5-1002 MHz	≥20	≥20
MoCA Isolation (1125MHz - 1675 MHz)				
Downstream In to Out loss	dB	1125-1675 MHz	≥35	≥35
Upstream Out to In loss	dB	1125-1675 MHz	≥35	≥35
Out to Out loss - Adjacent (1-2, 3-4, 5-6, 7-8)	dB	1125-1675 MHz	≤25	≤25
Out to Out loss - Semi-Adjacent (1-4, 5-8)	dB	1125-1675 MHz	≤30	≤30
Out to Out loss - Cross (1-8)	dB	1125-1675 MHz	N/A	≤35
Bi-directional Modem to Input		1125-1675 MHz	≥35	≥35
Bi-directional Modem to Out		1125-1675 MHz	≤30	≤30
Other				
Surge Withstand (All Ports)		IEEE C62.41	6kV A3 ring	6kV A3 ring
Surge Withstand (All Ports)		IEEE C62.41	6kV B3 combo	6kV B3 combo
EMI	dB	5-1675 MHz	≥110	≥110
Dimensions	in (mm)	Length	4.91 (124.7)	5.91 (150.1)
Dimensions	in (mm)	Width	3.10 (78.7)	3.10 (78.7)
Dimensions	in (mm)	Depth	1.52 (38.6)	1.52 (38.6)
DC Current Consumption	ma	12-15VDC	280	300
AC Power Consumption	W	120 VAC (SM) Linear	(4.4) 6.0	(4.7) 6.5
Environmental				
Temperature	F (C)		-40° to + 140° (-40 to +60)	-40° to + 140° (-40 to +60)
Water proof	psi		15	15

Specifications Are Subject To Change Without Notice

Customers are reminded they are SOLELY responsible for confirming that all products are properly installed and used in accordance with codes and regulations.

Additional Info:

Specifications

Forward	Units	Condition	IPA2004DSL2-VFA	IPA2008DSL2-VFA
Ports			4	8
Frequency Range	MHz		54 to 1002	54 to 1002
Gain	dB	54 MHz	0.0±1.0	0.0±1.0
Gain	dB	1002 MHz	0.0±1.0	0.0±1.0
Slope	dB	54 - 1002MHz	0.0±1.0	0.0±1.0
Frequency Response	dB p-p	54 - 1002MHz	≤1.0	≤1.0
Return Loss (Output)	dB	54 - 1002MHz	≥20	≥20
Return Loss (Input)	dB	54 - 1002MHz	≥20 (Power On or Off)	≥20 (Power On or Off)
Isolation	dB	54 - 860MHz	≥25	≥25
Channel Loading		54 - 1002MHz	77 NTSC analog + Noise (551-1002MHz) @ -6dB	
Rated Input Level	dBmV	Flat	10	10
CTN	-dBc	10 dBmV in	≥55	≥55
CTB	-dBc	10 dBmV in	≥75	≥75
CSO	-dBc	10 dBmV in	≥65	≥65
XMOD	-dBc	10 dBmV in	≥75	≥75
Rated Output Level	dBmV	@CTB73, CSO62, XM65 dBC	≥17	≥17
HUM Modulation	-dBc	54 - 1002MHz	≥80	≥80
Noise Figure	dB	Input NF less input losses	≤5	≤5
Group Delay	ns	ch. 2 (-3.58 MHz span)	≤20	≤20
Group Delay	ns	ch. 3 (-3.58 MHz span)	≤10	≤10
Group Delay	ns	ch. 4+ (-3.58 MHz span)	≤5	≤5
RF-to-Power Port Isolation	dB	5 - 1002MHz	≥60	≥60
2nd Harmonic	-dBc	54-84 MHz @60dBmV	≥95	≥95

Reverse	Units	Condition	IPA2004DSL2-VFA	IPA2008DSL2-VFA
Frequency Range	MHz		5 MHz to 42 MHz	5 MHz to 42 MHz
Gain	dB	5-42 MHz	-11.0±1.0	-15.0±1.0
Frequency Response	dB p-p	5-42 MHz	≤1.0	≤1.0
Return Loss	dB	5-42 MHz	≥20	≥20
Isolation	dB	5-42 MHz	≥25	≥25
DSO @ 6 or 32 MHz	-dBc	55 dBmV Out @ 13&19 MHz	N/A	N/A
DTO @ 7 or 25 MHz	-dBc	55 dBmV Out @ 13&19 MHz	N/A	N/A
Rated Output Level	dBmV	@55 -dBc	N/A	N/A
Noise Figure	dB	Output NF less output losses	N/A	N/A
Group Delay	ns	5-6 MHz 1.0 MHz span	≤20	≤20
Group Delay	ns	6-10 MHz 1.0 MHz span	≤15	≤15
Group Delay	ns	10-36 MHz 1.0 MHz span	≤5	≤5
Group Delay	ns	36-42 MHz 1.0 MHz span	≤20	≤20

Additional Info:

Specifications

Passive Data Port	Units	Condition	IPA12004DSL2-VFA	IPA2008DSL2-VFA
Frequency Range	MHz		5 MHz to 1002 MHz	5 MHz to 1002 MHz
Frequency Response	dB p-p	5-870 MHz	≤0.8	≤0.8
Frequency Response	dB p-p	871-1002 MHz	≤0.8	≤0.8
Insertion Loss	dB	5-550 MHz	≤3.8	≤3.8
Insertion Loss	dB	551-870 MHz	≤4.6	≤4.6
Insertion Loss	dB	871-1002MHz	≤5.6	≤5.6
Insertion Loss	dB	1125-1675 MHz	≥35	≥35
Return Loss	dB	5-1002 MHz	≥20	≥20
MoCA Isolation (1125MHz - 1675 MHz)				
Downstream In to Out loss	dB	1125-1675 MHz	≥35	≥35
Upstream Out to In loss	dB	1125-1675 MHz	≥35	≥35
Out to Out loss - Adjacent (1-2, 3-4, 5-6, 7-8)	dB	1125-1675 MHz	≤25	≤25
Out to Out loss - Semi-Adjacent (1-4, 5-8)	dB	1125-1675 MHz	≤30	≤30
Out to Out loss - Cross (1-8)	dB	1125-1675 MHz	N/A	≤35
Bi-directional Modem to Input		1125-1675 MHz	≥35	≥35
Bi-directional Modem to Out		1125-1675 MHz	≤30	≤30
Other				
Surge Withstand (All Ports)		IEEE C62.41	6kV A3 ring	6kV A3 ring
Surge Withstand (All Ports)		IEEE C62.41	6kV B3 combo	6kV B3 combo
EMI	dB	5-1675 MHz	≥110	≥110
Dimensions	in (mm)	Length	4.91 (124.7)	5.91 (150.1)
Dimensions	in (mm)	Width	3.10 (78.7)	3.10 (78.7)
Dimensions	in (mm)	Depth	1.52 (38.6)	1.52 (38.6)
DC Current Consumption	ma	12-15VDC	150	170
AC Power Consumption	W	120 VAC (SM) Linear	(2.5) 3.2	(2.8) 3.6
Environmental				
Temperature	F (C)		-40° to + 140° (-40 to +60)	-40° to + 140° (-40 to +60)
Water proof	psi		15	15

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