

BDA-*/PS

BROADBAND COMMUNICATIONS DROP AMPLIFIER



The BDA Broadband Telecommunications Drop Amplifier is a two-way 1 GHz amplifier designed for customer premise amplification. These amplifiers can be used to compensate for long drops and excessive splitting losses. Each BDA is housed within a robust aluminum die cast housing and utilizes Motorola's P-Series Auto-Seize F-Connector for maximum reliability.

- BDA-*1/PS – Power Supply Included
- BDA-*2/PS – Power Supply Included
- BDA-*4/PS – Power Supply Included
- Amplifiers are also available with Power Inserters included (BDA-*/PS/PI)

Features

- 1 GHz Gallium Arsenide Technology
- 2.5 dB Noise Figure
- Patented Auto-Seize P-Series F-Connector
- One, Two, or Four Port Versions
- Two-Way Capable
- Led Power Verification
- Local or Remote Powering
- Environmentally Hardened Design
- 6 kV Surge Resistant
- Current limited power supply

		Passband: 52-1000 MHz						Comments
	Freq. (MHz)	BDA-S1		BDA-S2		BDA-S4		
		Min	Nom	Min	Nom	Min	Nom	
	52-1000	14.0	15.0	10.2	11.0	6.4	7.0	
	52-1000	18	23	18	23	18	23	
	52-1000	18	23	18	23	18	23	
Isolation (dB)	52-1000	-	-	24	28	24	30	
Flatness, (+/- dB max)	52-1000	0.8						
Distortions (dB min)								
Channel loading output levels:								
77 channels (550 MHz)		27		23		19		
110 channels (750 MHz)		24		20		16		
CTB (dBc min)		70						
XM (dB min)		70						
CSO (dBc min)		60						
Noise Figure (dB max)		2.5		3.0		3.0		
RFI Shielding (dB min)		100						
Hum Modulation (dBc)		70						

Return Specifications		Passband: 5-42 MHz						Comments
Specification	Freq. (MHz)	BDA-S1		BDA-S2		BDA-S4		
		Max	Nom	Max	Nom	Max	Nom	
Insertion Loss (dB)	5-42	1.6	1.0	4.8	4.4	8.5	8	
Input Return Loss (dB)	5-42	18	25	18	25	18	25	
Output Return Loss (dB)	5-42	18	25	18	25	18	25	
Output Port to Port Isolation (dB)	5-42	-	-	28	30	26	30	

General Specifications		
Parameter	Specification	Comments
Input and Output Connector(s)	F-Connector	SCTE compliant. P-Series auto-seize.
AC Power Supply Input Voltage	120 VAC nominal	Other power supply voltages available.
DC Amplifier Input Voltage	12 VDC nominal	
Power Consumption	3 watts	
Surge Withstand	6000 volts	BDA input port: 6 kV - IEEE C62.41-1991 Cat. B-3 Combination Wave, 2 kA. BDA output port(s): IEEE C62.41-1991 Cat. A-3 Ring Wave, 6 kV, 200 A and 1 kV Combination Wave (10x).
Operating Temperature	-40° to +60° C (-40° to +140° F)	
Housing	Aluminum 360 Die Cast	
Housing Dimensions	4.0 x 4.9 x 1.1 inch (102 x 124 x 28 mm)	Height x Width x Depth
Weight	1.1 lb (0.5 kg)	Add 0.5 lb (0.2 kg) for power supply and cable

Specifications subject to change without notice.