RF Communications

BYPASS DROP AMPLIFIER

application

The bypass drop amplifier supports critical applications that require high reliability and uninterrupted service. In the event of a power or amplifier failure, the amplifier switches to bypass mode creating a nearly seamless connection to the bypass port. The amplifier returns to normal operating mode once power is restored.

features

- Bandwidth: 1 GHz
- Extremely low noise
- 6KV surge protection
- Outstanding return loss
- Bypass failover conditions
  - Power outage
  - IC failure
  - Low input voltage
  - High input voltage
- Pre-installed mounting screws for easy install
- Powder coated and weather sealed housing for exceptional corrosion protection
- SCTE compliant

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PARAMETER		TYPICAL	WORST	UNIT	NOTE
Forward Path 54-1000 MHz					
Gain	RF OUT	10	9	dB	
Insertion Loss	Digital Phone	-3.7	-4.0	dB	
Flatness		± 0.7	± 1	dB	
Isolation, Digital Phone to RF Out			-10	dB	
Cross Modulation		-83	-75	dBc	(1)
Composite Triple Beat		-81	-73	dBc	(1)
Composite Second Order		-72	-62	dBc	(1)
Noise Figure		2.5	4.0	dB	(2)
CNR			65	dB	(3)
Group Delay	CH2		20	ns	Span 3.58 MHz
	CH3		10	ns	Span 3.58 MHz
	CH4 >		5	ns	Span 3.58 MHz
Return Path 5-42 MHz					
Insertion Loss	RF OUT	-4.0	-4.5	dB	
	Digital Phone	-3.3	-3.8	dB	
Flatness		± 0.3	± 0.5	dB	
Isolation, Digital Phone to RF Out			-25	dB	
Group Delay	5-42 MHz		20	ns	Span 1 MHz
	10-36 MHz		3	ns	Span 1 MHz
General Specifications 5-42 MHz, 54-1000 MHz					
Impedance		75		Ohm	
Return Loss		20	18	dB	
Hum Modulation		-85	-75	dB	
RFI		110	100	dB	
Surge Withstand Capability		6kV 3kA, 8/20us Combo Wave IEEE 587 (C62.41-1991) Category B3 Standard			RF In and Power Pack
		6kV 200A, 0.5-100KHz, Ring Wave IEEE 587 (C62.41-1991) Category A3 Standard			RF Out
Operating Temperature		-40 to +60		ºC	
Power Consumption		150		mA	12Vdc
Waterproof		Withstand 15 lbs/inch for 1 minute			All F-Ports

Note:

(1) Input levels at +13.5 dBmV/CH (79 NTSC), plus digital after 550MHz at 6dB set-back.

(2) Noise Figure of the gain block, behind splitter losses. Add 3.5dB for fwd input splitter loss.

(3) 13.5dBmV input ref for FWD CNR

All specifications are subject to change