

DATASHEET | JANUARY 2012

FIBER OPTICS



Features

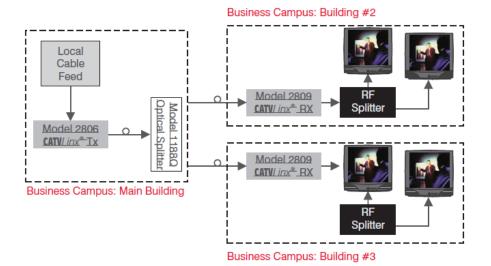
- Bandwidth of 40 to 550 MHz
 Accommodates up to 77 Channels.
- Provides Excellent Picture Quality with a CNR up to 54.5 dB, CSO of -63 dBc, and CTB of -66 dBc.
- Low Profile, Rugged Package Allows Great System Installation Flexibility.
- Wide Optical Input Range of -8 dBm to +4.5 dBm Permits the Use of a Lower Power Transmitter, Reducing System Cost.
- Excellent for HFC, Short-Haul, Intra-Facility, and Campus/Enterprise Distribution.

The Model 2809 77 Channel CATV Receiver facilitates a low-cost system for transporting up to 77 channels of VSB/AM modulated signals over a singlemode optical fiber. The Model 2809, working with Model 2806 transmitter, provides excellent performance up to 10 km with full channel loading, high sensitivity, and 550 MHz of usable bandwidth. With a wide optical input range of -8.0 to +4.5 dBm and +18 dBmV of RF output at 0 dBm optical input, the Model 2809 allows excellent performance for intra-facility limited distance applications, such as corporate CATV delivery and campus/enterprise distribution where cost, small size, and performance are major considerations. This low-cost system gives CATV providers the ability to provide reliable limited distance fiber optic video distribution systems.

77 Channel CATV Receiver Part Numbers

Description	Part Number	
Fiberoptic Receiver, 1310/1550 nm, SC/APC Optical Connector	2809R-SFSP	
Fiberoptic Receiver, 1310/1550 nm, FC/APC Optical Connector	2809R-SFAP	

Note: Power Supply Part Number PS095 Included.





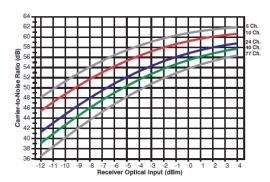
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RF & Optical Characteristics

Parameter	Min	Тур	Max	Units
Optical Input Power	-8.0	0.0	+4.5	dBm
Operating Wavelength	1280	1310	1340	nm
Operating Wavelength	1490	1550	1610	nm
Bandwidth	40	-	550	MHz
Output RF Impedance	-	75	-	Ohms
RF Output Level	-	+18	-	dBmV
RF Output Return Loss	-	16	-	dB
Backreflection Tolerance	-	-	-50	dB
Required Fiber Bandwidth	2,000	-	-	MHz
Composite Second Order (CSO)	-	-63	-	dBc
Composite Triple Beat (CTB)	-	-66	-	dBc
Carrier-to-Noise Ratio		See Graph		dB

Carrier-to-Noise Performance



System performance specifications indicated for use with 9/125 μ m singlemode fiber.

Electrical Characteristics

Parameter	Min	Тур	Max	Units
Power Supply Voltage	+8	-	+10	V _{DC}
Power Dissipation	-	5	-	Watts

Physical Characteristics

Parameter	Min	Тур	Max	Units
Weight	-	6.6 187	-	oz g
Dimensions	-	3.75 x 2.95 x 1.12 95 x 75 x 29	-	in mm

Environmental Characteristics

Parameter	Min	Тур	Max	Units
Operating Temperature Range	0	-	+50	°C
Storage Temperature Range	-20	-	+70	°C
Humidity (RH, non-condensing)	5	-	95	%