

Q-SERIES® Optical

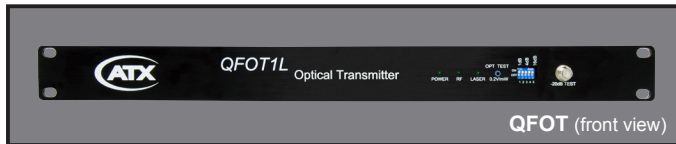
Fiber Optic Products



QFOT1L 1310nm DFB Fiber Optic Transmitter:

Features:

- ▶ Low noise, high linearity DFB laser
- ▶ GaAs technology up to 1000 MHz
- ▶ RF level ALC control, 5 digit DIP switch manual adjust RF attenuation
- ▶ Excellent pre-distortion technology improves CTB, CSO & C/N
- ▶ -20 dB RF test port, DIP switch, power LED indicator & laser LED indicator on front panel
- ▶ 19" 1RU housing



QFOT1L 1310nm Specifications

SPECIFICATIONS	VALUE									
	4mW	6mW	8mW	10mW	12mW	14mW	16mW	18mW	20mW	
OPTICAL POWER	4mW	6mW	8mW	10mW	12mW	14mW	16mW	18mW	20mW	
OPTICAL LINK PATH LOSS	7 dB	9 dB	10 dB	11 dB	11.8 dB	12.5 dB	13 dB	13.6 dB	14 dB	
OPTICAL WAVELENGTH	1310nm +/- 20									
TYPE OF LASER	DFB Laser with Isolator									
OPTICAL MODULATION MODE	Direct Modulation									
OPTICAL CONNECTOR TYPE	SC/APC									
FREQUENCY RANGE	47-1000 MHz									
RF INPUT LEVEL	15-25 dBmV									
FLATNESS IN BAND	+/- 0.75 dB									
RF INPUT IMPEDANCE	75 Ω									
INPUT REFLECTION LOSS	≥ 16 dB from 47-1000 MHz									
C/COMP. TR. BT.	≥ 67 dB									
C/COMP. 2nd ORD.	≥ 62 dB									
CARRIER-TO-NOISE RATIO	≥ 51 dB									
MGC CONTROL RANGE	1 dB / 2 dB / 4 dB / 16 dB									
POWER VOLTAGE	100-240 VAC (50/60 Hz)									
POWER CONSUMPTION	20W									
OPERATION TEMPERATURE	0°C to +50°C (+32°F to +122°F)									
STORE TEMPERATURE	-40°C to +85°C (-40°F to +185°F)									
RELATIVE HUMIDITY	Max 95% Non-condensing									
DIMENSIONS	1.75"H x 19.0"W x 12.8"D (4.45H x 48.26W x 32.51D cm)									
WEIGHT	11.0 lbs (5.0 kg)									
NOTE:										
Test Condition: 77 channels NTSC signal to optical transmitter. C/CTB, C/CSO and C/N at -1 dBm optical input (10 km fiber + optical attenuator) measured at standard optical receiver with 36 dBmV RF output.										

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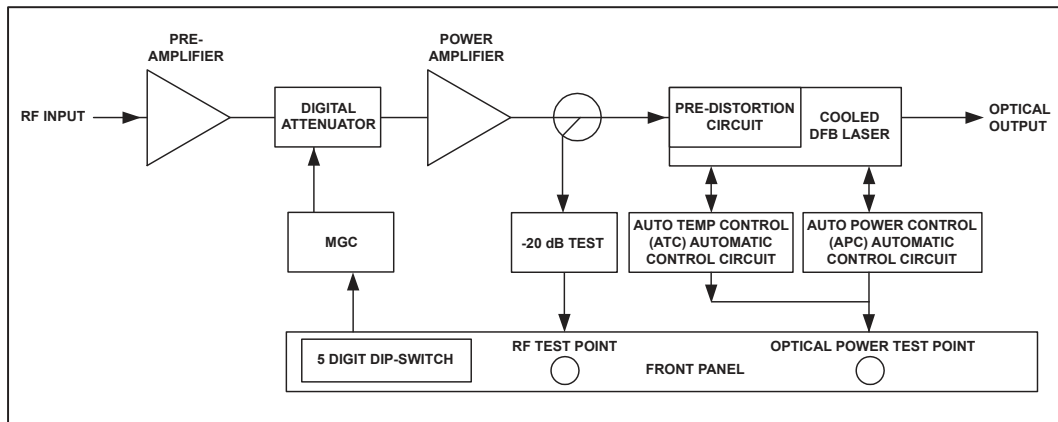
Optical Link Path C/N Specifications

OPTICAL LINK PATH C/N SPECIFICATIONS																
OPTICAL LOSS (dB)	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	
QFOT1L-04	53.8	52.8	51.8	51.0	50.1	49.2	48.2									
QFOT1L-06				53.0	52.0	51.0	50.1	49.1	48.1							
QFOT1L-08					52.8	51.9	51.0	50.1	49.1	48.2						
QFOT1L-10						52.9	51.9	51.0	50.1	49.1	48.2					
QFOT1L-12							52.7	51.8	50.8	49.9	49.0	48.0				
QFOT1L-14								52.4	51.5	50.5	49.5	48.6	47.8			
QFOT1L-16									52.0	51.0	50.1	49.1	48.1			
QFOT1L-18									52.5	51.6	50.6	49.7	48.7	47.9		
QFOT1L-20										51.9	51.0	50.0	49.0	48.0		
QFOT1L-22											52.2	51.4	50.4	49.4	48.6	47.8

Ordering Information

Part Number	Description
QFOT1L-04	Optic Transmitter, 1 GHz, 1310nm, DFB, MGC, SC/APC, 4mW
QFOT1L-06	Optic Transmitter, 1 GHz, 1310nm, DFB, MGC, SC/APC, 6mW
QFOT1L-08	Optic Transmitter, 1 GHz, 1310nm, DFB, MGC, SC/APC, 8mW
QFOT1L-10	Optic Transmitter, 1 GHz, 1310nm, DFB, MGC, SC/APC, 10mW
QFOT1L-12	Optic Transmitter, 1 GHz, 1310nm, DFB, MGC, SC/APC, 12mW
QFOT1L-14	Optic Transmitter, 1 GHz, 1310nm, DFB, MGC, SC/APC, 14mW
QFOT1L-16	Optic Transmitter, 1 GHz, 1310nm, DFB, MGC, SC/APC, 16mW
QFOT1L-18	Optic Transmitter, 1 GHz, 1310nm, DFB, MGC, SC/APC, 18mW
QFOT1L-20	Optic Transmitter, 1 GHz, 1310nm, DFB, MGC, SC/APC, 20mW
QFOT1L-22	Optic Transmitter, 1 GHz, 1310nm, DFB, MGC, SC/APC, 22mW

Functional Schematic



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