

### FEATURES

- **DESIGNED FOR SONET/SDH/ATM SYSTEMS**
- **FIXED PIGTAIL FIBER AND OPTICAL CONNECTOR**
- **SMT PACKAGE**
- **COMPACT SIZE:**  
28.0 x 12.3 x 7 mm
- **LOW POWER CONSUMPTION:**  
0.6 W MAX
- **SINGLE +3.3 V POWER SUPPLY**
- **WIDE OPERATING TEMPERATURE RANGE:**  
0 to +65°C

### ORDERING INFORMATION<sup>1</sup>

Pigtail Optical Connector	Part Number
SC	OD-J7870-0B11
MUJ	OD-J7870-0B21
FC	OD-J7870-0B31

Note:

1. Part number depends on optical connector.

### MAJOR PERFORMANCE

- **DATA RATE:**  
2.48832 Gbps (STM-16, OC-48)
- **AC COUPLED SIGNAL INTERFACE (50 Ω)**
- **ALARM FUNCTIONS:**  
Optical output down alarm, LD bias alarm

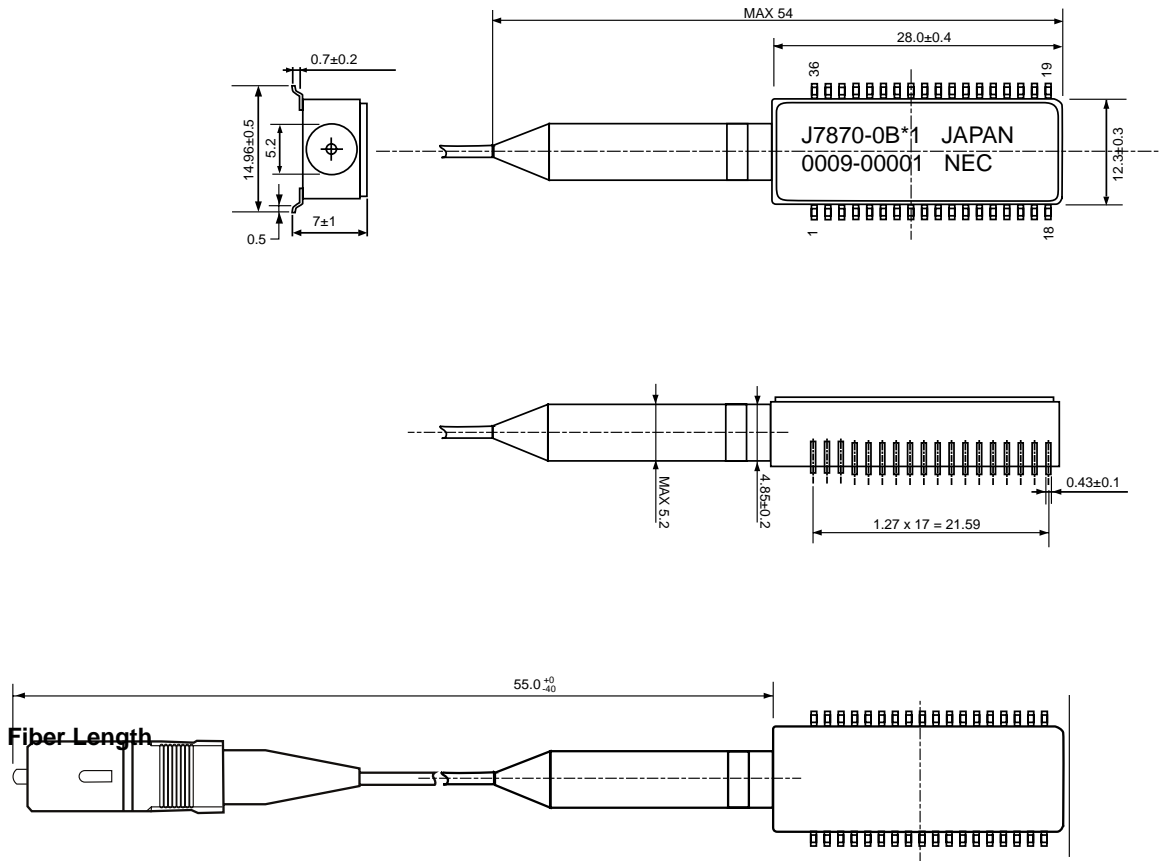
### APPLICATIONS

- **TELECOMMUNICATIONS NETWORKS**  
SONET OC-48 LR-1 Interface Compatible (Bellcore GR-253-Core Requirements)  
SDH STM-16 L-16.1 Interface Compatible (ITU-T Recommendation G.957)

### PERFORMANCE CHARACTERISTICS

Parameter	Performance
Transmission Speed	2.48832 Gbps
Data Format	Scrambled NRZ (External Scrambler is Required)
Pigtail Fiber (Separate order is necessary)	SMF 550 mm each Optical Connector: SC, FC, MUJ
Optical Output Power Range	-2 to +3 dBm Extinction Ratio: 8.2 dB MIN
Input Electrical Signal Interface	Data: AC coupled 50 Ω Clock: AC coupled 50 Ω
Applicable Transmission Fiber Cables	SMF (SI-10/125)
Operating Ambient Temperature	0 to 65°C
Relative Humidity	30 to 80 % RH (Non-condense Condition)
Power Supply Voltage	DC: +3.3 V
Power Consumption	0.6 W MAX
Dimensions (Refer to Outline Dimensions)	28 x 12.3 x 7 (mm)
Alarm Functions	Optical output down alarm LD bias alarm

**OUTLINE DIMENSIONS** (Units in mm)



PIN NO.	SYMBOL	I/O	PIN NO.	SYMBOL	I/O
1	OPT MON	O	16	GND	I
2	GND	I	17	GND	I
3	GND	I	18	GND	I
4	FF SEL	I	19	GND	I
5	GND	I	20	EXT C	-
6	CLK IN (-)	I	21	Vcc	I
7	CLK IN (+)	I	22	GND	I
8	GND	I	23	GND	I
9	DATA IN (-)	I	24	GND	I
10	DATA IN (+)	I	25	GND	I
11	SHUT DOWN	I	26	GND	I
12	BIAS MON	O	27	GND	I
13	CURR ALM TST	I	28	Vcc	I
14	CURR ALM	O	29	GND	I
15	OPT OUT ALM	O	30	Vcc	I

I: Input Terminal, O: Output Terminal

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03/15/2001