

FEATURES

- **DESIGNED FOR SONET/SDH/ATM SYSTEMS**
- **FIXED PIGTAIL FIBER AND OPTICAL CONNECTOR**
- **SMT PACKAGE**
- **COMPACT SIZE:**
27 x 10 x 7 (mm)
- **LOW POWER CONSUMPTION: 0.3 W TYP**
- **SINGLE +3.3 V POWER SUPPLY**
- **WIDE OPERATING TEMPERATURE:**
0 to 65°C

MAJOR PERFORMANCE

- **DATA RATE:**
155.52 Mbps (STM-1, OC-3)
- **P-ECL SIGNAL LOGIC INTERFACE**
- **ALARM FUNCTIONS:**
Optical output down alarm, LD bias alarm
- **AUTOMATIC OPTICAL LAUNCHED POWER STABILIZING**

PERFORMANCE CHARACTERISTICS (OD-J7820-AB*1)

| Items | Performance |
|--------------------------------------|--|
| Transmission Speed | 155.52 Mbps |
| Data Format | Scrambled NRZ (External Scrambler is Required.) |
| Pigtail Fiber | SMF Pigtail Length: 550 nm Optical Connector: SC, FC, MUJ |
| Output Optical Interface | Launched Power: -5 to 0 dBm Extinction Ratio: 10 dB MIN Wavelength: 1480 to 1580 nm Maximum -20 dBm width: 1 nm Minimum side mode suppression ratio: 30 dB |
| Input Electrical Interface | Data Interface: P-ECL Clock Interface: P-ECL |
| Applicable Transmission Fiber Cables | SMF (SI-10/125) |
| Ambient Temperature | 0 to 65°C |
| Relative Humidity | 30 to 80 % RH (non-condense Condition) |
| Power Supply Voltage | DC: +3.3 V |
| Power Consumption | 0.3 W TYP |
| Dimensions | 27 x 10 x 7 (mm) (refer to drawing) |
| Alarm Functions | Optical output down alarm; active low LD bias alarm; active low Signal Interface: LV-TTL |

APPLICATIONS

- **TELECOMMUNICATIONS NETWORKS:**
SONET OC-3, LR-2, and LR-3 Interface compatible
(Bellcore GR-253-CORE requirement)
SDH STM-1, L-1.2, and L-1.3 Interface Compatible
(ITU-T Recommendation G.957)

ORDERING INFORMATION¹

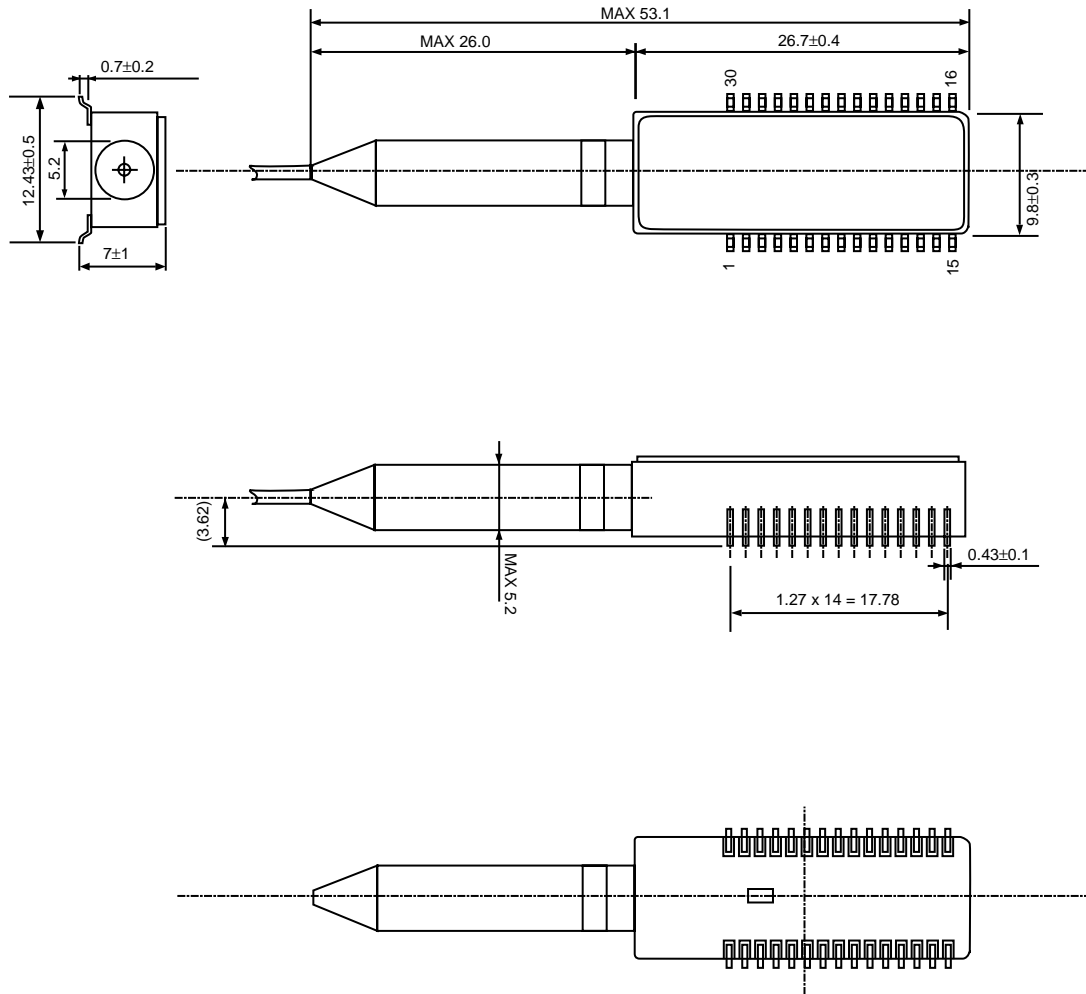
| Optical Connector | Product Number |
|-------------------|----------------|
| SC | OD-J7810-AB11 |
| MUJ | OD-J7810-AB21 |
| FC | OD-J7810-AB31 |

NOTE:

1. Please make sure of the product number listed above. The optical connector depends on part number.

OD-J7810-AB*1

(unit 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