

NEC

10-Gbps OPTICAL TRANSCEIVER WITH 16-CHANNEL MUX/DEMUX for SONET SR-1 (12 km)

OD-J8349**FEATURES**

- DESIGNED FOR SONET/SDH/ATM SYSTEMS
- OC-192 SR-1[12 km], compliant
- UNCOOLED DFB-LD TRANSMITTER AND PIN-PD RECEIVER
- 16:1-MUX/1:16-DMUX INTEGRATED
- 622.08-Mbps LVDS INPUT/OUTPUT INTERFACE
- **COMPACT SIZE:**
114 x 89 x 16 (mm)
- **POWER SUPPLY VOLTAGE:**
+3.3 V and -5.2 V
- **TARGET POWER CONSUMPTION:**
5.5 W (TYP)
- **OPERATING CASE TEMPERATURE RANGE:**
0 to +65°C

MAJOR PERFORMANCE

- **9.95328-Gbps OPTICAL TRANSMISSION DATA RATE For SR-1**
- **622.08-Mbps LVDS ELECTRICAL INTERFACE**
- **JITTER SPECIFICATIONS:**
SONET Bellcore GR-1377
- **ALARM FUNCTIONS:**
Transmitter Part: Optical output down alarm, LD bias alarm
Receiver Part: Loss of signal alarm
- **MONITOR FUNCTIONS:**
Transmitter part: Optical output power monitor, LD bias monitor
Receiver part: Photo current monitor

APPLICATIONS

- SONET/SDH-based Transmission systems
- ATM switches
- IP Routers

PERFORMANCE CHARACTERISTICS

Parameters	Performance
Optical Transmission Data Rate	9.95328 Gbps
Pigtail Fiber	Pigtail Fiber: SMF, Pigtail length: 1 m each Optical Connector: SC (Grp. 0A01)
Transmitter Output Optical Interface	Launched Power: -4 to 0 dBm
	Wavelength: 1290-1330nm
	Extinction Ratio: 6 dB MIN
Receiver Input Optical Interface	Minimum Sensitivity: -12 dBm MAX
	Overload: -3 dBm MIN
	Optical Return Loss: -14 dB
Data Input Signals	622.08-MHz x 16 channels
Data Output Signals	622.08-MHz x 16 channels
Electrical Signal Interface	Data Interface: 622.08-Mbps-LVDS Clock Interface: 622.08-MHz-LVDS Reference Clock Interface: 155.52-MHz-LVPECL
Operating Case Temperature	0 to 65°C
Power Supply Voltage	+3.3 V and -5.2 V
Power Consumption	5.5 W TYP
Dimensions (Refer to Outline Dimensions)	114 x 89 x 16 (mm)
Alarm Function	Transmitter: Optical output down alarm, LD bias alarm Receiver: Loss of signal alarm
Monitor Function	Transmitter: Optical output power monitor, LD bias monitor Receiver: Photo current monitor

OUTLINE DIMENSIONS (Units in mm)

