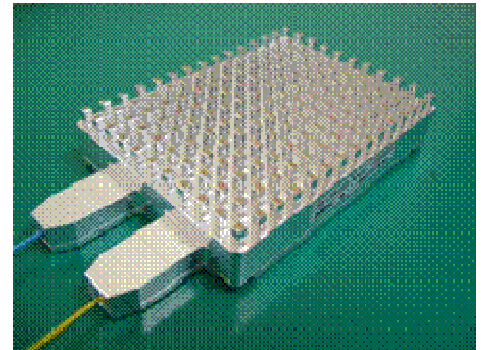


**SR-2:OD-J9191/J9193/J9195-\*\*\*\***  
**IR-2:OD-J9192/J9194/J9196-\*\*\*\***  
**SR-1:OD-J9198/J9199/J9200-\*\*\*\***  
**IR-1:OD-J9316-\*\*\*\***

## 10-Gbps Optical Transceiver with 16-channels MUX/DEMUX

### Features

- 300-pin MSA(*Multi Source Agreement*) compliant.
- Designed for SONET / SDH / ATM Systems.
- Telcordia GR-253-CORE OC-192 SR-1/SR-2/IR-1/IR-2 ITU-T G.691 I-64.1/I-64.2/S-64.1/S-64.2b, VSR2000-2R1 compliant.
- Cooled DFB or EA DFB transmitter and pin-PD receiver.
- 16:1-MUX / 1:16-DEMUX Integrated.
- 622.08/644.53/669.32-Mbps LVDS Input/Output interface.
- Compact Size : 75 x 55 x 16 (mm).
- Power Supply Voltage : +1.8V, 3.3V, -5.2V.
- Power Consumption : 4.5W (Typ.) , 7.0W(Max)
- Operating Case Temperature Range : -5 to 70°C.



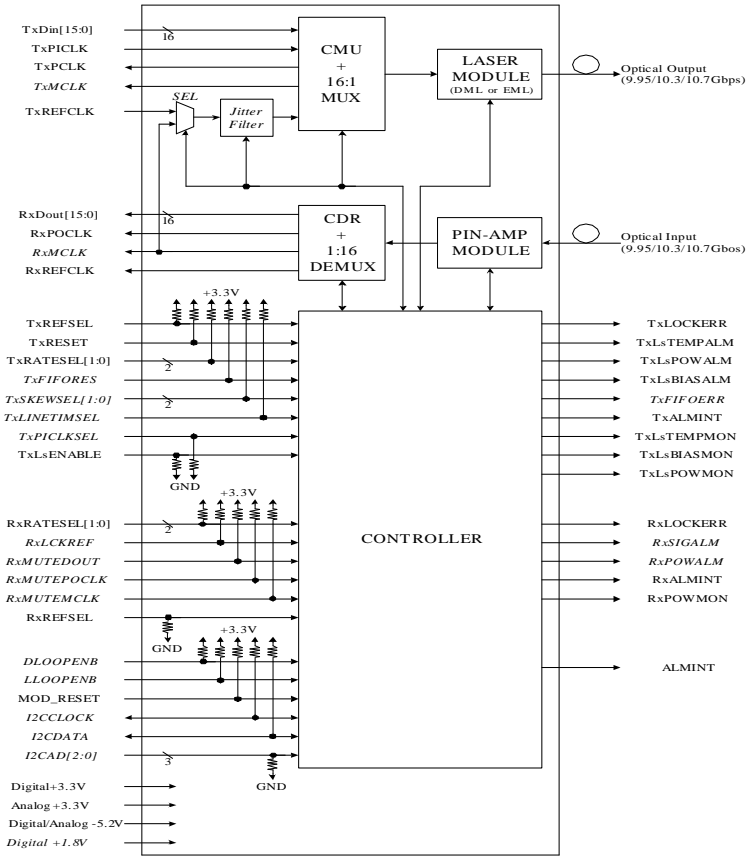
### Performance

| Parameter                            |                     | Performance   |
|--------------------------------------|---------------------|---|
| Transmission Data Rate               |                     | 9.95328/10.3125/10.709-Gbps   |
| Pigtail Fiber                        |                     | Pigtail Fiber : SMF, Pigtail Length : 1 m each<br>Optical Connector : SC (Grp. 0A01)  |
| Transmitter Output Optical Interface | Launched Power      | SR-1:-6 to -1 dBm , SR-2:-5 to -1dBm<br>IR-1: +1 to +5dBm , IR-2:-1 to +2dBm          |
|                                      | Wavelength          | SR-1/IR-1:1290-1330nm<br>SR-2/IR-2:1530-1565nm  |
|                                      | Extinction Ratio    | SR-1/IR-1:6.0dB min<br>SR-2/IR-2:8.2dB min  |
| Receiver Input Optical Interface     | Minimum Sensitivity | SR-1/IR-1:-11dBm max<br>SR-2/IR-2:-14dBm max  |
|                                      | Overload            | -1dBm min   |
|                                      | Optical Return Loss | SR-1/IR-1:-14dB<br>SR-2/IR-2:-27dB  |
| Data I/O Signals                     |                     | 622.08/644.53/669.32-Mbps x 16-channels   |
| Alarm Function                       |                     | Tx : Optical output alarm, LD bias alarm<br>Rx : Loss of signal alarm                 |
| Monitor Function                     |                     | Tx : Optical output power monitor,LD bias monitor<br>Rx : Optical input power monitor |

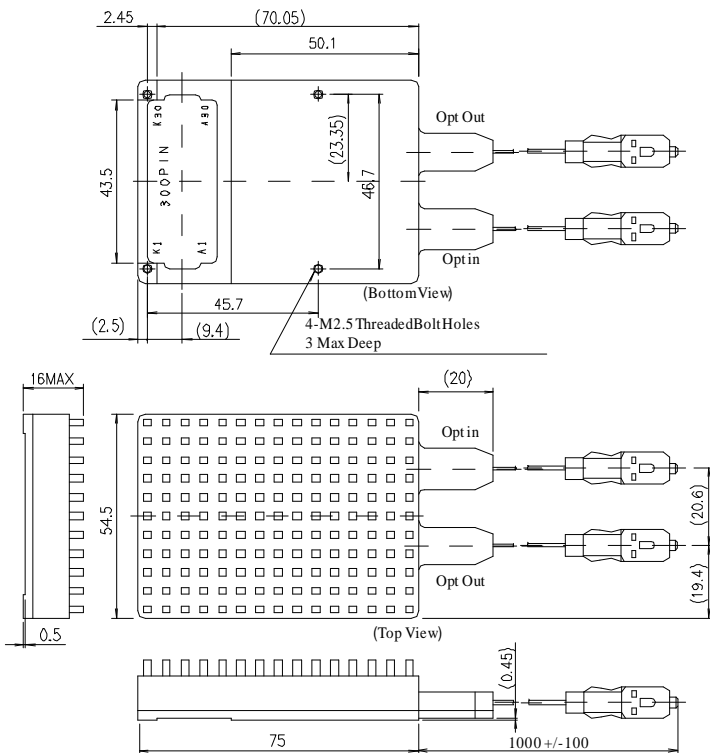
### Line up

|                      | OC-192<br>Single-rate | Dual-rate<br>with Jitter Filter | OC-192/10GbE/FEC<br>Multi-rate |
|----------------------|-----------------------|---------------------------------|--------------------------------|
| SR-1/VSR(Cooled DFB) | J9198/J9199           | J9198                           | J9200                          |
| IR-1(Cooled DFB)     | -                     | -                               | J9316                          |
| SR-2(EA DFB)         | J9195                 | J9191                           | J9193                          |
| IR-2(EA DFB)         | J9196                 | J9192                           | J9194                          |

## Block Diagram

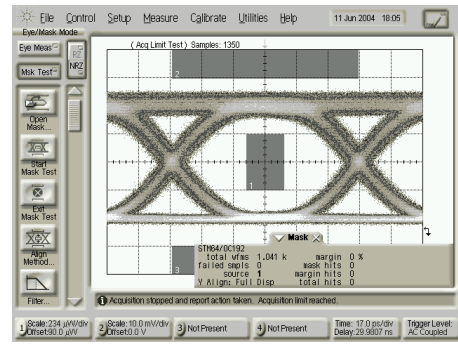


## Dimension

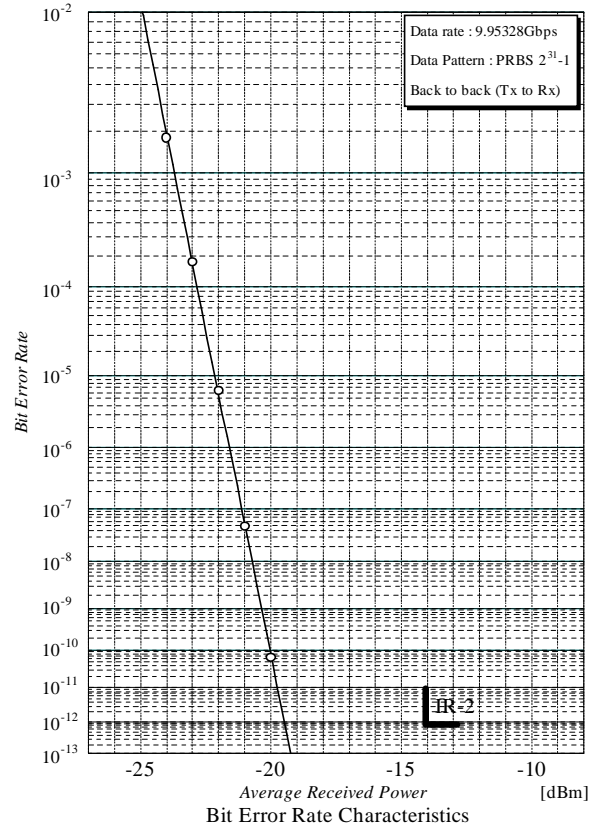


## Performance

### J9196 Output waveform (Tc=25deg.C , Filtered)



### J9196 Sensitivity (Back to back)



## Order form

OD-J9\*\*\*-0xy1

\*\*\* : 191/192/193/194/195/196/198/199/200/316

x : Connector type

A:SC,B:FC,C:MU,D:LC

y : Package type

0:16mm height with Heatsink

1:13.5mm height with Heatsink

2:12mm height without Heatsink

DATA SUBJECT TO CHANGE WITHOUT NOTICE



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