

## NY55T Series High power DWDM Transmitter

### Product Features

- ※ Up to 100mw high power output
- ※ Low RIN
- ※ Highly integrated, module packaging
- ※ High Reliability
- ※ Optional ITU wavelength



### Applications

- ※ Fiber optic communication
- ※ Fiber optic sensing
- ※ DWDM System
- ※ Space optical communication

### Introduce Of NY55T

NY55T Transmitter are mainly composed of a high power DFB laser, an automatic optical power control circuit, an automatic temperature control circuit, a voltage-stabilizing conversion circuit and a monitoring and indicating circuit.

Wavelength of the module can cover the ITU channel wavelength table of DWDM application. Maximum output power can reach 100mW; Low relative intensity noise. Take a good stability of output wavelength. The power supply of NY55T Transmitter is a single positive power supply, which can work stably in the voltage range of +7V ~ +36V.

Besides, NY55T Transmitter also has the function of indicating that the power supply and optical power output is normal.

## Absolute Maximum Ratings

| Parameter             | Symbol           | Min. | Typ. | Max. | Unit |
|-----------------------|------------------|------|------|------|------|
| Storage temperature   | T <sub>STG</sub> | -40  | +25  | +85  | °C   |
| Operation temperature | T <sub>C</sub>   | -20  | +25  | +70  | °C   |
| Voltage               | V <sub>in</sub>  | +7   | +12  | +36  | V    |

## Optical and Electrical Specification (TC = 22±3°C)

| Parameter                      | Symbol            | Condition           | Min. | Typ.   | Max. | Unit   |
|--------------------------------|-------------------|---------------------|------|--------|------|--------|
| Wavelength                     | λ                 | -                   | -    | C Band | -    | nm     |
| Light output power             | P                 | -                   | 40   | -      | 100  | mW     |
| Relative Intensity Noise       | RIN               | -                   | -    | -163   | -160 | dBc/Hz |
| Side-mode suppression ratio    | SMSR              | -                   | 30   | -      | -    | dB     |
| Wavelength drift over TC Range | Δλ <sub>TOP</sub> | T = T <sub>OP</sub> | -    | -      | 50   | pm     |

## Power Supply (TC = 22±3°C)

| Parameter              | Min. | Typ. | Max. | Unit |
|------------------------|------|------|------|------|
| Voltage                | +7   | +12  | +36  | V    |
| Current <sup>(1)</sup> | 0.3  | 0.6  | 1    | A    |

(1) Test condition: V<sub>in</sub>=+12V.

## Typical Spectrogram

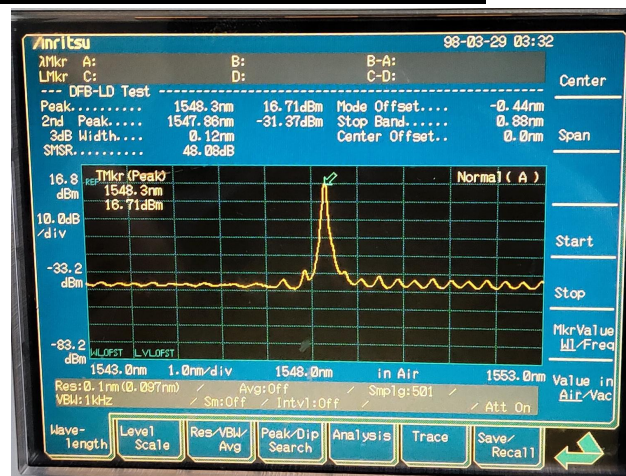
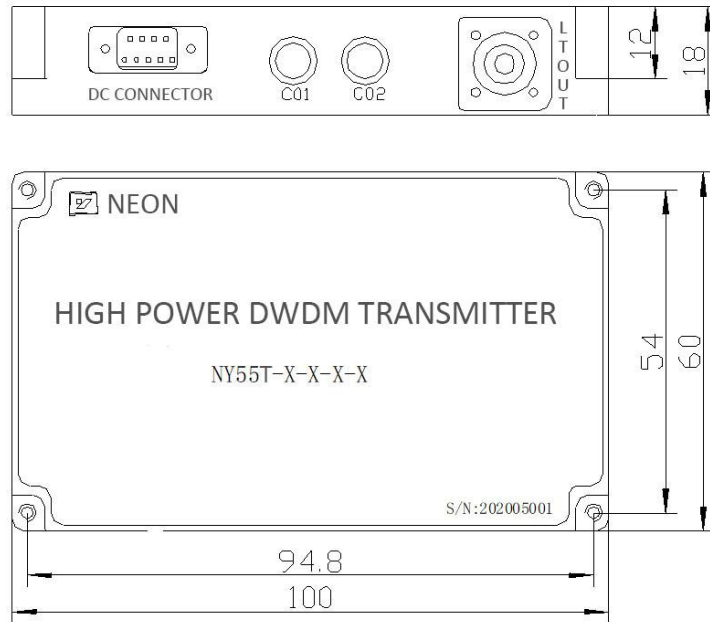


Figure 1 NY55T Transmitter Typical Spectrogram

NY55T Series High power DWDM Transmitter

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**Dimension** Unit: mm[inch]



**RF Connector: SMA**

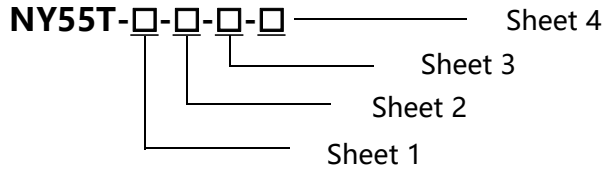
**Power Connector: J30J-9-ZKP**

Figure 2 NY55T Transmitter Dimension

**Pin Of Power Supply**

| Parameter | Description |   |   |    |   |     |   |   |    |
|-----------|-------------|---|---|----|---|-----|---|---|----|
| Pin       | 1           | 2 | 3 | 4  | 5 | 6   | 7 | 8 | 9  |
| Voltage   | Vin         |   |   | NC |   | GND |   |   | NC |

## Order Information



Sheet 1:

| Code | Optical power |
|------|---------------|
| 040  | 40mW          |
| 050  | 50mW          |
| 063  | 63mW          |
| 100  | 100mW         |

Sheet 2:

| Code | Wavelength       |
|------|------------------|
| 1    | 1550nm           |
| 2    | Customized (ITU) |

Sheet 3:

| Code | Fiber type       |
|------|------------------|
| PM1  | Panda fiber      |
| PM2  | Elliptical fiber |

Sheet 4:

| Code | Optical connector |
|------|-------------------|
| CM   | Customized        |
| A    | FC/APC            |