

ROF-PM-UV



www.rof-oc.com

Low-V_{pi} phase modulator

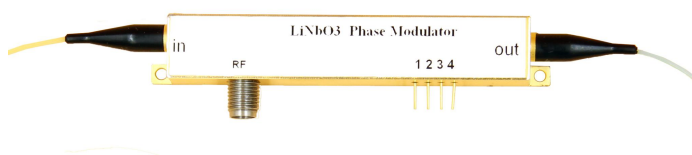
ROF-PM-UV series Low-V_{pi} phase modulator has low half-wave voltage (2.5V) , low insertion loss, high bandwidth, high damage characteristics of optical power, chirp in high-speed optical communication system is mainly used for light control, phase shift of coherent communication system, sideband ROF system and reduce the simulation of optical fiber communication system in Brisbane deep stimulated scattering (SBS), etc.

Features

- High endurance light power
- Low half-wave voltage~2.5V
- Low insertion loss
- High modulating bandwidth

Applications

- Optical fiber sensing
- Optical fiber communication, laser coherent synthesis
- Phase delay (shifter)
- Quantum communication
- ROF system



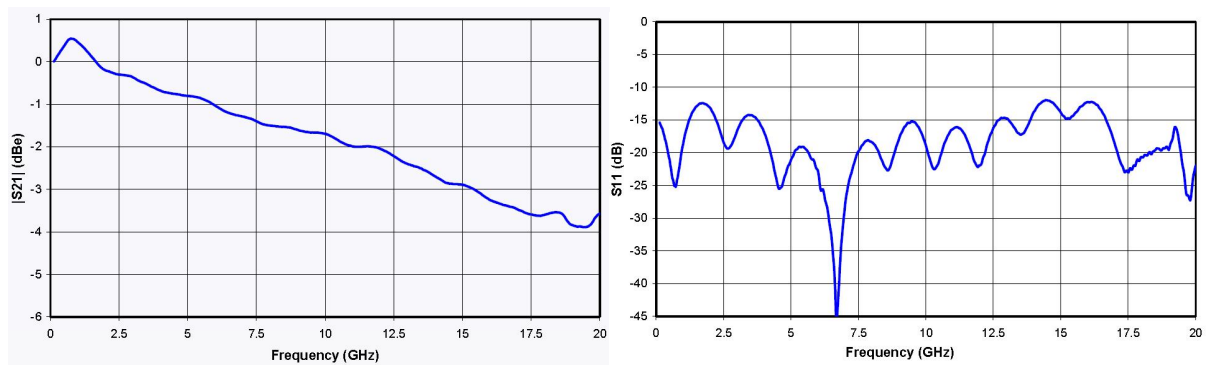
Performance parameter

| Parameter | | Symbol | Min | Typ | Max | Unit |
|--------------------------------------|-------------|-----------------|---------------------------------|-----|------|----------|
| Optical parameters | | | | | | |
| Operating wavelength | | λ | 1525 | | 1565 | nm |
| Insertion loss | | IL | | 3 | 3.5 | dB |
| Optical return loss | | ORL | | | -45 | dB |
| Optical fiber | Input port | | Panda PM | | | |
| | output port | | Panda PM | | | |
| Optical fiber interface | | | FC/PC、FC/APC Or user to specify | | | |
| Electrical parameters | | | | | | |
| Operating bandwidth（-3dB） | | S ₂₁ | 10 | 12 | | GHz |
| RF Half-wave voltage（Each electrode） | @50KHz | V π | 2.4 | 2.5 | 2.6 | V |
| | @10GHz | V π | 3.4V | | 3.7 | V |
| Electrical return loss | | S ₁₁ | | -12 | -10 | dB |
| RF Input impedance | | Z _{RF} | 50 | | | Ω |
| Electrical interface | | | SMA(f) | | | |

Limit Conditions

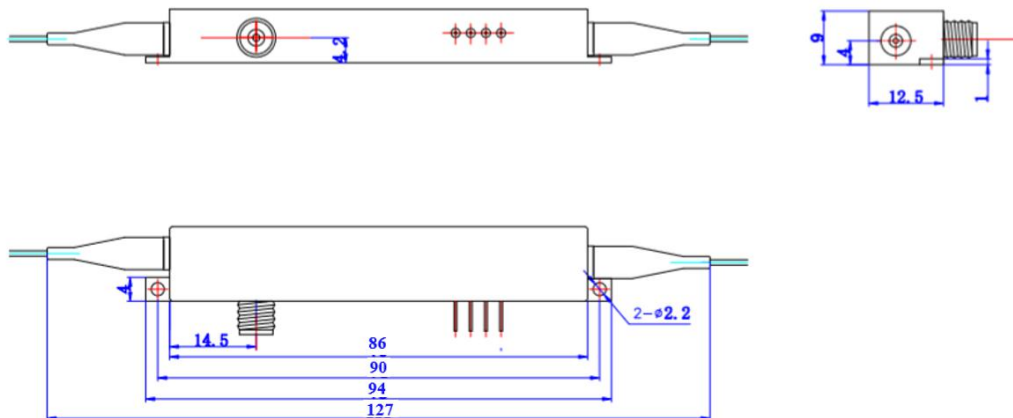
| Parameter | Symbol | Min | Typ | Max | Unit |
|-----------------------|--------------|-----|-----|-----|------|
| Input optical power | $P_{in,Max}$ | dBm | | | 20 |
| Input RF power | | dBm | | | 28 |
| Operating temperature | Top | °C | -10 | | 60 |
| Storage temperature | Tst | °C | -40 | | 85 |
| Humidity | RH | % | 5 | | 90 |

Characteristic curve



S_{11} & S_{21} Curve

Mechanical Diagram(mm)



Order information

| | | | | | |
|-----|---|---------------------------------------|--|--|--|
| ROF | PM-UV | 15 | 10G | XX | XX |
| | Modulator type: PM---Phase modulator UV---Low-Vpi | Working wavelength: 15---1550nm | Operating bandwidth: 10G---10GHz | Optical fiber: PS---PM/SMF PP---PM/PMF | Facet: FA---FC/APC FP---FC/PC SP---用户指定 |

*please contact our sales if you have special requirements.