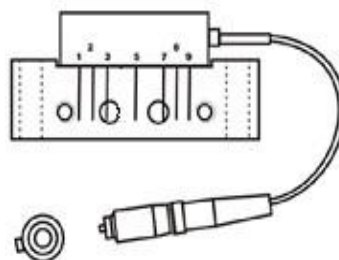


FEATURES

- Excellent Linearity
- High Optical Input Power Range
- Excellent Flatness
- Optimal Reliability
- Low Noise
- Outline Standarding
- High reliability
- FC/APC SC/APC



DESCRIPTION

The SMO815M1 has an FC/APC or SC/APC connector. The amplifier supply voltage pin is connected to 24V(DC) . The modules have a mono mode optical input suitable for 1290 to 1600nm wavelengths a terminal to monitor the photo diode current and an electrical output having a characteristic impedance of 75 Ω .

| Pin | Description |
|---------|-----------------|
| 1 | Monitor current |
| 5 | +V _B |
| 9 | Output |
| 2、3、7、8 | GND |

QUICK REFERENCE DATA

| SYMBOL | PARAMETER | CONDITIONS | MIN | MAX | UNITS |
|------------------|-------------------------------|---------------------|-----|-----|-------|
| f | Frequency range | | 40 | 870 | MHz |
| S ₂₂ | Output return losses | f=40 to 870 MHz | -10 | - | dB |
| | Optical input return losses | | 45 | - | dB |
| I _{tot} | Total current consumption(DC) | V _B =24V | 100 | 130 | mA |

HANDLING

Fiberglass optical coupling: maximum tensile strength=5N;minimum bending radius=35mm

LIMITING VALUES

SANLAND ELECTRONIC

- Tel: 86-0755-28968333
 - Fax:86-0755-89724455
- Aug A 01/2022

- Http: www.sanlandtech.com
- E-mail: info@sanlandtech.com

In accordance with the Absolute Maximum Rating System

| SYMBOL | PARAMETER | CONDITION | MIN. | MAX. | UNITS |
|-----------|-------------------------------------|---|------|------|-------|
| P_{in} | Optical input power | continuous | - | 3 | mW |
| T_{stg} | Storage temperature | | -40 | +85 | °C |
| T_{mb} | Operating mounting base temperature | | -20 | +85 | °C |
| ESD | ESD sensitivity | Human body model; R=1.5K Ω ;C=100pF | 500 | - | V |

CHARACTERISTICS

(Bandwidth 40 to 870MHz; $T_{mb}=25^{\circ}C$, $V_B=24V$, $Z_S=Z_L=75\Omega$)

| SYMBOL | PARAMETER | UNIT | MIN. | TYP. | MAX. | CONDITIONS |
|-----------|-----------------------------------|------------|------|------|------------|----------------------------------|
| S | Responsivity | V/W | 850 | - | - | $\lambda = 1300nm$ |
| FL | Flatness straight line | dB | - | - | ± 0.75 | f=40 to 870 MHz |
| V_o | Output voltage | dB μ V | - | 88 | - | 60 channels flat; |
| CTB | Composite triple beat | dB | -63 | - | - | Measured at 543.25MHz; |
| CSO | Composite second order distortion | dB | -60 | - | - | Optical power receiving at -1dbm |
| CNR | Carrier to noise ratio | dB | -50 | - | - | |
| S_{22} | Output return loss | dB | -10 | - | - | f=40 to 870 MHz |
| I_{tot} | Total current consumption | mA | 100 | - | 130 | $V_B=24V$ |

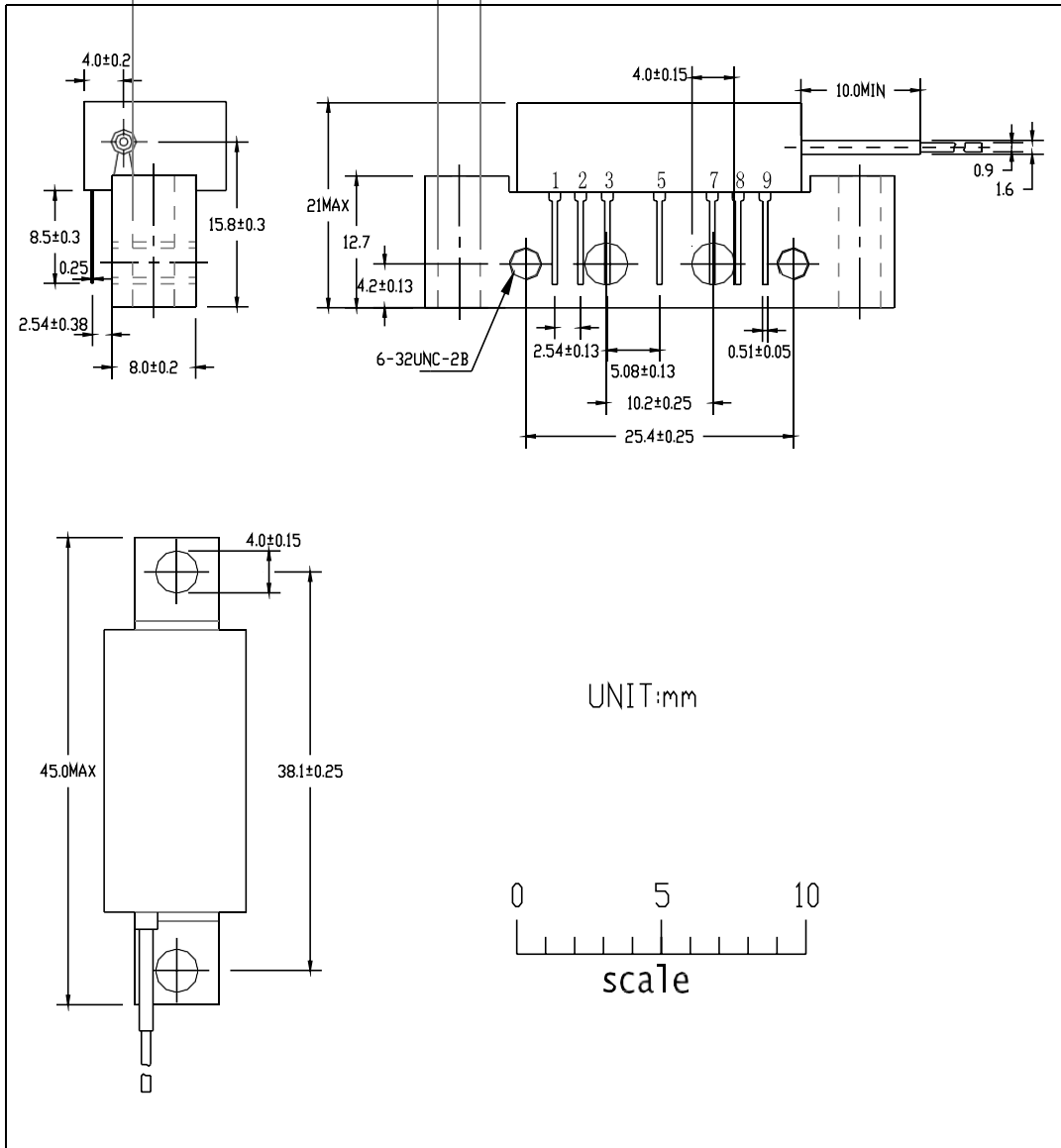
The module normally operates at $V_B=24V(\pm 0.5)$

MODULE OUTLINE

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