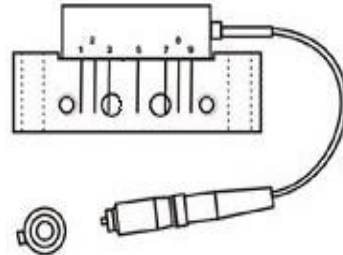


FEATURES

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



DESCRIPTION

The SMO1025 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 75Ω.

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	1005	MHz
S ₂₂	Output return losses	f=40 to 1005 MHz	-11	-	dB
	Optical input return losses		45	-	dB
I _{tot}	Total current consumption(DC)	V _B =24V	240	290	mA

HANDLING

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

LIMITING VALUES

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=1.5KΩ;C=100pF	500	-	V

CHARACTERISTICS

(Bandwidth 40 to 1005MHz; $T_{mb}=25^{\circ}\text{C}$, $V_B=24\text{V}$, $Z_S=Z_L=75\Omega$)

SYMBOL	PARAMETER	UNIT	MIN.	TYP.	MAX.	CONDITIONS
S	Responsivity	V/W	850	-	-	$\lambda=1300\text{nm}$
FL	Flatness straight line	dB	-	-	± 0.75	$f=40$ to 1005 MHz
V_o	Output voltage	dB μ V	-	88	-	110 channels flat; $P_{opt} = -1\text{dBm}$; CTB measured at 745.25 MHz; CSO measured at 746.5 MHz;
CTB	Composite triple beat	dB	-	-65	-	
CSO	Composite second order distortion	dB	-	-63	-	
CNR	Carrier to noise ratio	dB	-	-51	-	
S_{22}	Output return loss	dB	-	-11	-	$f=40$ to 1005 MHz
I_{tot}	Total current consumption	mA	240	-	290	$V_B=24\text{V}$

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

MODULE OUTLINE

