

SANLAND

Optical Receivers

SMO28H/CATV

FEATURES

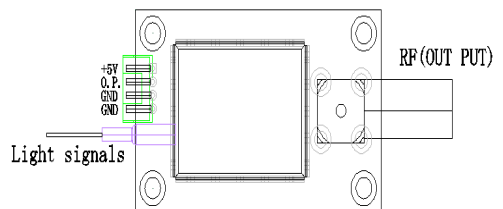
- Excellent Linearity
- High Optical Input Power Range
- Excellent Flatness
- Optimal Reliability
- Low Noise
- FC/APC SC/APC



DESCRIPTION

The SMO28H has an FC/APC or SC/APC connector. The amplifier supply voltage pin is connected to 5V (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



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	12	-	dB
	Optical input return losses		45	-	dB
I _{tot}	Total current consumption(DC)	V _B =5V	200	235	mA

HANDLING

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

SANLAND ELECTRONIC

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- Rev B 01/2013

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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; $R=1.5K\ \Omega$; $C=100pF$	500	-	V

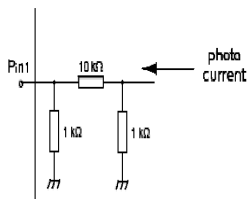
CHARACTERISTICS

(Bandwidth 40 to 870MHz; $T_{mb}=25^{\circ}C$, $V_B=5V$, $Z_S=Z_L=75\ \Omega$)

SYMBOL	PARAMETER	UNIT	MIN.	TYP.	MAX.	CONDITIONS
S	Responsivity	V/W	850	-	-	$\lambda =1310$
FL	Flatness straight line	dB	-	-	± 0.75	f=40 to 870 MHz
V_o	Output voltage	dBuV	-	84 ± 1	-	60 channels flat; measured at 543.25 MHz; Optical power receiving at $-5dBm$
CTB	Composite triple beat	dB	-	-	-65	
CSO	Composite second order distortion	dB	-	-	-60	
CNR	Carrier to noise ratio	dB	-	49	-	
S_{22}	Output return loss	dB	12	-	-	f=40 to 870 MHz
I_{tot}	Total current consumption	mA	200	-	235	$V_B=5V$

The module normally operates at $V_B=5V(\pm 0.1)$

PHOTODIODE CURRENT MONITOR PIN

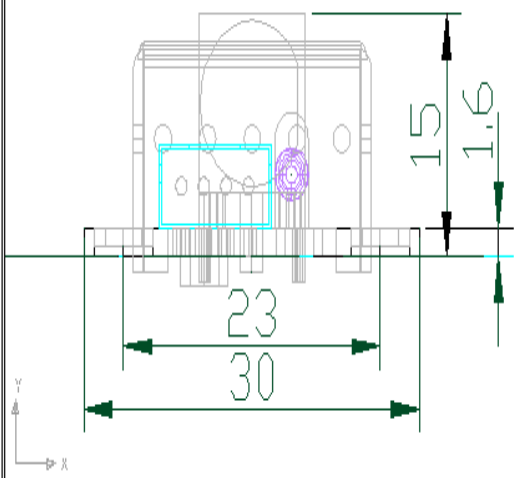
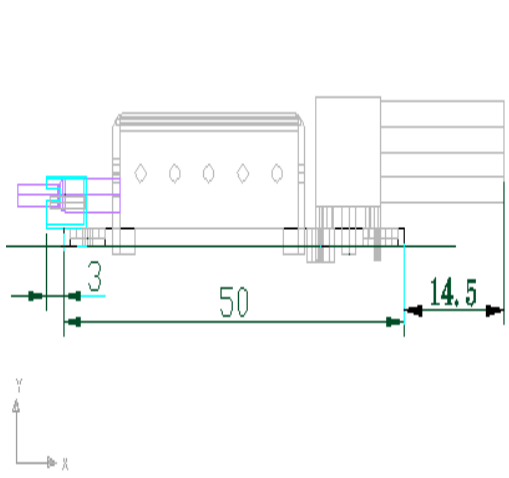
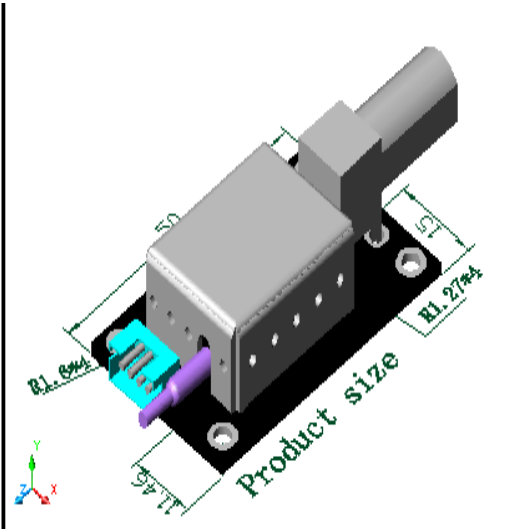
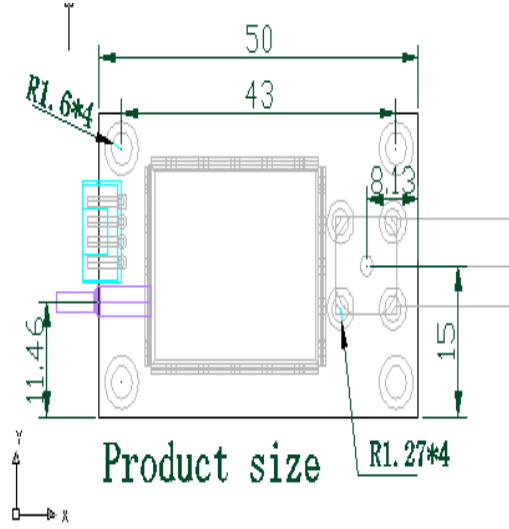


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MODULE OUTLINE



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