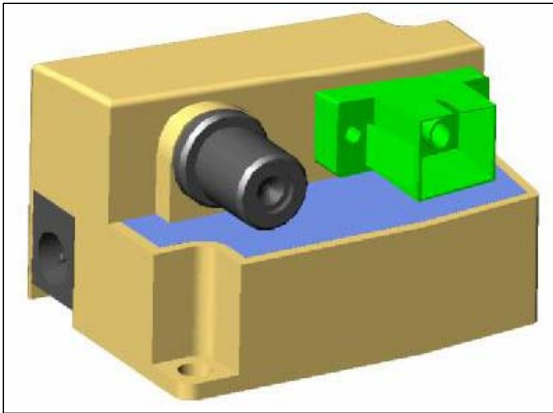


RV-ONU-870-N



Description

The RV-ONU-870-N is designed with SC receptacle for CATV system applications. The RV-ONU-870-N combines RF amplification with high dynamic range SC receptacle optical receiver in a compact size package.

The module features high input power range, low distortion characteristics, wide operating temperature range, low noise and high linearity up to 870MHz bandwidth. RV-ONU-870-N is suitable for all standard used TV frequencies around the world.

Features

- ▲ Excellent Frequency Response
- ▲ Compact Size
- ▲ SC Receptacle Design
- ▲ Operating Temperature from -5 to +60 Degree C
- ▲ Low Noise InGaAs PIN Diode as Receiver
- ▲ Excellent Linearity
- ▲ Up to 870MHz Bandwidth Design

Applications

- ▲ FTTX Optical Receiver Applications
- ▲ Cable TV Systems



RV-ONU-870-N

Absolute Maximum Ratings

Exceeding the conditions specified below may result in permanent damage to the module.

Parameter	Symbol	Condition	Min	Max	Unit
Operating Case Temperature	T _c	--	-5	+60	°C
Storage Temperature	T _{stg}	--	-40	+85	°C
Bandwidth	BW	--	40	870	MHz
Photodiode Reverse Bias	V _{rpd}	--	--	25	V

Electrical and Optical Characteristics

All data are tested at 25 °C, unless otherwise noted.

Parameter	Symbol	Min	Typ	Max	Unit	Test Conditions
Optical Power Input	P _{in}	-10	--	0	dBm	
Optical Wavelength	λ	1100	--	1610	nm	
Optical Return Loss	ORL	--	--	-40	dB	1100nm < λ < 1610nm
RF Connector Type						F-Type female
Optical Connector Type						SC/APC, 8° Angle
Input Voltage	V _{in}	13	--	15	V	DC
Current Draw	I	--	--	120	mA	DC
Power Consumption	P	--	--	1.8	W	DC
Optical Power Indication						<-10 dBm: Red LED >-10 dBm: Green LED

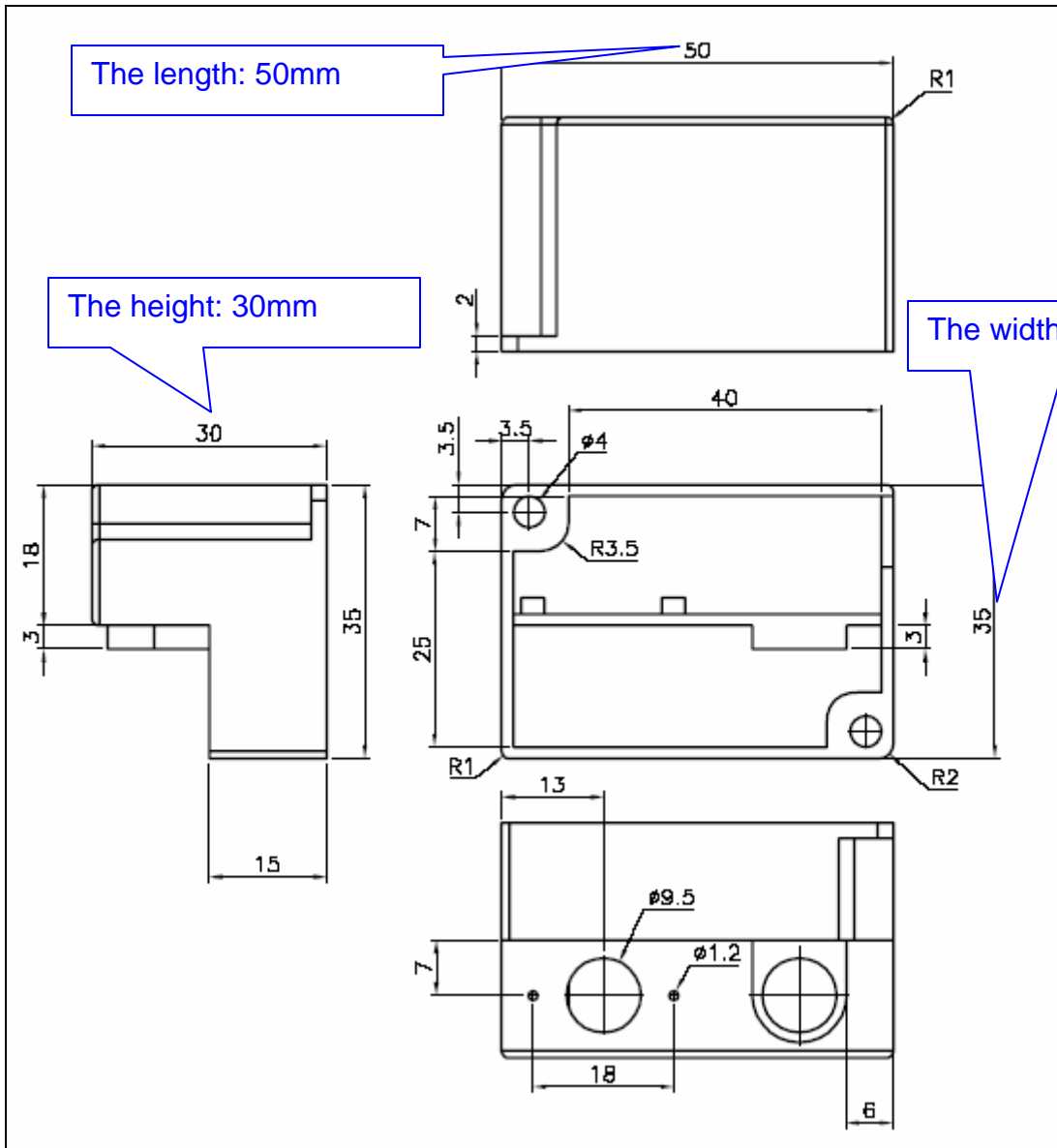
RF Characteristics

Parameter	Symbol	Min	Typ	Max	Unit	Test Conditions
Operating Frequency Range	F	40	--	870	MHz	
RF Output Impedance	Z _{out}	--	75	--	Ω	Unbalanced
Output Return Loss	RL	14	--	--	dB	F=862 MHz
RF Output Level	R _{out}	10	--	--	dBmV	-6 dBm optical input, 4.0% OMI
RF Flatness	S ₂₁	-1.5	--	+1.5	dB	40 MHz < F < 870 MHz
Carrier to Noise	CNR	46	--	--	dB	Note 1
Composite Triple Beat	CTB	--	--	-60	dBc	Note 1, NTSC-77
		--	--	-56	dBc	Note 1, CENELEC-42
Composite Second Order	CSO	--	--	-60	dBc	Note 1, NTSC-77
		--	--	-56	dBc	Note 1, CENELEC-42

Note 1: Measured at optical input -6dBm, OMI=4%

RV-ONU-870-N

Mechanical Dimensions (Unit: mm)



Ordering Options

RV-ONU-870-N

