

### Description

4-way output CATV optical receiver.

### Feature

- Forward optical receive part adopts E-O PIN or WTD (Option) receiving IC. Import PHILIPS (BGY887) amplifier module in pre-RF amplify circuit, import PHILIPS (BGD814) power double amplify module(also adopt GaAs )
- Return optical receive part adopts FP or DFB, adopts PHILIPS amplify module (BGY67A) ensure NPR.
- Insert dual-filter, insert fix-Equalizer and fix-attenuator or (VAR)
- Eight-order optical power indication.
- Aluminum waterproof housing, high-capability power switch, anti-thunder system



### Performance Parameter

Item	Unit	Parameter
		SA814/SA814R
<b>Forward Performance Parameter</b>		
<b>Optical Parameter</b>		
Receive Optical Power	dBm	-5 ~ +2
Propose Use Range	dBm	-3 ~ +1
Return Loss	dB	> 45
Optical Wavelength	nm	1100 ~ 1600
Connector Type		FC/APC、SC/APC
Fiber Type		Single Mode
<b>Circuit Performance</b>		
C/N	dB	≥ 51
C/CTB	dB	≥ 69
C/CSO	dB	≥ 62
<b>RF Parameter</b>		
Frequency Range	MHz	45/87 ~ 750/862
Flatness in Band	dB	±0.75
Rated Output Level	dBμV	≥ 94
Max Output Level	dBμV	≥ 104
Output Return Loss	dB	≥ 15
Output Impedence	Ω	75

Item	Unit	Parameter
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SR814

Optical Node

SA814/SA814R

Return Transmit Performance Parameter

Optical Parameter

Optical Transmit Wavelength	nm	1310±10
Laser Type		FP or DFB Laser
Output Optical Power	mW	1 ~ 3
Connector Type		FC/APC、SC/APC

RF Parameter

Frequency Range	MHz	5 ~ 30/65
Flatness In Band	dB	±1.5
Input Level	dBμV	90 ~ 98
Input Return Loss	dB	≥ 16
Output Impedence	Ω	75
NPR	dB	≥10 (NPR≥30 dB)

General Performance

Supply Voltage	V	A: AC 135~250; B: AC 35~90 (50Hz)
Operating Temperature	°C	-40 ~ +60
Storage Temperature	°C	-50 ~ +70
Relative Humidity	%	Max 95% No Condensation
Consumption	W	≤ 40
Dimension	mm	340(L)×220(W)×140(H)

Test Condition

Below part of optical receiver: Standard optical fiber together with transmitter makes the testing circuit. Set with 59 PAL-D analog TV channel signal at range of 45 MHz ~ 550MHz in the fix index loss of circuit. Transmit digital modulation signal at rang of 550MHz~862MHz, the electricity level (8 MHz bandwidth) digital signal is lower 10dB than analog signal of carrier electricity level; the input of optical receiver is -2dBm, output level of RF is 90dBuV with lean beam of 9dB output, measure C/CTB, C/CSO, C/N.

