7.0 SR100 Series Model And Shape

SR100

SR100-WF

SR100F

SR100F-WF

8.0 NOTE

1. SR100, SR100-WF, SR100F, SR100F-WF and set top box (STB) of the RF input port directly connected. SR100-WD for user wiring box.
2. When using the RF connector, and the RF input interface must be tightened to STB. Otherwise the ground is bad and will cause high frequency segments Digital TV signals MER degradation.
3. Keep the optical connector clean, the bad link will cause too low RF output level.

SR100-WD

FTTH CATV Passive Node

(45~1050MHz)

1.0 PRODUCT DESCRIPTION

SR100 series CATV converter for digital television, fiber to the home. This machine adopts the high sensitivity optical receiving tube, without power supply, no power consumption. When the input optical power output level Pin=-1dBm, Vo=68dBuV, economic, flexible application integration, application of fiber to the home network. There are five kinds of model selection:

SR100, SR100F: CATV operating wavelength 1260~1620nm.

SR100-WD: Built-in CWDM, suitable for single-fiber triple wavelength system, CATV operating Wavelength 1550nm, pass wavelength 1310/1490nm, can conveniently connect the ONU of EPON, GPON.

SR100-WF, SR100F-WF: built-in 1310/1490nm filter, suitable for single-fiber triple wavelength system, CATV operating wavelength 1550nm.

2.0 PRODUCT FEATURE

1.No Power required

2.Work bandwidth 45~1050MHz

3.Output Level=68dBμV (Pin=-1dBm)

3.0 MAIN APPLICATION

1. CATV FTTH

2. Integration of three networks

3. FTTH PON

4.0 TEST DATA

The Test Frequency: 155MHz

Pin (dBm)	Vo (dBμV)	MER	BER	
			POST	PER
+2.0	77.2	39.0	<1.0E-9	<1.0E-9
+1.0	75.5	38.9	<1.0E-9	<1.0E-9
+0.0	73.7	38.8	<1.0E-9	<1.0E-9
-1.0	71.8	38.9	<1.0E-9	<1.0E-9
-2.0	69.7	38.9	<1.0E-9	<1.0E-9
-3.0	67.7	38.9	<1.0E-9	<1.0E-9
-4.0	65.8	38.9	<1.0E-9	<1.0E-9
-5.0	63.4	38.9	<1.0E-9	<1.0E-9
-6.0	61.3	38.3	<1.0E-9	<1.0E-9
-7.0	59.0	38.1	<1.0E-9	<1.0E-9
-8.0	57.8	37.8	<1.0E-9	<1.0E-9
-9.0	55.6	37.3	<1.0E-9	<1.0E-9
-10.0	53.5	36.1	<1.0E-9	<1.0E-9
-11.0	51.3	35.2	<1.0E-9	<1.0E-9
-12.0	49.3	35.4	<1.0E-9	<1.0E-9
-13.0	47.2	33.8	<1.0E-9	<1.0E-9
-14.0	45.6	32.0	<1.0E-9	<1.0E-9
-15.0	43.9	30.0	<1.0E-9	<1.0E-9
-16.0	41.9	28.0	<1.0E-9	<1.0E-9

The Test Frequency: 858MHz

Pin (dBm)	Vo (dBμV)	MER	BER	
			POST	PER
+2.0	71.2	38.5	<1.0E-9	<1.0E-9
+1.0	69.7	39.0	<1.0E-9	<1.0E-9
+0.0	68.5	39.0	<1.0E-9	<1.0E-9
-1.0	67.7	38.7	<1.0E-9	<1.0E-9
-2.0	66.2	38.8	<1.0E-9	<1.0E-9
-3.0	64.3	38.9	<1.0E-9	<1.0E-9
-4.0	62.2	38.7	<1.0E-9	<1.0E-9
-5.0	60.5	38.3	<1.0E-9	<1.0E-9
-6.0	58.6	38.2	<1.0E-9	<1.0E-9
-7.0	57.5	37.5	<1.0E-9	<1.0E-9
-8.0	55.5	37.2	<1.0E-9	<1.0E-9
-9.0	53.2	36.0	<1.0E-9	<1.0E-9
-10.0	51.2	35.0	<1.0E-9	<1.0E-9
-11.0	49.2	34.9	<1.0E-9	<1.0E-9
-12.0	47.4	33.1	<1.0E-9	<1.0E-9
-13.0	45.4	31.1	<1.0E-9	<1.0E-9
-14.0	43.5	29.0	<1.0E-9	<1.0E-9

Remark: 1. Teat Signal：MER：39.0 (dB)、BER : <1.0E-9. 2. Tx input level: 87dBμV.(OMI=4.3%)

5.0 TECHNICAL INDEX

	Optic feature	Unit	Index	Supplement
Optic feature	CATV Work wavelength	(nm)	1260~1620	SR100, SR100F
			1540~1563	SR100-WF, SR100F-WF, SR100-WD
	Pass wavelength	(nm)	1310~1490	SR100-WD
	Channel Isolation	(dB)	≥40	1550nm&1490nm
	Response	(A/W)	≥0.85	1310nm
			≥0.9	1550nm
	Receiving power	(dBm)	+2~-14	
	Optical return loss	(dB)	≥55	
	Optical fiber connector		SC/APC	
RF Feature	Work bandwidth	(MHz)	45~1050MHz	
	Output level	(dBμV)	>68	Digital TV (Pin=-1dBm)
	Return loss	(dB)	≥14	47~862MHz
	Output impedance	(Ω)	75	
	Output port number		1	
	RF tie-in		F-Female	
TV Digital Feature	OMI	(%)	4.3	
	MER	(dB)	≥38	Pin=-1dBM
			≥30	Pin=-13dBm
	BER		<1.0E-9	Pin:+2~-14dBm
General feature	Work temp	(℃)	-20~+55	
	Storage temp	(℃)	-40~85	
	Work relative temp	(%)	5~95	

6.0 PRODUCT SERIES

Model	Input wavelength	CATV Operating	Data pass	Output Fiber	Input Fiber
SR100, SR100F	1310 or 1550nm	1260~1620nm	-	SC/APC	-
SR100-WF, SR100F-WF	1310,1490/1550nm	1540~1563nm	-	SC/APC	-
SR100-WD			1310/1490nm	SC/APC	SC/UPC