SOFTEL®

SR100SC3

FTTH Passive Optical Node

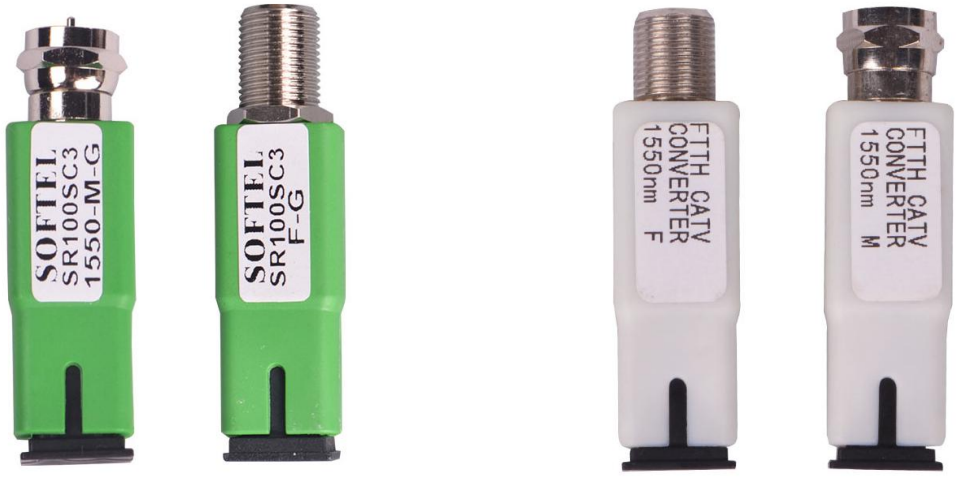
(45~1050MHz)

1.0 BRIEF INTRODUCTION

SR100SC3 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=6 8dB V, can be economically and flexibly apply the integration of three networks, fiber to the home network application. SR100 appearance of enamel, there are two kinds of optical mode selection:

1. SR100SC3: CATV operating wavelength 1260~1620nm.
2. SR100SC3-1550: Built-in 1310/1490nm filter, suitable for single-fiber triple wavelength system, CATV Operating wavelength 1550nm.

2.0 PRODUCT DISPLAY



3.0 PRODUCT FEATURE

1. No Power required
2. Work bandwidth 45~1050MHz
3. Output Level=68dBμV (Pin=-1dBm)

4.0 MAIN APPLICATION

1. CATV FTTH

2. Integration of three networks

3. FTTH PON

5.0 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%)

6.0 TECHNICAL INDEX

	Optic feature	Unit	Index	Supplement
Optic feature	CATV Work wavelength	(nm)	1260~1620	SR100SC3
			1540~1563	SR100SC3-1550
	Channel Isolation	(dB)	≥40	1550nm&1490nm
	Resposibitity	(A/W)	≥0.85	1310nm
			≥0.9	1550nm
	Receiving power	(dBm)	+2~-14	
	Optical return loss	(dB)	≥55	
	Optical fiber connector		SC/APC	SR100-SC
			FC/APC	SR100-FC
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	
DigitalTV eature	OMI	(%)	4.3	
	MER	(dB)	≥38	Pin=-1dBM
			≥30	Pin=-13dBm
	BER		<1.0E-9	Pin:+2~-14dBm

General feature	Work temp	(°C)	-20~+55	
	Storage temp	(°C)	-40~85	
	Work relative temp	(%)	5~95	
	Size (W)×(D)×(H)	(mm)	23×53×12	A Type (Enamel Type)
			Φ13×28	B Type (Fiber Type)
			50×88×22	C Type (Box Type)

7.0 ORDRE INFORMATION

Model	Input Wavelength	CATV Operating Wavelength	RF Output Type	Casing Color
SR100SC3-F-W	1310 or 1550nm	1260~1620nm	F-female	White
SR100SC3-M-W	1310 or 1550nm	1260~1620nm	F-male	White
SR100SC3-F-G	1310 or 1550nm	1260~1620nm	F-female	Green
SR100SC3-M-G	1310 or 1550nm	1260~1620nm	F-male	Green
SR100SC3-1550-F-W	1310,1490/1550nm	1540~1563nm	F-female	White
SR100SC3-1550-M-W	1310,1490/1550nm	1540~1563nm	F-male	White
SR100SC3-1550-F-G	1310,1490/1550nm	1540~1563nm	F-female	Green
SR100SC3-1550-M-G	1310,1490/1550nm	1540~1563nm	F-male	Green

8.0 NOTE

1. SR100SC3 and set top box (STB) of the RF input port are directly connected.
2. When using the RF connector, and the RF input interface must be tightened to STB. Otherwise, the ground is bad, can 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

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