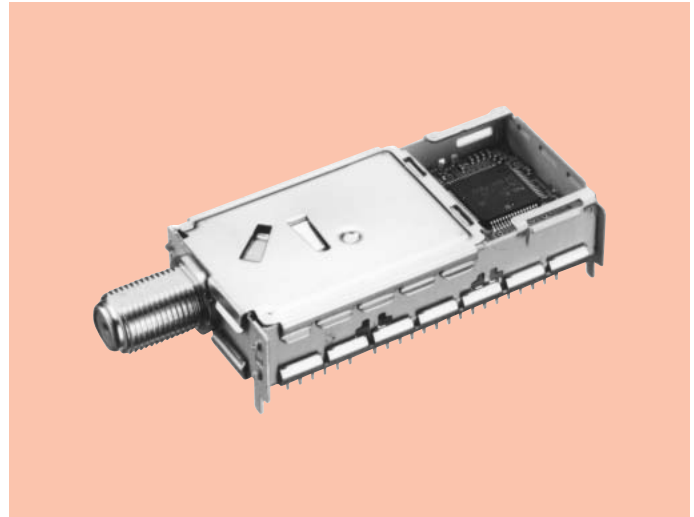


2nd RF Units for BS Digital Broadcasting Receiver TSU37 Series

DBS 2nd RF Units, CATV Converters

OUTLINE

This is an ultra-small second RF unit for BS digital broadcast/reception, incorporating a demodulation IC and capable of receiving BS digital, 110 degree CS and conventional CS. Because it is ultra-small with a single power supply, it can be used for a variety of purposes, such as thin receivers.



FEATURES

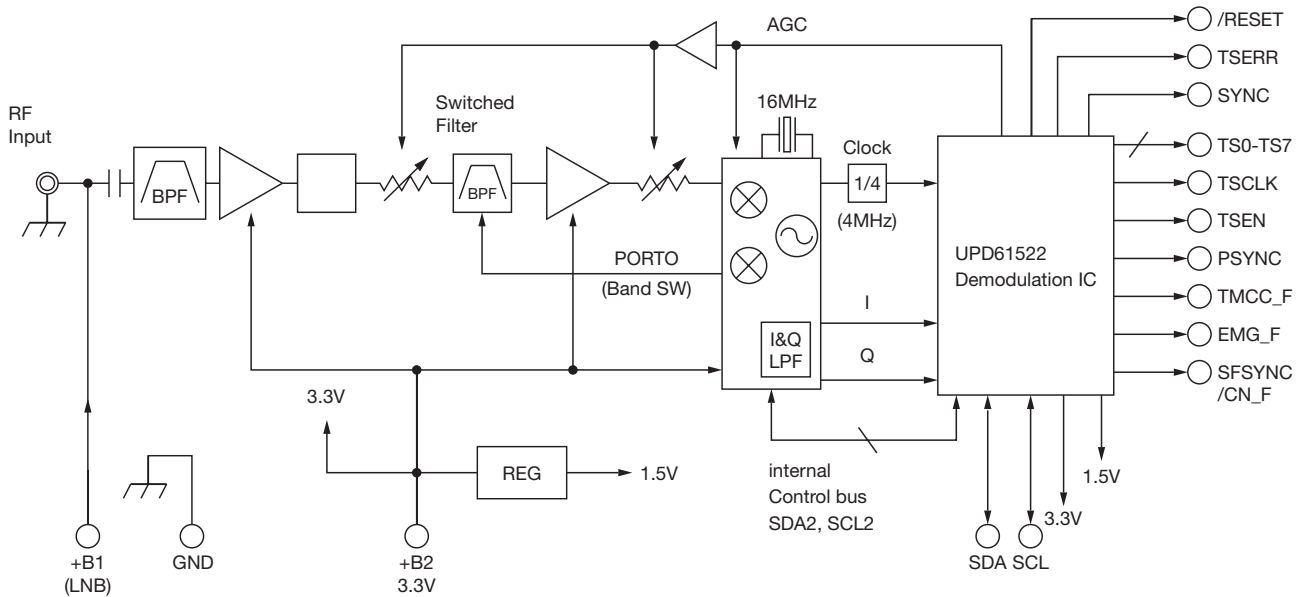
1. Excellent BER characteristics even for 110 degree CS reception. (8PSK, 950 - 2150MHz)
2. Ultra-small size achieved through adoption of direct conversion IC in the RF section. (20cc)
3. Contains ISDB high-function and high-performance demodulation IC that supports ISDB-S.
4. High sensitivity (-80dBm, typ.) with good interference characteristics.
5. Excellent phase noise characteristics and high C/N margin.
6. Supports vertical/horizontal configuration. (Ideal for slim TVs, PC expansion slots, etc.)
7. Supply voltage driven by 3.3V single power supply.

SPECIFICATIONS

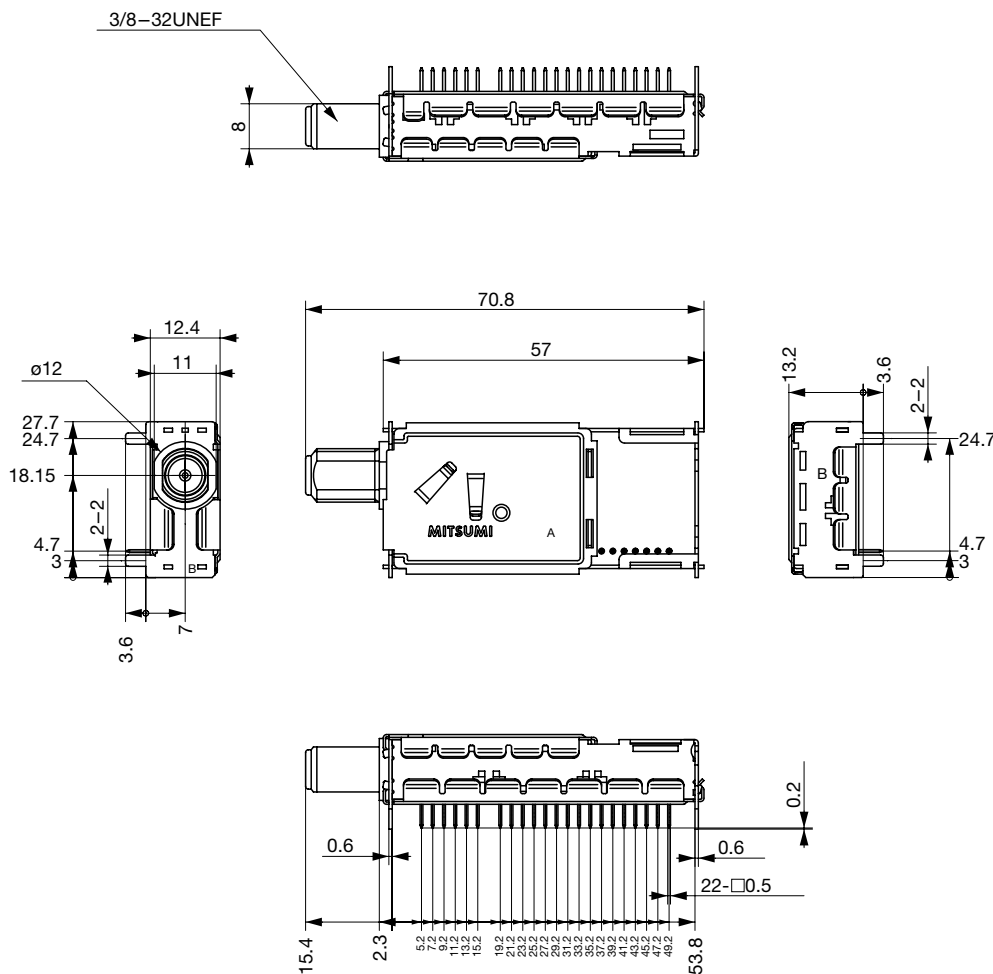
Item	Specifications
Input Frequency Range	950~2150MHz
Input Level Range	-65~-25dBm
Input Impedance	75Ω
Return Loss	-7dB max.
Symbol Rate Range	28.86Mbaud
Modulation Type	TC8PSK, QPSK, BPSK
Demodulator Standard	Based on ISDB-S
FEC Rates	BPSK, QPSK (1/2, 2/3, 3/4, 5/6, 7/8), TC8PSK (2/3)
Output Data	8bit parallel TS/serial TS
Controller Bus Interface	I ² C bus controll
Power Supply Voltage	3.3V
Dimension (Mounting area)	56.7 (W)×28.1 (D)×12.4 (H)mm

*Note Specifications subject to change without notice.

BLOCK DIAGRAM



DIMENSIONS



Terminals	
1.	RF IN
2.	+B1 (LNBIN)
3.	GND
4.	+B2 (3.3V)
5.	SFSYNC/CN_F
6.	TMCC_F
7.	EMG-F
8.	TSERR
9.	TSEN
10.	SCL
11.	SDA
12.	SYNC
13.	TS0
14.	TS1
15.	TS2
16.	TS3
17.	TS4
18.	TS5
19.	TS6 (SDEN)
20.	TS7 (SDOA)
21.	TSCLK
22.	PSYNC
23.	/RESET

Unit : mm
General Tolerance : ±0.5mm