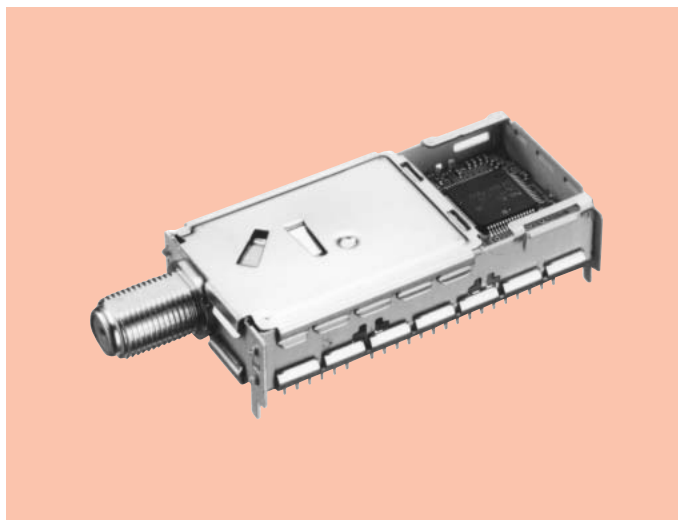


2nd RF Units for BS Digital Broadcasting Receiver TSU37 Series

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

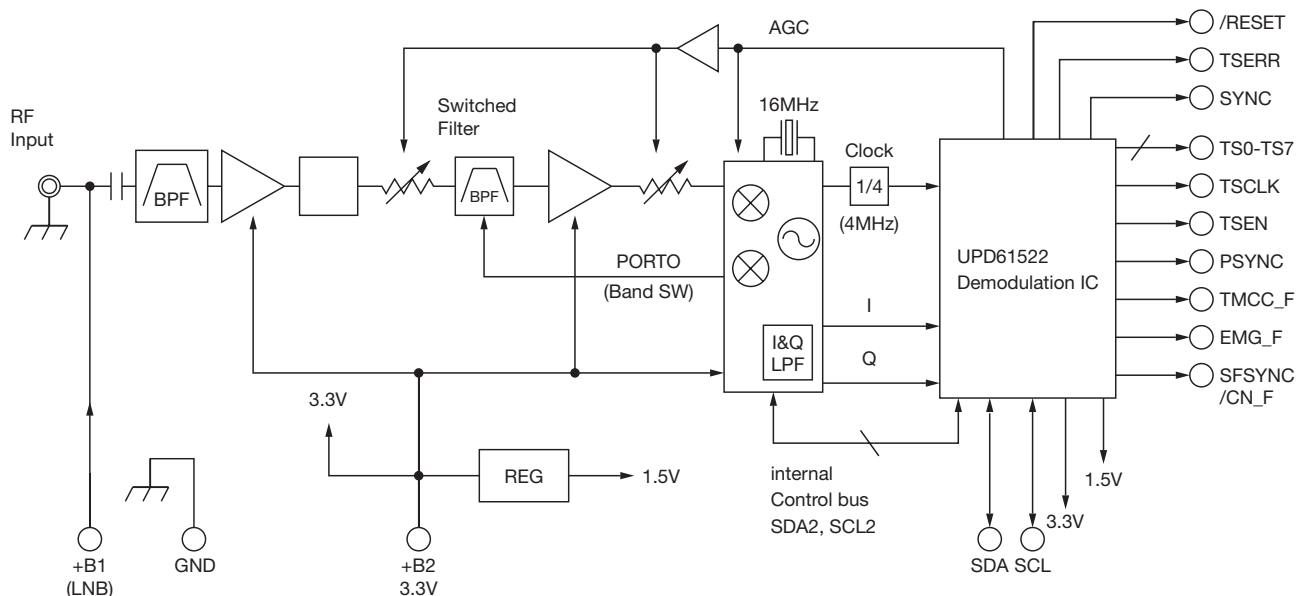
1. Excellent BER characteristics even for 110 degree CS reception. (8PSK, 950 - 2150MHz)
2. Ultra-small size achieved through adoption of direct conversion IC in the RF section. (20cc)
3. Contains ISDB high-function and high-performance demodulation IC that supports ISDB-S.
4. High sensitivity (-80dBm, 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

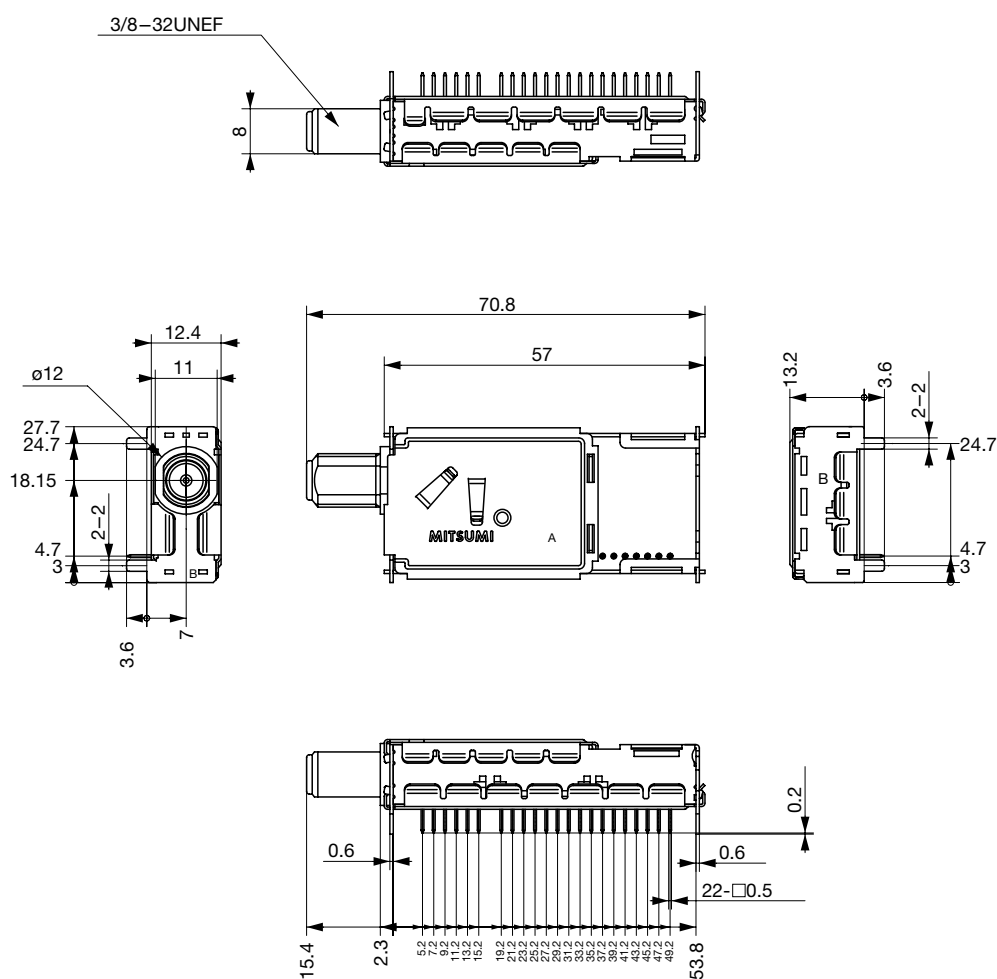
Item	Specifications
Input Frequency Range	950~2150MHz
Input Level Range	-65~-25dBm
Input Impedance	75Ω
Return Loss	-7dB max.
Symbol Rate Range	28.86Mbaud
Modulation Type	TC8PSK, QPSK, BPSK
Demodulator Standard	Based on ISDB-S
FEC Rates	BPSK, QPSK (1/2, 2/3, 3/4, 5/6, 7/8), TC8PSK (2/3)
Output Data	8bit 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 : $\pm 0.5\text{mm}$