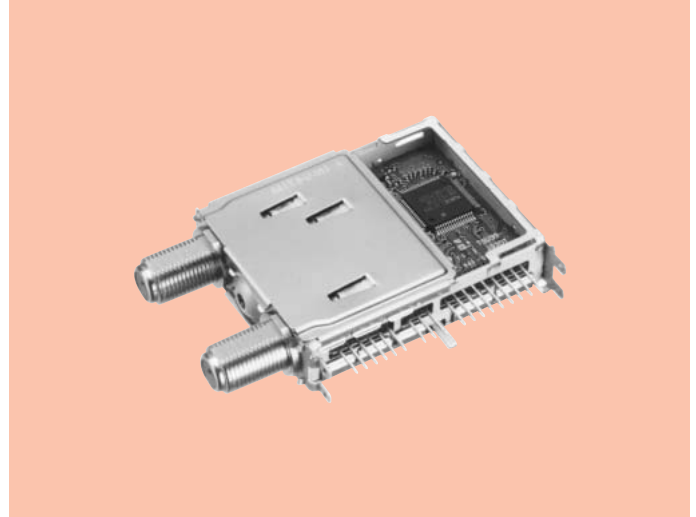


2nd RF Units for BS Digital Broadcasting Receiver TSU39 Series

Terrestrial Tuners, DBS 2nd RF Units

OUTLINE

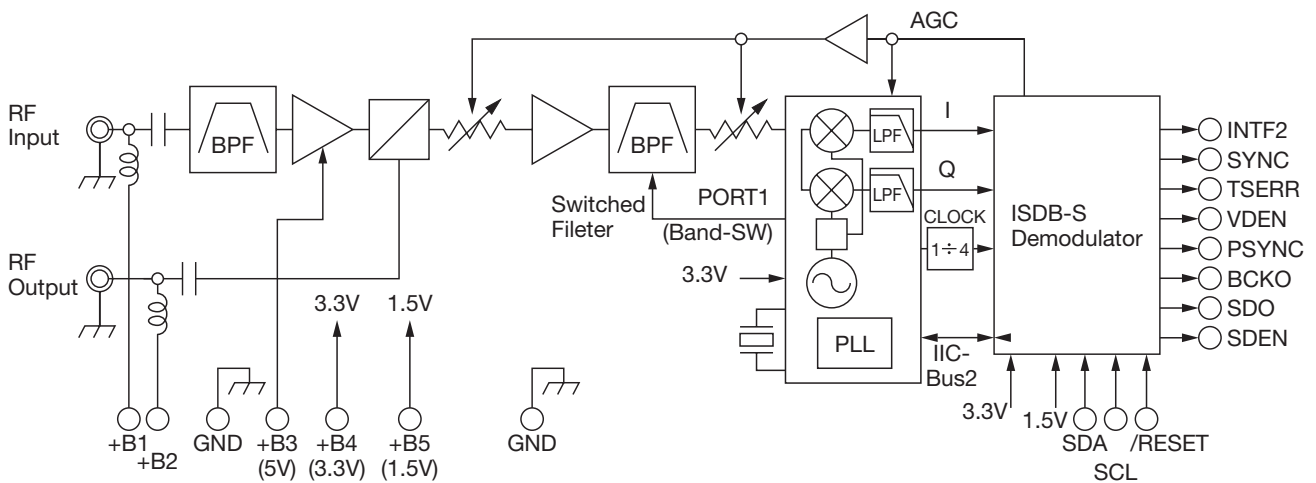
This is an ultra-small second RF unit for BS digital broadcast/reception, incorporating a demodulation IC and capable of receiving BS digital, 110 degree CS and conventional CS. Because it is ultra-small with loop thru, it can be used for a variety of purposes, such as thin receivers.



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.
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. RF loop thru. (Ideal for DVD recorder, STB, etc.)

BLOCK DIAGRAM

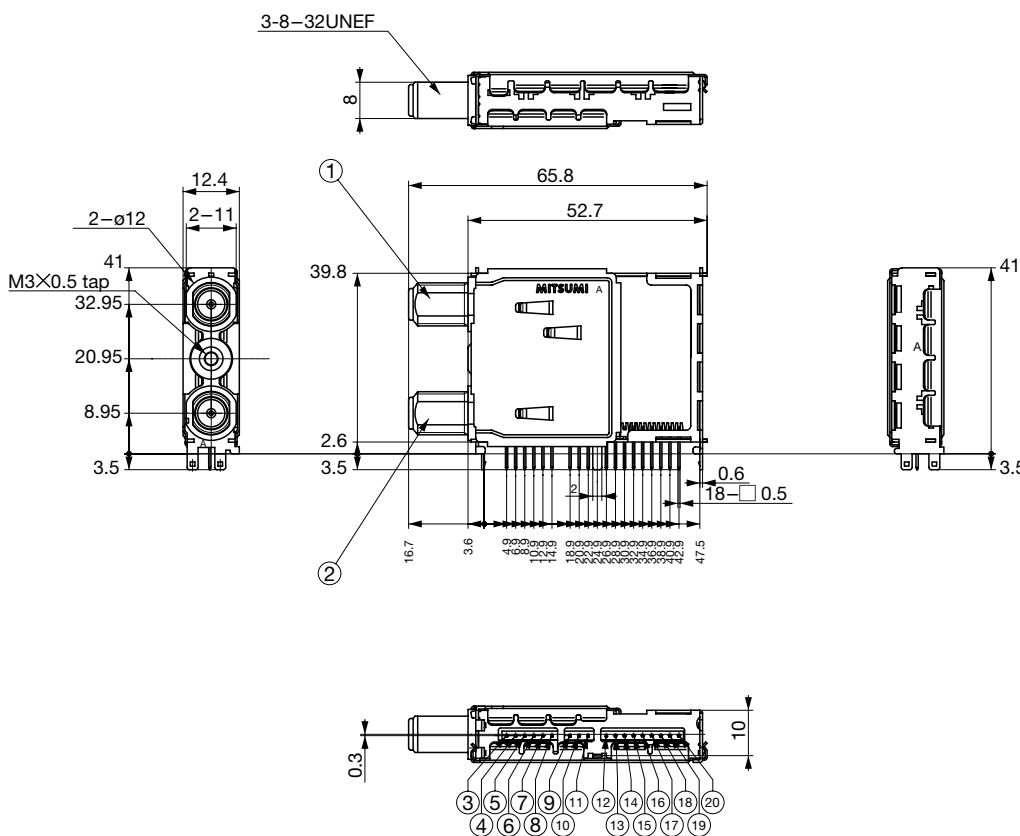


SPECIFICATIONS

Item	Specifications
Input Frequency Range	950~2150MHz
Input Level Range	-65~-25dBm
Distributor gain	-5 ~+5dB
Input impedance	75Ω
Return Loss	-7dB max.
Symbol Rate Range	28.86 Mbaud
Modulation Type	TC8PSK, QPSK, BPSK
Demodulator Standard	Based on ISDB-S
FEC Rates	TC8PSK (2/3), QPSK (1/2, 2/3, 3/4, 5/6, 7/8), BPSK
Output Data	serial TS
Controller Bus Interface	I ² C BUS Control
Power Supply Voltage	+B3 5.0V, +B4 3.3V, +B5 1.5V
Dimension (Mounting area)	52.7 (W)×39.2 (D)×12.4 (H)

*Note Specifications subject to change without notice.

DIMENSIONS



Terminals
1. RF IN
2. RF OUT
3. +B1 (LNB IN)
4. +B2 (LNB OUT)
5. GND
6. +B3(5.0V)
7. +B4(3.3V)
8. +B5(1.5V)
9. GND
10. SCL
11. SDA
12. SDEN
13. SDO
14. BCKO
15. PSYNC
16. VDEN
17. TSERR
18. SYNC
19. INTF2 (EMG_F)
20. /RESET

Unit : mm
General Tolerance : ±0.5mm