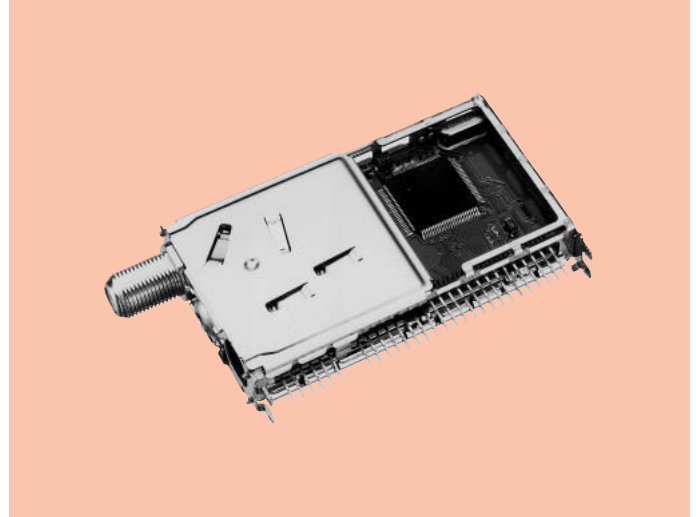


2nd RF Units for BS Digital Broadcasting Receiver TSU33 Series

Terrestrial Tuners, DBS 2nd RF Units

OUTLINE

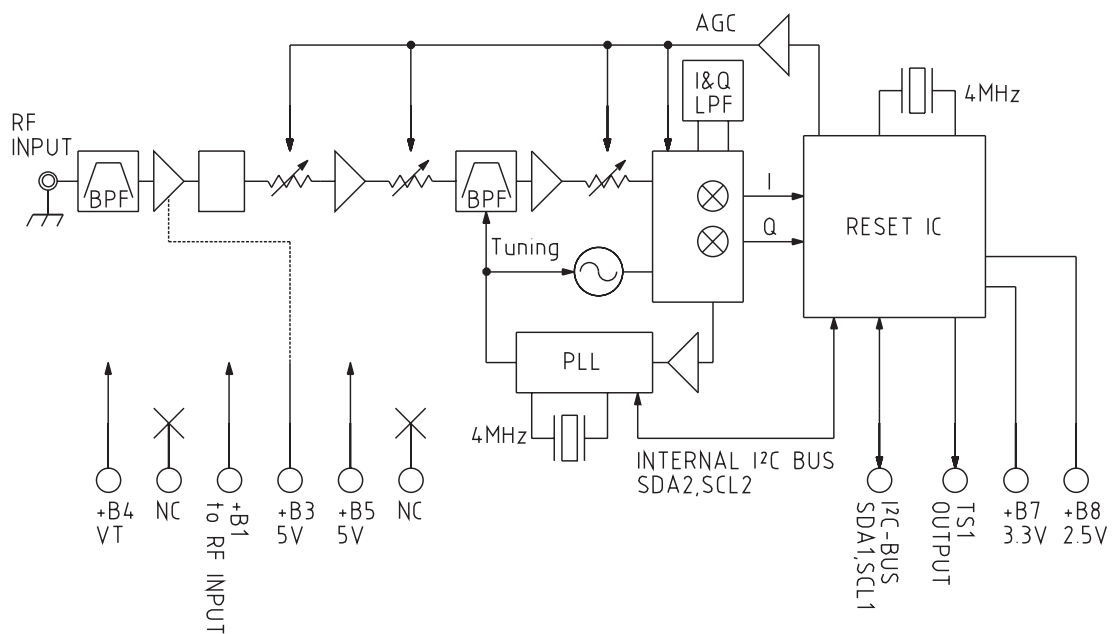
TSU33 series are 2nd RF unit for use in Japanese BS digital broadcasting receivers. Demodulator and error correction circuit are integrated in an ultra compact, high performance RF unit.



FEATURES

1. By direct conversion, a high degree of miniaturization is achieved (volume: 30ml).
2. The bit error characteristics are excellent.
3. Demodulator and FEC circuit such as 8PSK are built in.
4. CS reception has also been considered with wide band range reception (950~2150MHz).
5. Two paths for MPEG2 transport stream output are in preparation.
6. High sensitive reception is possible: -75dBm typ.

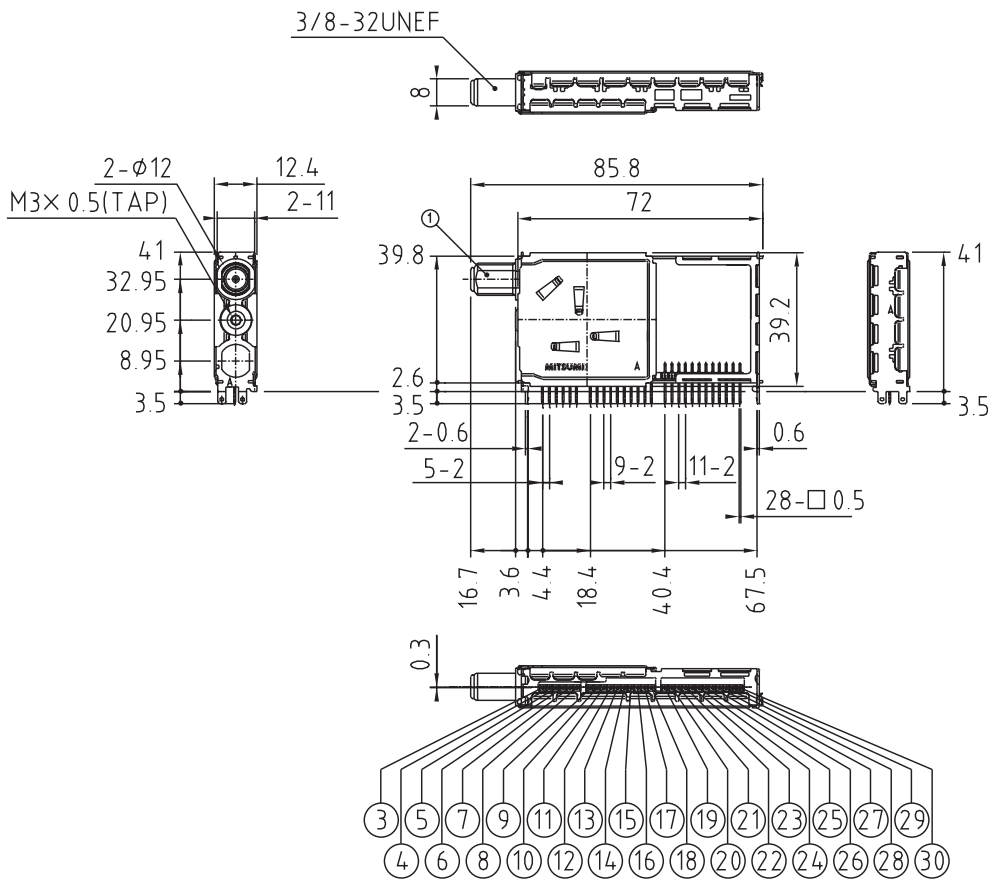
BLOCK DIAGRAM



SPECIFICATIONS

Item	Models	TSU33-J05D	Remarks
Input Frequency		950~2150MHz	
Input Impedance		75Ω	
Input Level		-20~-65dBm	F-female
Sybol Rate Range		30M sym/s max.	
Modulation Type		TC8PSK, QPSK, BPSK	
Output Data		8 bit parallel	
FEC Rates		1/2, 2/3, 3/4, 5/6, 7/8	
Controller Bus Interface		I ² C BUS Control	

DIMENSIONS



Terminals
1. RF IN
2. —
3. +B4 (VT)
4. NC
5. +B1 (LNB IN)
6. +B3 (5V)
7. +B5 (5V)
8. NC
9. SFSYNC
10. PSYNC
11. TSEN
12. TS0
13. TS1
14. TS2
15. TS3
16. TS4
17. TS5
18. TS6
19. TS7
20. TSCLK
21. TSERR
22. SYNC
23. EMG_F
24. TMCC_F
25. CN_F
26. +BB (2.5V)
27. +B7 (3.3V)
28. SCL
29. SDA
30. /RESET

Unit : mm
General Tolerance : ±0.5mm