

APPLICATIONS:

- Satellite receiver
- Data receiver

BSFR/Z-Series Double Conversion IF Output Satellite Tuner

**NEW HIGH PERFORMANCE DOUBLE
CONVERSION TUNERS FEATURING
PRESCALER CAPABILITY.**

FEATURES

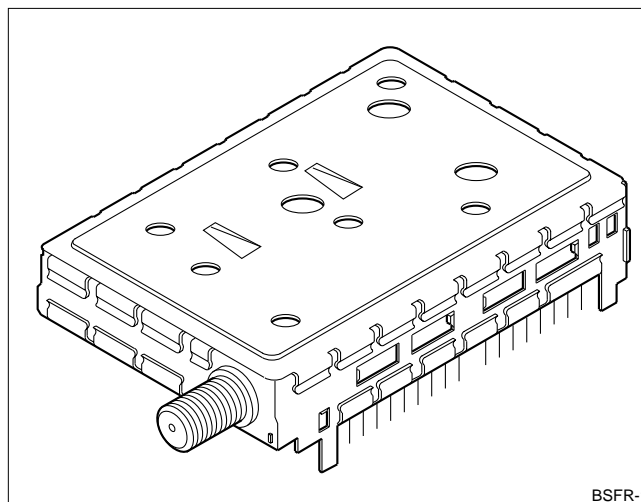
- First LO PLL tuning
- Low noise figure, 9 db typical (model dependent)
- 50 db typical AGC range
- Conversion gain range from 20 db to 70 db, typical
- Low phase noise
- Input and output impedance: 75 Ω
- Maximum input level: -20 dBm

SHARP'S new BSFR and BSFZ-series satellite tuners are designed as a flexible solution for reception of modulated digital data streams. With a total of seven different models to meet varying performance requirements, these tuners can be used as receivers for both digital video and data streams.

Each model provides two local oscillators. The first is phase-locked loop-tuned using a 3-wire serial data bus. The second local oscillator is controlled by an analog voltage. All models provide a prescaler on the second LO output for complete control of the conversion process.

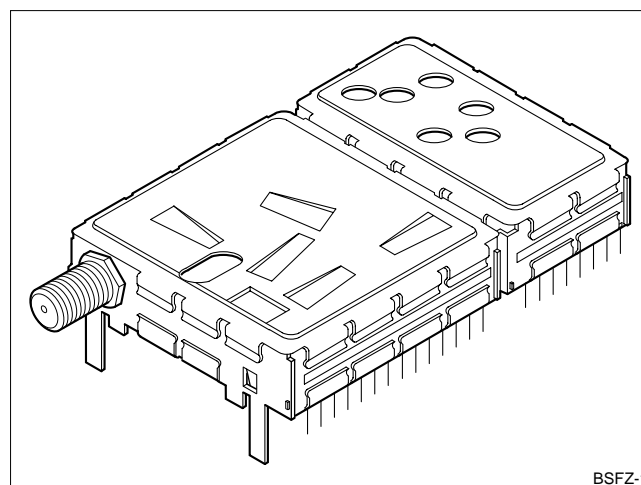
Several power supply configurations are used: 5 V and 20 V; 5 V, 12 V, and 20 V; and 5 V, 12 V, and 28 V.

STANDARD BSFR PACKAGE



BSFR-1

STANDARD BSFZ PACKAGE



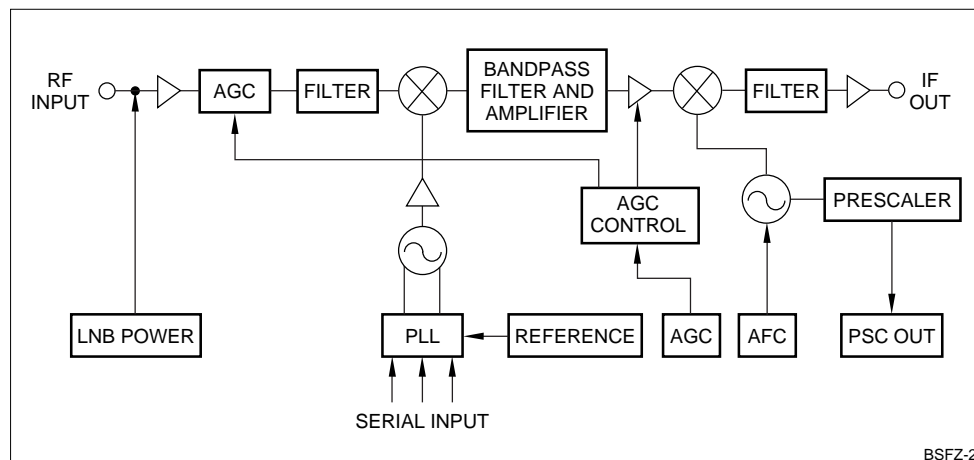
BSFZ-1

MODEL SELECTION GUIDE

| MODEL | INPUT FREQUENCY, MHz | BANDPASS FILTER, MHz | IF OUPUT FREQUENCY, MHz | PRESCALER RATIO | POWER SUPPLY, V |
|-----------|----------------------|----------------------|-------------------------|-----------------|-----------------|
| BSFR53G03 | 950 - 1450 | 7 | 60 | 128 | 5, 20 |
| BSFR53G05 | 950 - 1450 | 36 | 60 | 128 | 5, 20 |
| BSFR53G06 | 950 - 1450 | 7 | 60 | 4 | 5, 12, 20 |
| BSFR53G07 | 950 - 1450 | 16 | 70 | 128 | 5, 20 |
| BSFR53G10 | 950 - 1450 | 7 | 43.75 | 4 | 5, 12, 20 |
| BSFR53G15 | 950 - 1450 | 7 | 70 | 4 | 5, 12, 20 |
| BSFZ57G05 | 950 - 2050 | 16 | 70 | 128 | 5, 12, 28 |

Windows software for tuning the PLLs in the above listed models in a laboratory or test environment is available upon request.

BASIC BLOCK DIAGRAM



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