

**APPLICATIONS:**

- Satellite receiver
- Data receiver

# BSFR/Z-Series Double Conversion IF Output Satellite Tuner

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

**FEATURES**

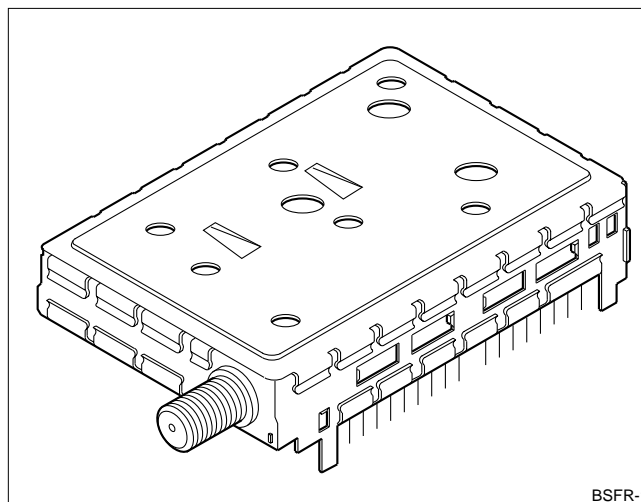
- First LO PLL tuning
- Low noise figure, 9 db typical (model dependent)
- 50 db typical AGC range
- Conversion gain range from 20 db to 70 db, typical
- Low phase noise
- Input and output impedance: 75 Ω
- Maximum input level: -20 dBm

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.

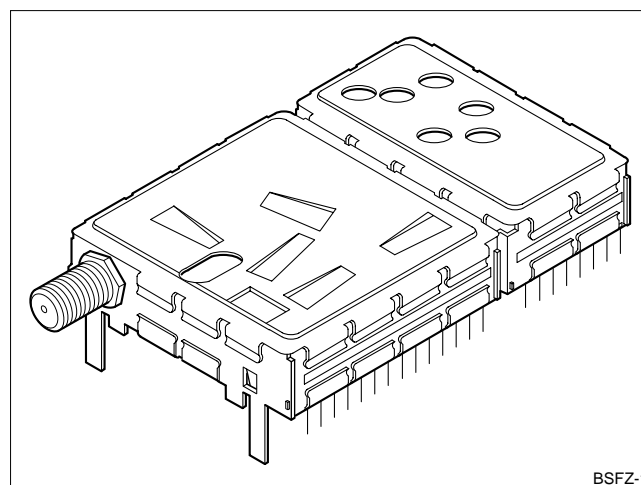
Several power supply configurations are used: 5 V and 20 V; 5 V, 12 V, and 20 V; and 5 V, 12 V, and 28 V.

**STANDARD BSFR PACKAGE**



BSFR-1

**STANDARD BSFZ PACKAGE**



BSFZ-1

# PRODUCT INFORMATION

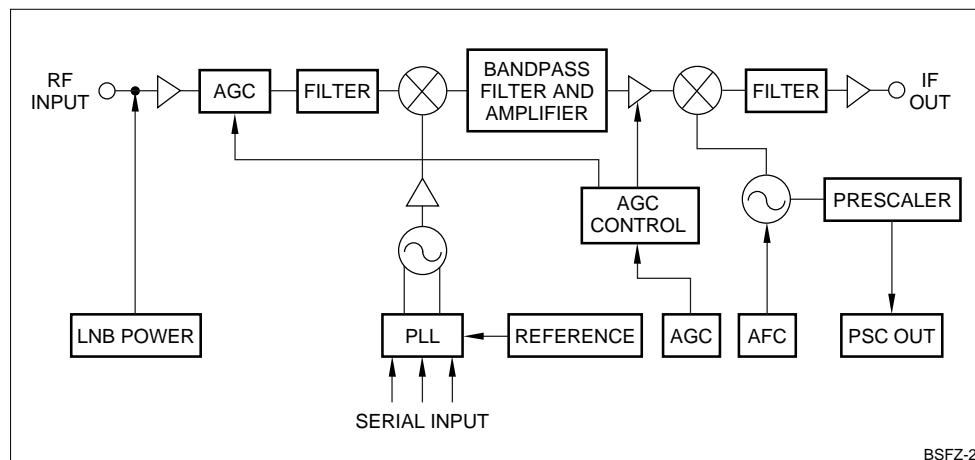
# SHARP®

## 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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