SHARP

RF Components Group

APPLICATIONS: • Satellite receiver • Data receiver

BSFZ-Series I/Q Output Satellite Tuners

FEATURES

- First LO PLL tuning
- Low noise figure, 8 dB typical (model dependent)
- 65 dB typical AGC range
- Conversion gain range 45 dB typical
- Low phase noise
- Input range: 950 2,050 MHz
- Maximum input level: -25 dBm
- Input and output impedance: 75 Ω
- 30 MHz I/Q output low pass filter, typical

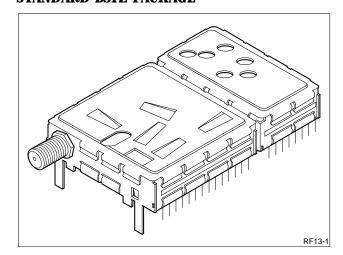
DESCRIPTION

The BSFZ-series tuners are designed for reception of modulated digital data streams. These tuners can be used for reception of digital video and data streams.

The first Local Oscillator is Phase-Locked Loop tuned using a 3-wire or I²C-bus serial data bus. The second Local Oscillator in the I/Q Demodulator is controlled by a SAW resonator or an analog voltage depending on model. A prescaler is provided on the I/Q conversion oscillator output in some models for complete control of the conversion process.

The power supply is 5 V and 29 V.

STANDARD BSFZ PACKAGE



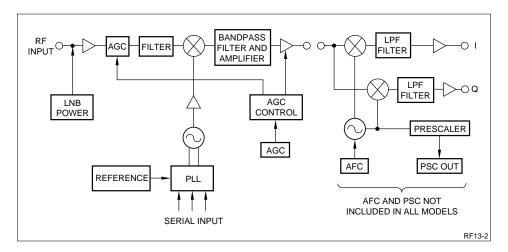
PRODUCT INFORMATION SHARP

MODEL SELECTION GUIDE

| Model | Bandpass Filter (MHz) | I/Q Conversion Control | Package Style | PLL |
|-----------|---------------------------------|---------------------------|---------------------------|------------------|
| BSFZ68G57 | 36 | SAW Stabilized | Standup | I2C |
| BSFZ68G58 | 36 | SAW Stabilized | Laydown | I2C |
| BSFZ68G61 | 36 | SAW Stabilized | Standup | 3-wire |
| BSFZ68G62 | 36 | SAW Stabilized | Laydown | 3-wire |
| BSFZ68G63 | 27/54 | SAW Stabilized | Laydown | 3-wire |
| BSFZ68G64 | 27/36 | SAW Stabilized | Standup | 3-wire |
| BSFZ68G65 | 27/36 | SAW Stabilized | Laydown | 3-wire |
| BSFZ68G66 | 7.8 | SAW Stabilized | Standup | 3-wire |
| BSFZ68G67 | 7.8 | SAW Stabilized | Laydown | 3-wire |
| BSFZ68G72 | 36 | SAW Stabilized | PCI Compatible Laydown | I ² C |

Windows[®] software for tuning the 3-wire PLLs in the above listed models in a laboratory or test environment is available upon request.

BASIC BLOCK DIAGRAM



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