

APPLICATIONS:

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Set Top Box

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HDTV

BSFZ57G05 Double Conversion Tuner

FEATURES

- Receiving frequency range 950 MHz to 2,050 MHz
- Input signal level -20 dBm to -70 dBm
- Nominal input impedance 75 Ω
- LO1 frequency range 1,429.5 MHz to 2,529.5 MHz
- Synthesizer IX2083PA
- Reference frequency 14.58 MHz
- Step size 324 kHz
- First IF frequency 479.5 MHz
- First IF filter 3 dB BW 16.0 MHz
- AGC voltage input 1 V to 5 V, 1 V to MAX. gain, 5 V to MIN. gain
- LO2 frequency 549.5 MHz (AFT = 6 V)
- AFT voltage input 2 V to 10 V (center voltage = 6 V)
- AFT input resistance 2.2 k Ω $\pm$ 0.2 k Ω
- AFT input capacitance 54 pF $\pm$ 5 pF
- Nominal output impedance 50 Ω
- Nominal output frequency 70 MHz
- Nominal output level 0 dBm under AGC control
- Prescaler on LO2, divide by 128
- Operating voltage
 - B1, B2, B3 5 V $\pm$ 0.25 V
 - TUN 28 V $\pm$ 1.0 V
 - LNB 25 V DC, 400 mA MAX.
- Operating temperature 0°C to +60°C
- Storage temperature -30°C to +85°C
- Operating and storage humidity, less than 95%

DESCRIPTION

This product brief covers L-band to 70 MHz IF double conversion tuner intended for use in digital TV receivers.

PIN DESCRIPTION

NUMBER	NAME	I/O	VOLT (V)	NOTES
1	RF In	I		
2				
3	LNB			
4	NC			
5	TUN	I	28 V	1
6	LE	I		
7	Data	I		
8	Clock	I		
9	NC			
10	B1	I	5 V	2
11	NC			
12	GND			
13	NC			
14	B2	I	5 V	3
15	GND			
16	GND			
17	PSC	O		
18	B3	I	5 V	4
19	AGC	I	1 V – 5 V	
20	AFT	I	2 V – 10 V	
21	NC			
22	GND			
23	IF Out	O		5

NOTE:

1. VT
2. PLL L01
3. RF, IF Amp
4. AGC amp., second H/Lx
5. 70 MHz output

BLOCK DIAGRAM

