

**LINEAR
INTEGRATED
CIRCUITS
=INDUSTRIAL=**

* **BLF 11331**
* **BLF 13331**

4-NORMALLY OPEN SWITCHES WITH DISABLE

These devices are monolithic combination of bipolar and JFET technology producing the one chip quad JFET switch. A circuit technique is employed to maintain a constant resistance over the analog voltage range of +/- 10 V. The input is designed to operate from minimum TTL levels, and switch operation also ensures a break before make action. These devices operate from +/- 15 V supplies and swing a +/- 10 V analog signal.

The JFET switches are designed for applications where a DC to medium frequency analog signal requires control.

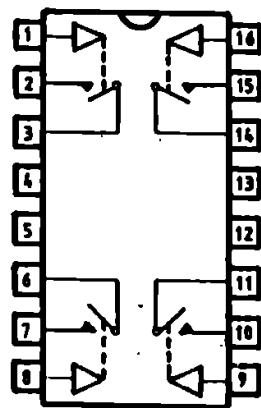
Features

- Operating temperature	BLF 11331 ...	-55 ... +125 °C
	BLF 13331 ...	0 ... +70 °C
- Storage temperature		-55 ... +125 °C
- Positive supply - negative supply (VCC-VEE)	max.	36 V
- Reference voltage	VEE ... VCC	V
- Logic input voltage	VR-4 ... VR+6	V
- Analog current	max.	20 mA
The following parameters are supposed to be guaranteed for :		
VCC = +15 V; VEE = -15 V; VR = 0 V; TA = 25 °C		
- " ON " resistance (VA = 0 V; ID = 1 mA)	max.	200 ohms
- " ON " resistance matching	max.	50 ohms
- Analog range	-10 ... +10	V
- Leakage current in " ON " condition	max.	10 nA
- Source and drain current in " OFF " condition	max.	10 nA
- Logical " 1 " input voltage	min.	2 V
- Logical " 0 " input voltage	max.	0.8 V
- Logical " 1 " input current (VI = 5 V)	max.	40 uA
- Logical " 0 " input current	max.	0.1 uA
- Disable current	max.	1.5 mA
- Negative supply current all switches "OFF"	max.	7 mA
- Reference supply current	max.	5 mA
- Positive supply current	max.	9 mA

* Preliminary data

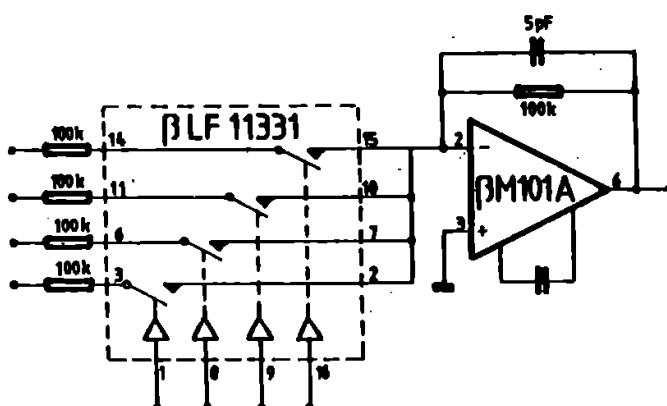
BLF 11331 ; BLF 13331 (cont.)

- 1. IN1
- 2. D1
- 3. S1
- 4. VR
- 5. -VEE
- 6. S2
- 7. D2
- 8. IN2
- 9. IN3
- 10. D3
- 11. S3
- 12. +VCC
- 13. Disable
- 14. S4
- 15. D4
- 16. IN4



PACKAGE MP-117 / TOP VIEW

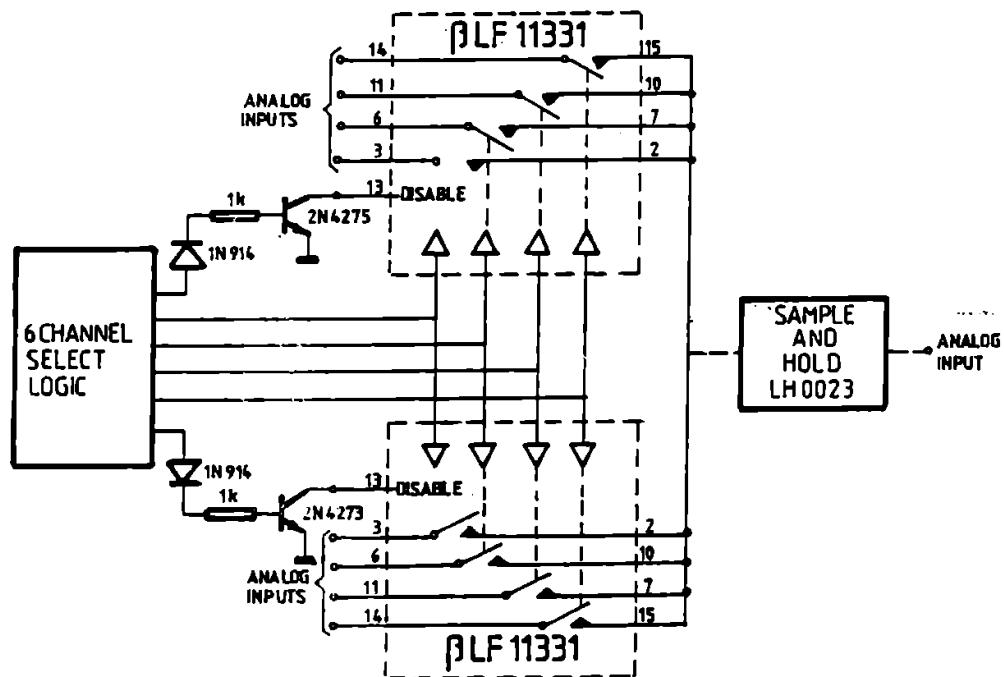
Typical applications



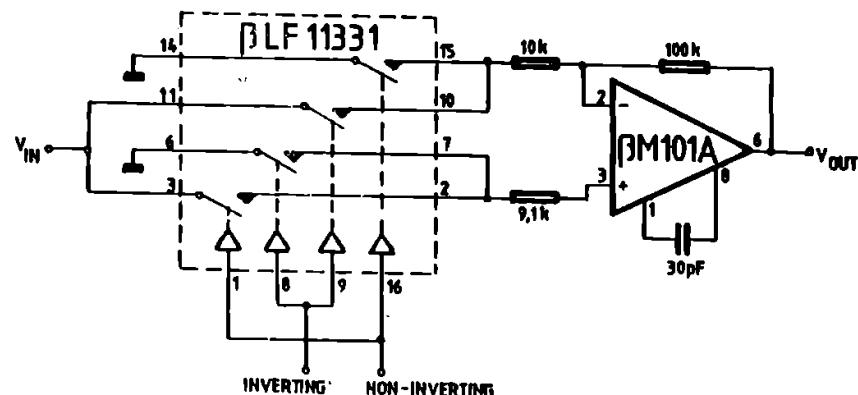
MULTIPLEXER / MIXER

BLF 11331 , BLF 13331 (cont.)

Typical applications



**8 CHANNEL ANALOG COMMUTATOR
WITH 6 CHANNEL SELECT LOGIC**



**PROGRAMMABLE INVERTING NON-INVERTING
OPERATIONAL AMPLIFIER**