

MBFP420A1

Wideband Low-Noise RF Bipolar Transistor



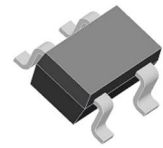
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Applications

- 1, LTE Small & Base Station
- 2, DAS, PICO
- 3, GNSS Antenna

Features

- 1, Signal Gain 19dB @3GHz
- 2, Frequency covers a wide range up to 12GHz
- 3, Output power at 1dB gain compression up to 18dBm



Description

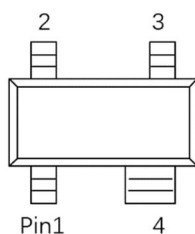
The MBFP420A1 is a low cost, high performance Ultra-low noise amplifier designed by bipolar technology. Frequency range from DC to 12GHz. . It is ideal for LNB, Repeater, GPS. MBFP420A1 is offered in SOT343 package and all components are 100% RF tested.

Electrical Specification

Item	Min.	Type.@25°C	Max.	Unit
Frequency Range	DC		12000	MHz
RF Input Power			20	dB
Drain-Source Voltage			16	V
Junction Temperature			150	°C
NF@12GHz		0.5		dB
P1dB			18	dBm
Operating Temp.	-40		+85	°C

All the above data are based on specified demo board and tested in 25° environment.

Pin Configuration



Pin No.	Label
2/4	GND
1	RF In
3	RF Out

All Use For RF & Microwave

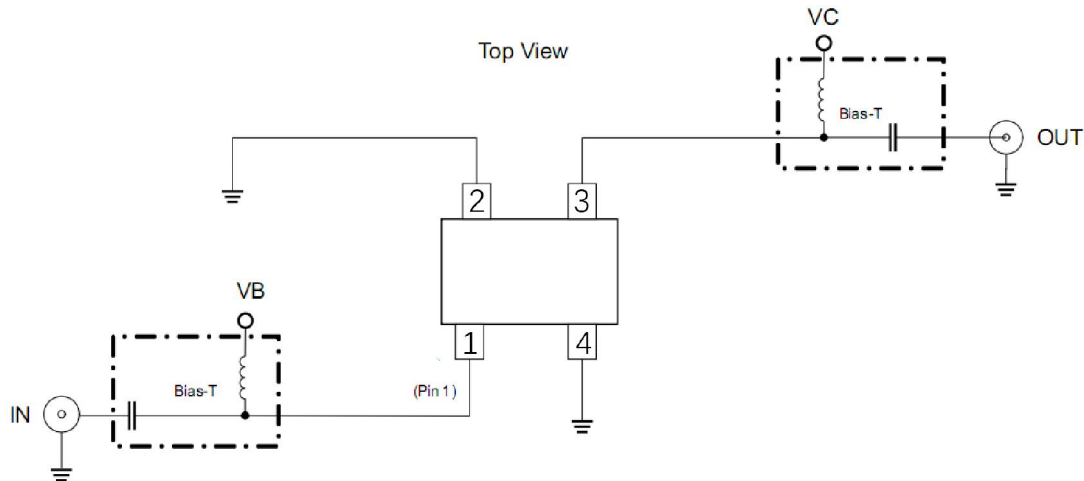
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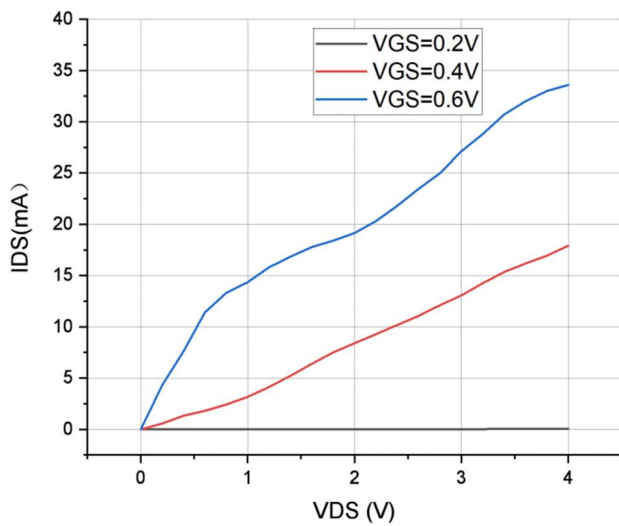


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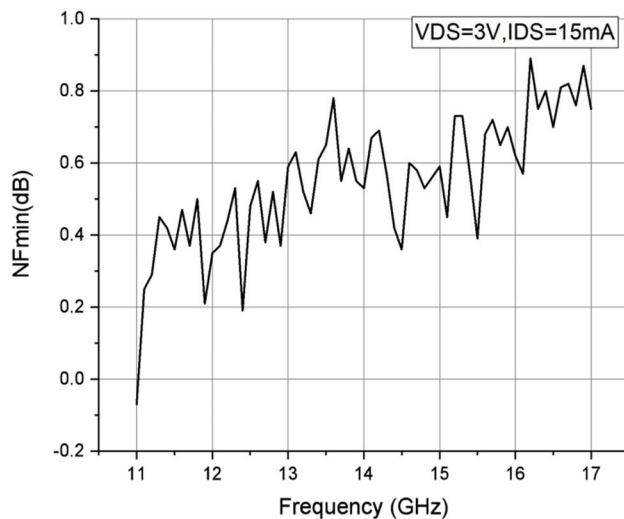
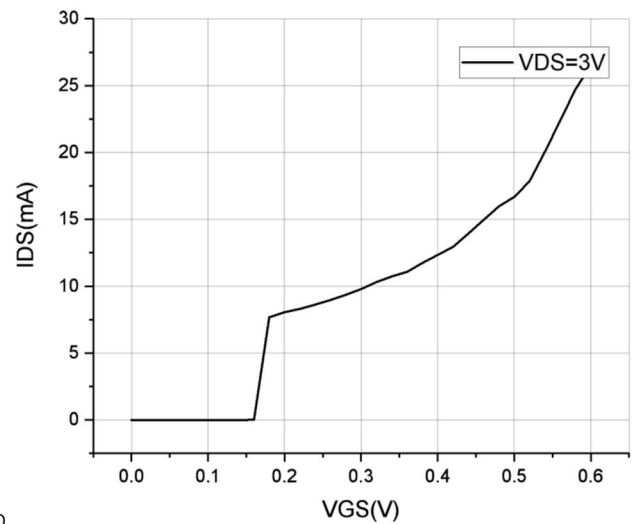
Typical Application



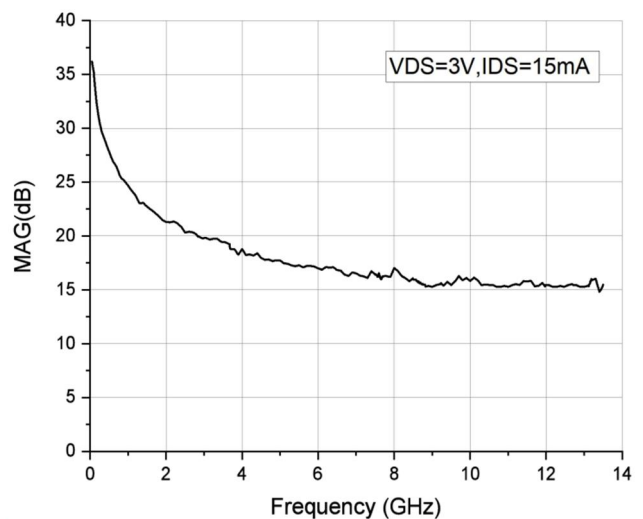
Typical Performance (25°C)



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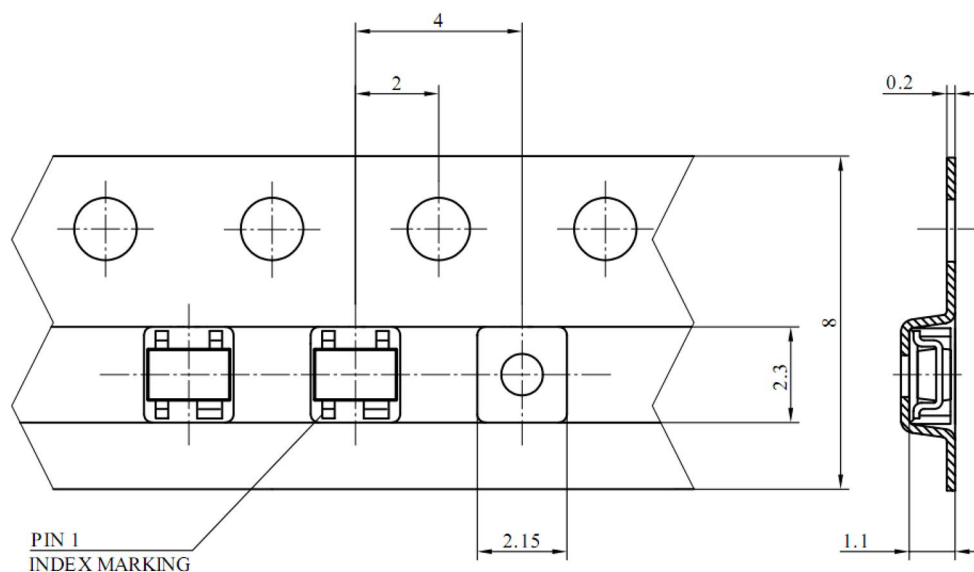
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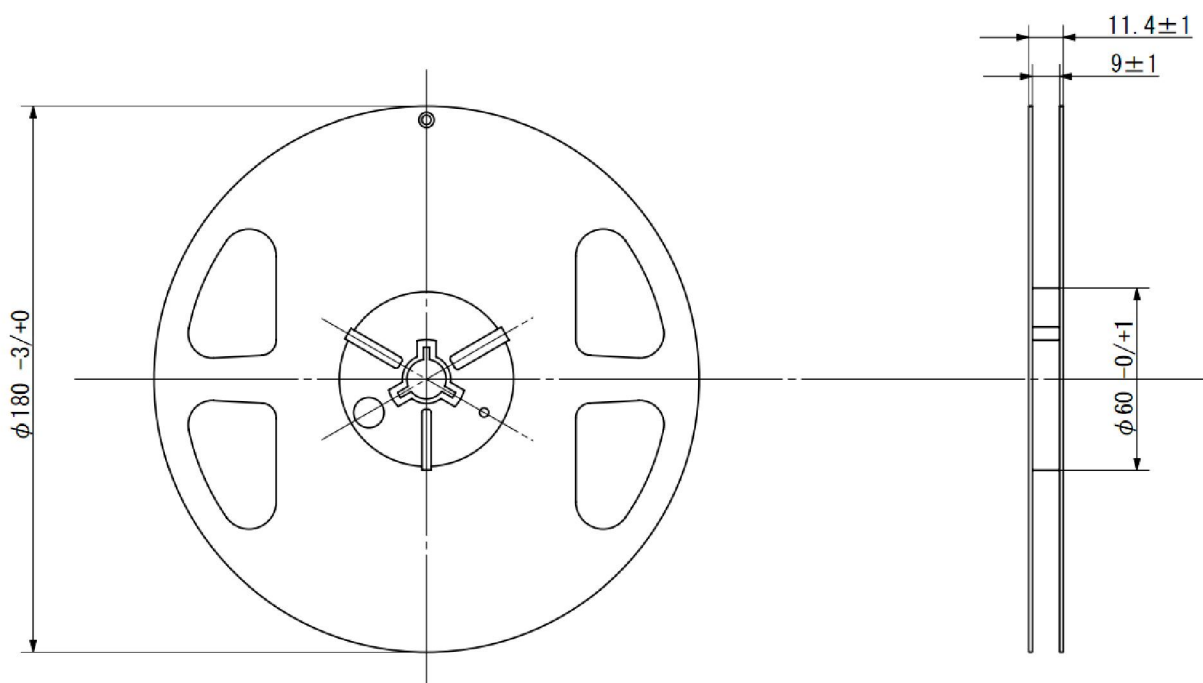
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Packaging and Ordering Information



ALL DIMENSIONS ARE IN UNITS MM

THE DRAWING IS IN COMPLIANCE WITH ISO 128 & PROJECTION METHOD 1



Device	Package	Reel	Shipping
MBFP420A1	SOT343	7"	3000/Reel

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Shenzhen Megsine technology co., ltd www.megsine.com sales@megsine.com may contain us for future information
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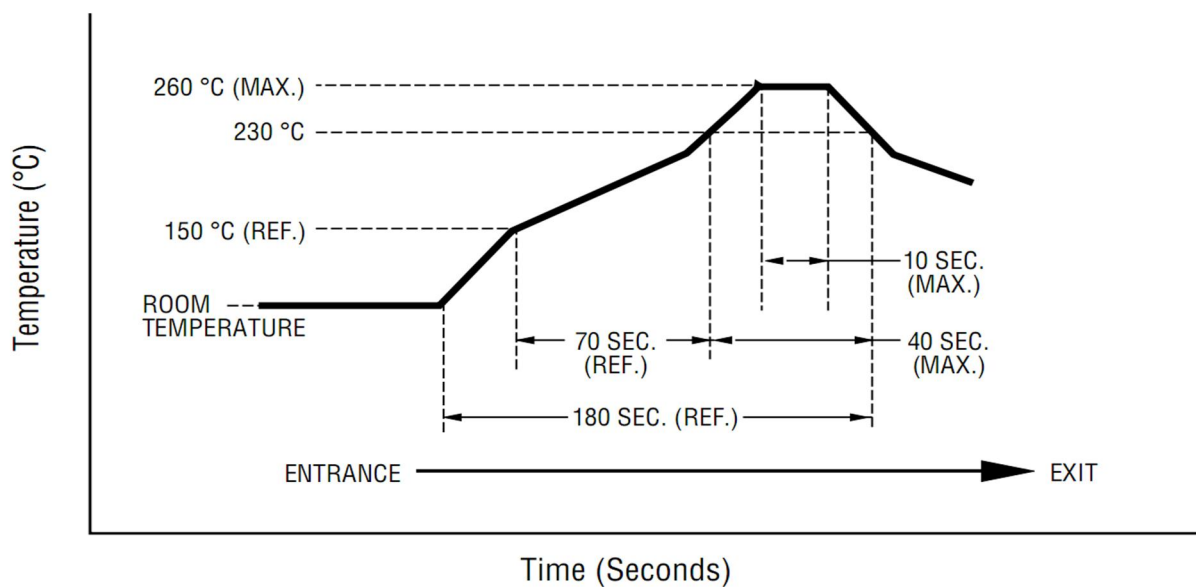
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MECSINE 兆赫訊

Recommended Reflow Solder Profile

Figure 10. MBF1221D33 Recommended Reflow Solder Profile



Revision	Description	Date
Rev1	Preliminary	2023/10/28

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