

Bipolar Transistors - BJT MATCHED MONO DUAL NPN

Manufacturers	<u>Analog Devices, Inc</u>
Package/Case	TO-78
Product Type	Transistors
RoHS	Rohs
Lifecycle	



Images are for reference only

Please submit RFQ for MAT01GHZ or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

General Description

The MAT01 is a monolithic dual NPN transistor. An exclusive Silicon Nitride "Triple-Passivation" process provides excellent stability of critical parameters over both temperature and time. Matching characteristics include offset voltage of 40 μ V, temperature drift of 0.15 μ V/ $^{\circ}$ C, and hFE matching of 0.7%.

Very high h is provided over a six decade range of collector current, including an exceptional hFE of 590 at a collector current of only 10nA. The high gain at lower collector current makes the MAT01 ideal for use in low-power, low-level input stages.

Features

- Low VOS (VBE match): 40 μ V typical, 100 μ V maximum
- Low TCVOS: 0.5 μ V/ $^{\circ}$ C maximum
- High hFE: 500 minimum
- Excellent hFE linearity from 10 nA to 10 mA
- Low noise voltage: 0.23 μ V p-p from 0.1 Hz to 10 Hz
- High breakdown: 45 V min

Application

- Weigh scales
- Low noise, op amp, front end
- Current mirror and current sink/source
- Low noise instrumentation amplifiers
- Voltage controlled attenuators
- Log amplifiers



Related Products



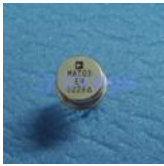
[MAT01AH](#)

Analog Devices, Inc
CAN6



[MAT04FPZ](#)

Analog Devices, Inc
DIP14



[MAT03EH](#)

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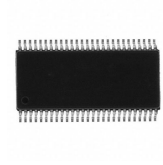
[MAT01GH](#)

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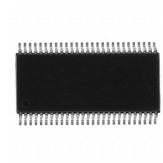
[MAT14ARZ](#)

Analog Devices, Inc
14-SOIC (0.154, 3.90mm Width)



[MAX20050ATC/V+T](#)

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[MAX2602ESA](#)

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8-SOIC (0.154, 3.90mm Width)