

Product Overview

FAN4274: Operational Amplifier, Rail-to-Rail I/O, 3.7Mhz, CMOS Op-Amp

For complete documentation, see the data sheet.

The FAN4174 (single) and FAN4274 (dual) are voltage feedback amplifiers with CMOS inputs that consume only 200 μ A of supply current per amplifier, while providing ± 33 mA of output short-circuit current. These amplifiers are designed to operate 5 V supplies. The common mode voltage range extends beyond the negative and positive rails. The FAN4174 and FAN4274 are designed on a CMOS process and provide 3.7 MHz of bandwidth and 3 V / μ s of slew rate at a supply voltage of 5 V. These amplifiers operate and are reliable over a wide temperature range of -40°C to +125°C. The combination of extended temperature operation, low power, rail-to-rail performance, low-voltage operation, and a tiny package optimize this amplifier family for use in many industrial, general-purpose, and battery-powered applications.

Features

- 200 μ A Supply Current per Amplifier
 - 3.7 MHz Bandwidth
 - Output Swing to Within 10 mV of Either Rail
 - Input Voltage Range Exceeds the Rails
 - 3 V / μ s Slew Rate
 - 25 nV / $\sqrt{\text{Hz}}$ Input Voltage Noise
 - Replaces KM4170 and KM4270
 - FAN4174 Competes with OPA340 and TLV2461; Available in a SOT23-5 Package
 - FAN4274 Competes with OPA2340 and TLV2462; Available in MSOP-8 Package
 - Fully Specified at +2.7 V and +5 V Supplies
- For more features, see the data sheet

Applications

- Storage & Peripherals
- Other Data Processing
- Mobile Handsets
- Wireless LAN Card & Broadband Access
- External AC-DC Merchant Power Supply - Wireless Communications

Part Electrical Specifications

Product	Pricing (\$/Unit)	Compliance	Status	Rail to Rail	Channels	V _S Min (V)	V _S Max (V)	I _q Typ (mA)	V _{OS} Max (mV)	GB W Typ (MHz)	SR Typ (V/ μ s)	I _O Typ (mA)	ΔV_{O} s/ ΔT (μ V/ $^{\circ}$ C)	e _n (nV/ $\sqrt{\text{Hz}}$)	I _{bias} Typ (pA)	CM RR Typ (dB)	Architecture	Temperature Range ($^{\circ}$ C)	Package Type
FAN4274IMU8X	0.2841	Pb-free Halide free non AEC-Q and PPAP	Active	Input/Output	2	2.3	5.25	0.2	6	4	3	12	2.9	25	5	73	CMOS	-40 to 125	Micr o8

For more information please contact your local sales support at www.onsemi.com.

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