

EL6263C - Product Brief

Quad 20MHz & Quad 70MHz, Switched Gain Pre-Amp

Features

- $\begin{tabular}{ll} \bullet & Autozero of output offset to \\ < 10mV \end{tabular}$
- 3 selectable gains
- Space-saving QSOP-24 package
- Differential Sum & Sum-Bar outputs
- · Single 5V supply

Applications

- · DVD RAM, RW, and ROM
- · CD RW, R and ROM
- · MO drives
- · Optical Pickup pre-amplifier
- Servo positioning systems
- · High speed instrumentation

Ordering Information

Part No	Package	Tape & Reel	Outline #
EL6263CU	24-Pin QSOP		MDP0040

General Description

The EL6263C consists of four 30MHz trans-impedance amplifiers and four 70MHz trans-impedance amplifiers. The four 70MHz amplifier outputs also are averaged to provide differential 70MHz outputs.

The EL6263C is designed to amplify the photodiode currents for CD, DVD, or other photodiode pick-up applications.

Two TTL/CMOS-compatible select the gains for all eight amplifiers. The gain settings for the fast amplifiers are $5.4k\Omega$, $10.7k\Omega$, and $28.6k\Omega$. The gain settings for the slow amplifiers are $13.3k\Omega$, $25k\Omega$, and $66.7k\Omega$. The gain settings for the sum and sumbar outputs are $7.6k\Omega$, $14.3k\Omega$, and $38.1k\Omega$ measured single-ended. Gain matching is typically 3% channel to channel. The autozero input reduces each amplifier's output offset to less than 10mV when it goes high. The AZ pin is TTL/CMOS-compatible.

The E, F, G, and H channel bandwidths are 30MHz for all gains and reasonable input and output loads. The A, B, C, D, S, and \overline{S} channels have bandwidths of 70MHz, 46MHz, and 40MHz at low, middle, and high gains respectively after driving 25cm of flex circuit.

Each amplifier output can typically sink or source up to 5mA and their outputs can swing $1V_{P-P}$ at full bandwidth.

The EL6263C operates from a single +5V supply and is available in QSOP-24 package. It is specified for operation from -0°C to 70°C.

Connection Diagram GAIN 0 SELECT 1 24 AZ INPUT GAIN 1 SELECT 2 23 SUM OUTPUT 22 SUM OUTPUT REF INPUT 3 21 A OUTPUT A INPUT 4 B INPUT 5 20 B OUTPUT C INPUT 6 19 C OUTPUT D INPUT 7 18 D OUTPUT 0V (VSS) 8 17 +5V (VDD) E INPUT 9 16 E OUTPUT 15 F OUTPUT F INPUT 10 G INPUT 11 14 G OUTPUT H INPUT 12 13 H OUTPUT

Note: All information contained in this data sheet has been carefully checked and is believed to be accurate as of the date of publication; however, this data sheet cannot be a "controlled document". Current revisions, if any, to these specifications are maintained at the factory and are available upon your request. We recommend checking the revision level before finalization of your design documentation.

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