DATEL Innovation & Excellence

DATEL | 120 Forbes Blvd., Suite 125 Mansfield, MA 02048 | Phone: +1-508-964-5131 | www.datel.com

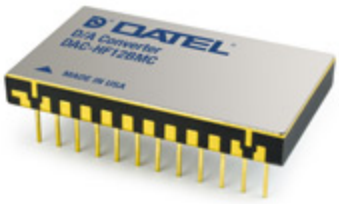


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Part Number DAC-88ME-2, Digital-to-Analog Converters

The DAC-88 Series D/A converters are high performance 12-bit devices with a fast settling voltage output. They are compatible and pin-pin replacement for the standard DAC88 and 3860 series. They incorporate a level-controlled input storage register and are specifically designed for systems applications such as data bus interfacing with computers. When the "load/Register Enable" input is high, data in the storage register is held, and when the load input is low, data is transferred through to the DAC. There are two basic models available by coding option: binary and two's complement. The output voltage ranges are externally pin programmable and include 0 to +10V, ±5V, and ±10V. The DAC-88 Series contains a precision zener reference circuit. This eliminates codedependent ground currents by routing current from the positive supply to the internal ground node as determined by the R-2R ladder network. The internal feedback resistors for the on-board amplifier track the ladder network resistors, enhancing temperature performance. The excellent tracking of the resistors results in a differential nonlinearity tempco of ±2ppm/°C maximum. The temperature coeffi cient of gain is±20ppm/°C maximum, and the tempco of zero is ±5ppm/°C maximum.

Specifications

Number of Channels	1
Resolution	12 Bit
Settling Time	3000 ns
Power Consumption	0.7 W
Differential Non-Linearity Error/Other	1.5 LSB
Integral Non-Linearity Error/Other	1 LSB
Package Type	DDIP
Required Supply Voltage 1st	15 V
Required Supply Voltage 2nd	-15 V
Required Supply Voltage 3rd	5 V
Operating Temp. Range (min)	-40 ºC
Operating Temp. Range (max)	+100 ºC
RoHS	No
Status	Recommended for new design

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