



### Part Number DAC-1212SM, Digital-to-Analog Converters

The **DAC-1212SM** is a Digital to Analog Converter with 12-bit resolution and up to 125MSPS conversion rate. It operates from a single +3V to +5V supply and contains a precision internal 1.2 V temperature compensated Bandgap voltage reference, external reference option, edge-triggered CMOS input latches and a power-down "sleep" mode. It offers 2mA to 20mA Output Current.

This converter provides excellent dynamic performance making it ideal for applications such as signal reconstruction, high-resolution imaging, cellular basestations, test and medical instruments. DATEL offers this converter in a small low cost plastic 28-pin TSSOP fully tested over the operating temperature of -55°C to +125°C with ATE results recorded and stored.

The **DAC-1212SM** is a low cost enhanced Commercial Off-The-Shelf (COTS) devices and is the best choice for Ruggedized, Military, Avionics, Aerospace and Medical applications that does not require Hermetic or full MIL-Standard 883 products.

### Specifications

|                                        |                            |
|----------------------------------------|----------------------------|
| Number of Channels                     | 1                          |
| Resolution                             | 12 Bit                     |
| Settling Time                          | 35 ns                      |
| Power Consumption                      | 0.075 W                    |
| Differential Non-Linearity Error/Other | 0.5 LSB                    |
| Integral Non-Linearity Error/Other     | 0.5 LSB                    |
| Sampling Rate                          | 125 MHz                    |
| Spurious Free Dynamic Range            | 72                         |
| Package Type                           | TSSOP Plastic              |
| Required Supply Voltage 1st            | +3 V                       |
| Operating Temp. Range (min)            | -55 °C                     |
| Operating Temp. Range (max)            | +125 °C                    |
| RoHS                                   | Yes                        |
| Status                                 | Recommended for new design |

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