

# ALL PSU DATA SHEET.

## ECF Series, 1 Watt Isolated & Regulated DC-DC Converter, (Single Output).

### General Description,

The ECF series are cost effective 1 Watt single output DC-DC converters. These converters achieve low cost and ultra-miniature SIP or DIP size without compromising performance or field reliability.

Input voltages are available from 5 to 24 volts DC, producing a single output voltage of 3.0 to 12 Volts DC. Standard features include 1000 VDC input/output isolation (option of 3KVdc), high efficiency, and output voltage accuracy of +/-3% maximum, and a fully regulated output to +/-0.5%.

All models are packaged in ultra-miniature 19.50 x 6.00 x 9.50mm single-in-line package (SIL) or 20.32 x 10.16 x 6.85mm dual-in-line packaged (DIL). Operation is specified over the full operating temperature range of -40°C to +71°C with no derating required Cooling is by free-air convection.

### Electrical Specification,

Specifications typical at +25°C, nominal input voltage, rated output current unless otherwise specified.

#### Input Specifications:

Voltage Range	+/-10%
Filter	Capacitor

#### General Specifications:

Efficiency	60% to 75%
Switching Frequency	125 KHz Typical

#### Isolation Specifications:

Rated Voltage	1000 Vdc
Leakage Current	1 mA
Resistance	10 to the 9 Ohm
Capacitance	60 pF, typical

#### Environmental Specifications:

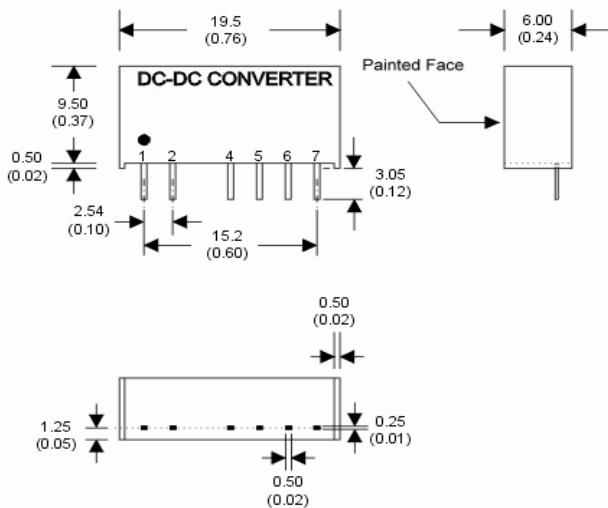
Operating Temp (ambient)	-40°C to +85°C
Storage Temp	-55°C to +125°C
Derating	None Required up to +71°C
Humidity	90% non-condensing
Cooling	Free-air convection

#### Output Specifications:

Voltage Accuracy	+/-3%, max
Ripple & Noise (at 20 MHz BW)	50 mVp-p, max
Short Circuit Protection	1 Second
Line Voltage Regulation	+/-0.5%
Load Voltage Regulation	+/-0.5%
Temperature Coefficient	+/-0.02%/°C

#### Physical Characteristics:

Dimensions	SIP 19.50 x 6.00 x 9.50mm DIP 20.32 x 10.16 x 6.85mm
Weight	2.7 g
Case Material	Non-conductive black plastic



### Mechanical Drawing & Pin Connections SIL, Single-In-Line Version.

Pin	Connection
1	+V Input
2	-V Input
3	No Pin
4	-V Out
5	No Pin
6	+V Out
7	No Pin

Please Enquire For Mechanical Drawing And Connections For DIL, Dual-In-Line Version,

Example Part Number ECF-1209S = 1 Watt Input 12 Volts to Single 9 Volts Output, SIL.

Further DC-DC Converters From 0.5 Watt To 2400 Watts Are Available And Can Be Seen Listed At [www.allpsu.co.uk](http://www.allpsu.co.uk)

Specifications may change without notice. E&OE. ALL PSU Terms & Conditions Apply.

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