# ALL PSU DATA SHEET.

## ECV-SA Series, 1 Watt 3000 Volt Isolated DC-DC Converter, (Single Output).

#### General Description,

The ECV-SA 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 3.3 to 48 volts DC, producing single output voltages of 3.3 to 15 Volts DC.

Standard features include 3000 VDC input/output isolation (option of 1KVdc), high efficiency, and output voltage accuracy of +/-5% maximum.

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-inline packaged (DIL). Operation is specified over the full operating temperature range of -25\*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: General Specifications:** 

+/-10% Voltage Range Efficiency 70% to 85% Filter Switching Frequency 125 KHz Typical Capacitor

**Isolation Specifications: Environmental Specifications:** 

Rated Voltage 3000 VDC Operating Temp (ambient) -25\*C to +71\*C Leakage Current 1 mA Storage Temp -55\*C to +125\*C 10 to the 9 Ohm Derating Resistance None Required Capacitance 60 pF, typical Humidity 90% non-condensing Cooling Free-air convection

**Output Specifications: Physical Characteristics:** 

Dimensions SIP 19.50 x 6.00 x 9.50mm Voltage Accuracy +/-5%, max

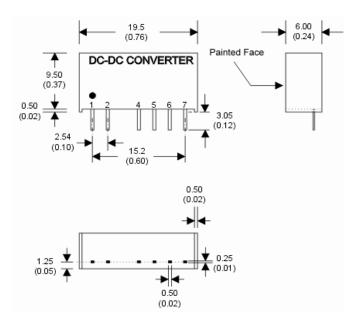
DIP 20.32 x 10.16 x 6.85mm

Ripple & Noise (at 20 MHz BW) 2 g 75 mVp-p, max Weight

**Short Circuit Protection** 1 Second Case Material Non-conductive black plastic

+/-1.2%/1% Vin Line Voltage Regulation +/-8%, load=20 to 100% Load Voltage Regulation

Temperature Coefficient +/-0.02%/\*C



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

Pin	Connection
1	+V Input
2	-V Input
3	No Pin
4	No Pin
5	0 V Out
6	No Pin
7	+V Out

Example Part Number ECV-1215SA = 12 Volts Input, 15 Volts Output.

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

Further DC-DC Converters From 1/4 Watt To 600 Watts Are Available And Can Be Seen Listed At www.allpsu.co.uk

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