

## **Features**

- 1 Watt output power
- SIP4 package
- 1:1 input voltage range
- Industry standard pinout
- 1 KVDC isolation
- Operating temperature range -40°C to +95°C
- High efficiency up to 80%
- UL62368-1, IEC62368-1, EMC- EN55032/55024 approval

## **Isolated DC-DC converter**

RS Stock No.: 2853136



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### **Product Description**

The DC-DC converter is specially designed for industry control application, tele-communication application.

OP temperature is full load from -40 °C to 85°C and 1000Vdc isolation.

No minimum load required.

Input range is +/-10 %.

### **General Specifications**

Туре	1W Isolated DC-DC converter
Regulated/Unregulated	Regulated
Efficiency *1	Тур. 80%
Applications	Industry control application, tele-communication application

### **Specifications**

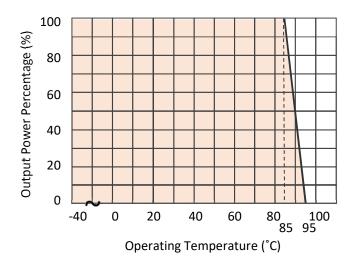
Output Voltage	5V dc
Input Voltage	5V dc
Output Current	200mA
Input Voltage Range	±10%
Output Voltage Accuracy	±5%
Capacitive Load *2	Max. 1500μF
Power Rating	1W
Operating Frequency	Min. 50KHz
Ripple and Noise*3	Max. 100mV pp
MTBF	Max. 13100000hours (25°C)
Line Regulation	1.2% typ. @1% of Vin
Load Regulation	15% (10% to 100% load)
Isolation Voltage	Min. 1000V dc/ 1 min., Input to Output
Isolation Resistance	Min. 10G $\Omega$
Isolation Capacitance	Typ. 20pF
Safety Approvals	UL62368-1/ IEC62368-1/ EN55032&35
Certificate	RoHS / REACH / CE



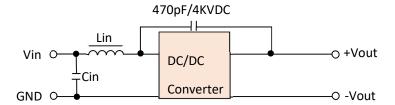
## **General Specifications**

Operating Temperature	-40 to 95°C
Storage Temperature	-55 to 125°C
Relative Humidity	5 to 95%RH

## **Derating**



### **EMC Compliance Circuit**



Class	Inductance/Capacitance (Lin/Cin)
Class A	47μΗ/2.2μϜ
Class B	47μΗ/10μϜ



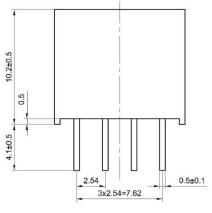
## **EMC Specifications**

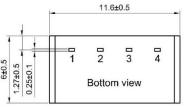
EMI	Class A/B EN 55032
ESD	Criteria A IEC 61000-4-2, Air±8kV; Contact±6kV
RS	Criteria A IEC 61000-4-3, 10V/m
EFT	Criteria A IEC 61000-4-4, ±0.5kV
Surge	Criteria A IEC 61000-4-5, ±0.5kV
CS	Criteria A IEC 61000-4-6, 10Vr.m.s
PFMF	Criteria A IEC 61000-4-8, 1A/m

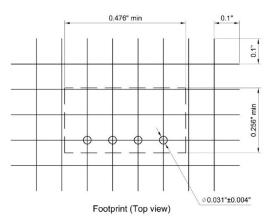
## **Mechanical Specifications**

Case Material	UL94V-0 black plastic
Potting Material	Ероху
Dimensions	11.60 x 6.00 x 10.20 mm
Weight	1.4g
Cooling	Natural convection

## **Dimension & Pinning**







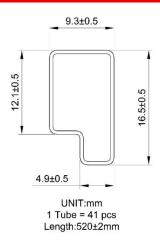
Pin	Pin-Out
1	-Vin
2	+Vin
3	-Vout
4	+Vout

Projection : Third angle projection Unit : mm

Tolerance: ±0.25mm



### **Package**



- 1. \*1 The efficiency is test by nominal input and max. full load at 25°C.
- 2. \*2 The capacitive load is test by minimum input and constant resistive load.
- 3. \*3 Ripple and Noise measured with 20MHZ BW and  $0.1\mu F$  ceramic capacitor.