

**Features**

- 1WATT SIP PACKAGE
- EFFICIENCY TO 82%
- 100% BURNED IN
- No-load Input Current as Low as 5mA
- UL 94V-0 PACKAGE MATERIAL
- CUSTOM SOLUTIONS AVAILABLE
- UNREGULATED OUTPUT TYPES



**1 Watt DC/DC  
Converter**

1 Watt Single O/P  
Isolated DC-DC Converter  <sup>®</sup> US

**Input Specifications**

Input Voltage	:5Vdc
Input Voltage Range	:±10%

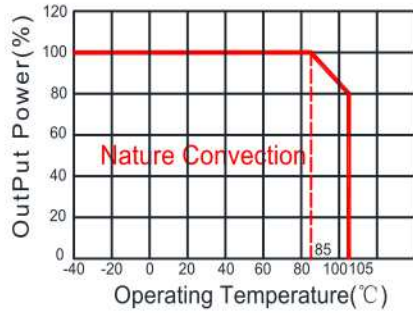
**Output Specifications**

Output Voltage	:5Vdc	
Output Voltage Accuracy	:±5%	@Vout=4.75-5.25Vdc@Vin=5Vdc
Output Current	:200mA	
Efficiency	:82% TYP	
Ripple / Noise	:30mVp-p TYP, 75mVp-p MAX	@20MHz Bandwidth
Short Circuit Protection	: Continuous	
Line Regulation	:±1.2% TYP	@ For 1.0% OF Vin
Load Regulation	:±10% TYP, ±15% MAX	@10% to 100% full load
Capacitive Load	:2400uF MAX	

**General Specifications**

Operating Temperature Range	: -40°C ~ +105°C	
Storage Temperature	: -55°C ~ +125°C	
Switching Frequency	: 370KHz TYP	
Humidity	: 95% MAX	
Isolation Voltage	: 1500Vdc	@Input to Output ( 60sec/0.5mA )
Isolation Resistance	: 1000MΩ MIN	@ 500Vdc
Cooling	: Free air convection	
MTBF	: >3500000 Hours	MIL-HDBK-217F@25°C, Ground Benign.
Case Material	: DAP	
Weight	: 1.5g TYP	
EMI	CE	CISPR32/EN55032 CLASS B (see Fig. 1 for recommended circuit)
	RE	CISPR32/EN55032 CLASS B (see Fig. 1 for recommended circuit)
EMS	ESD	IEC/EN61000-4-2 Air ±8kV , Contact ±6kV perf. Criteria B

**Temperature Derating Graph**



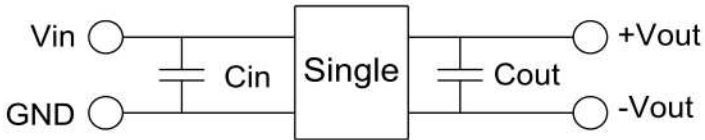
**Part Number**

13DC - 05 S 05 N 2 P

A B C D E F G

- A:Series
- B:Input Voltage
- C:Single Output
- D:Output Voltage
- E:Unregulated(N)
- F:Packge
- G:Protection

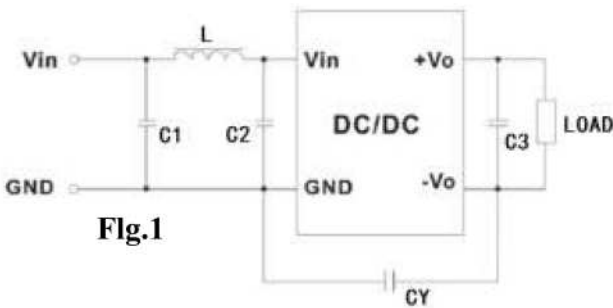
**Recommended Test Circuit**



Vin	Cin	Single Vout	Cout
5Vdc	4.7µF/25V	5Vdc	10µF/16V

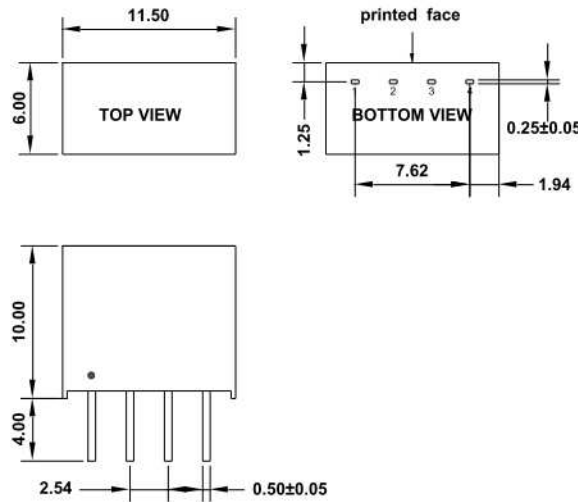
To make sure the product work at perfect operation status with full loading external capacitor is necessary and it is recommended to use high frequency low resistance electrolytic capacitor.

**EMC (CLASS B) compliance circuit**



EMC recommended circuit value table		
EMI	C1	4.7µF /50V
	C2	4.7µF /50V
	CY	1nF/4kV
	C3	Recommended Test Circuit
	L	6.8µH

**Outline Dimensions**



**UNIT:mm Unless otherwise specified,all tolerances are ±0.25**

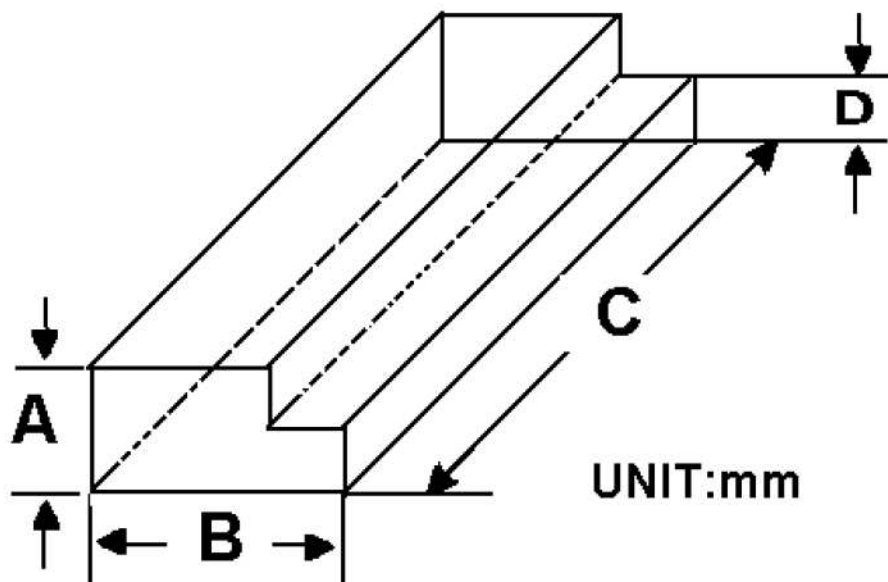
PIN	1	2	3	4
Single	-Vin	+Vin	-Vout	+Vout

### Packing Information:

Weight----- 1.5grams/pcs

TUBE-----42pcs

Weight: 83.2g per tube



Size(mm)			
A	B	C	D
9.50	16.50	522	5.00

Outer carton unit: 4200pcs/100Tube/box

Weight: 9.0kg per carton

