

FEATURES:

- 1 Watt SIP Package
- Efficiency to 70%
- 100% Burned In
- No Load Input Current as Low as 5mA
- UL 94V-0 Package Material
- Custom Solutions Available
- Regulated Output Types
- UL Recognized
- RoHS Compliant



DC-DC Converter EC2-05S05RP3

1 Watt Single O/P
Isolated DC/DC Converter



Input Specifications

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

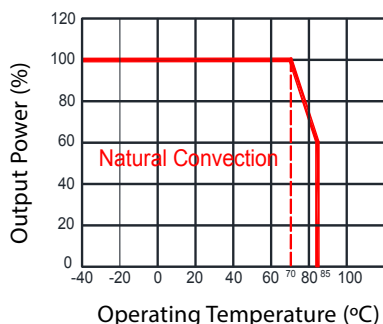
Output Specifications

Output Voltage:	5Vdc	
Output Voltage Accuracy:	±3%	@Vout= 4.85~5.15Vdc@Vin=5Vdc
Output Current:	200mA	
Efficiency:	70% TYP	
Ripple / Noise:	30mVp-p TYP, 75mVp-p MAX	@20MHz bandwidth
Short Circuit Protection:	Continuous	
Line Regulation:	±0.25% TYP	@For 1.0% OF Vin
Load Regulation:	±2% MAX	@10% to 100% full load
Capacitive Load:	2400uF MAX	

General Specifications

Operating Temperature Range:		-40°C ~ +85°C
Storage Temperature:		-55°C ~ +125°C
Switching Frequency:		215KHz TYP
Humidity:		95% MAX
Isolation Voltage:		3000Vdc @Input to Output (60 sec/ 0.5mA)
Isolation Resistance:		1000MΩ MIN @ 500Vdc
Cooling:		Free air convection
MTBF:		>3,500,000 Hours MIL-HDBK-217F@25°C, Ground Benign
Case Material:		DAP
Weight:		2.1g 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 ±4kV perf. Criteria B

Temperature Derating Graph

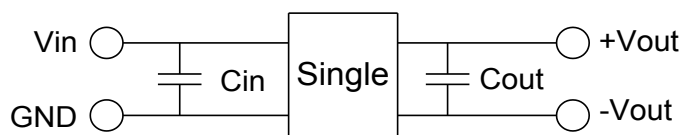


Part Number

EC2 - 05 S 05 R P 3
A B C D E F G

A: Series
B: Input Voltage
C: Single Output (S)
D: Output Voltage
E: Regulated (R)
F: Protection (P)
G: Isolation Voltage

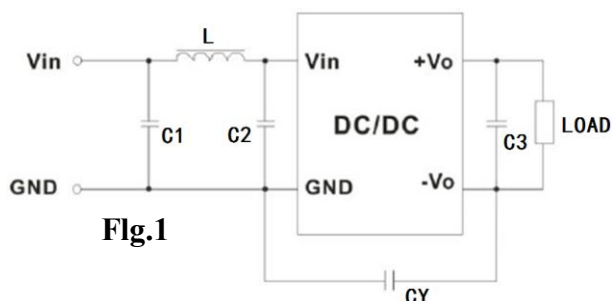
Recommended Test Circuit



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

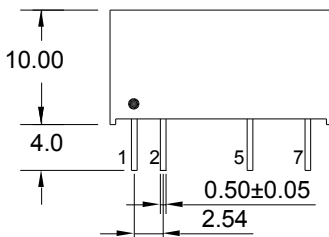
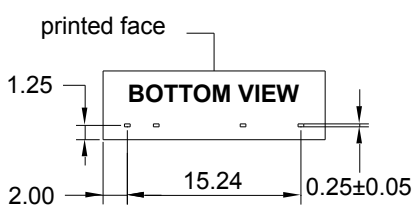
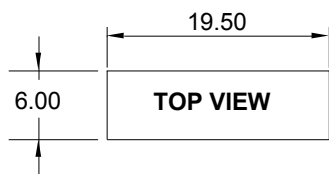
To make sure the product works at perfect operation status, a full loading external capacitor is necessary and it is recommended to use a high frequency low resistance electrolytic capacitor.

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

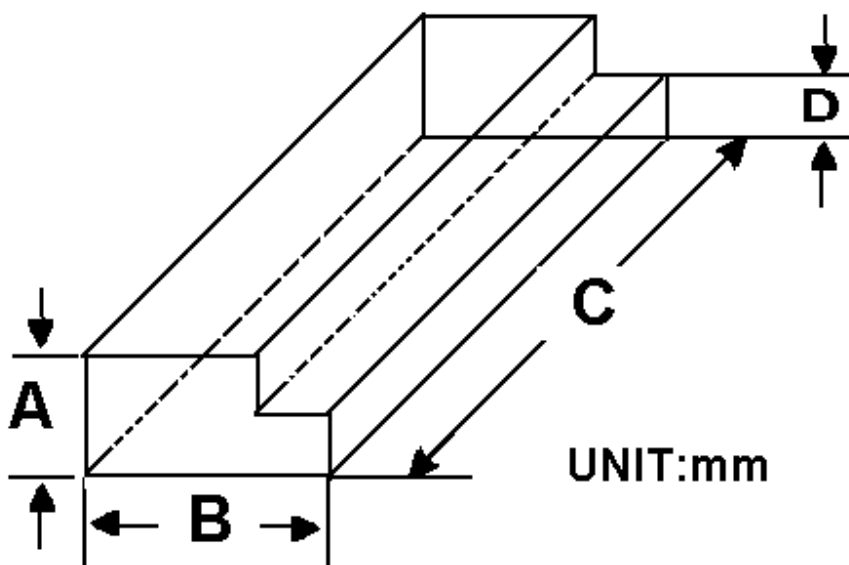
Pin	1	2	5	7
Single	+Vin	-Vin	-Vout	+Vout

Packaging Information

Weight: 2.1 grams/pcs

TUBE: 25 pcs

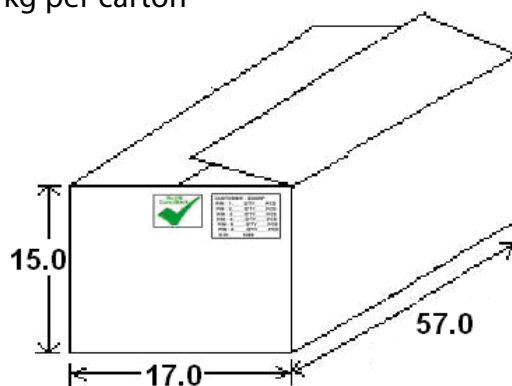
Weight: 73g per tube



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

Outer carton unit: 2500pcs/100Tubes/box

Weight: 7.5 kg per carton



Mouser Electronics

Authorized Distributor

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