



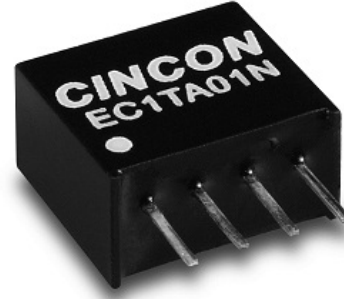
EC1TAN SERIES

1WATT, UNREGULATED OUTPUT DC-DC CONVERTERS



FEATURES

- * Industry Standard SIP Packages
- * Efficiency up to 82%
- * 1000VDC Isolation
- * Low Cost
- * Unregulated Outputs
- * Low Ripple and Noise
- * No Tantalum Capacitors inside



MODEL NUMBER	INPUT VOLTAGE	OUTPUT VOLTAGE	OUTPUT CURRENT	INPUT CURRENT		% EFF.	CAPACITOR LOAD MAX.
				NO LOAD	FULL LOAD		
EC1TA01N	5 VDC	5 VDC	200 mA	40 mA	253 mA	79	220uF
EC1TA02N	5 VDC	12 VDC	84 mA	40 mA	255 mA	79	220uF
EC1TA03N	5 VDC	15 VDC	67 mA	40 mA	251 mA	80	220uF
EC1TA11N	12 VDC	5 VDC	200 mA	15 mA	103 mA	81	220uF
EC1TA12N	12 VDC	12 VDC	84 mA	15 mA	103 mA	81	220uF
EC1TA13N	12 VDC	15 VDC	67 mA	15 mA	102 mA	82	220uF
EC1TA21N	24 VDC	5 VDC	200 mA	7 mA	52 mA	80	220uF
EC1TA22N	24 VDC	12 VDC	84 mA	7 mA	52 mA	80	220uF
EC1TA23N	24 VDC	15 VDC	67 mA	7 mA	52 mA	81	220uF

NOTE: 1. Nominal Input Voltage 5, 12 or 24VDC

SPECIFICATIONS

All Specifications Typical At Nominal Line, Full Load, and 25°C Unless Otherwise Noted

INPUT SPECIFICATIONS :

Input Voltage Range	±10%
Input Surge Voltage (100ms max.)	5V 9Vdc max.
	12V 18Vdc max.
	24V 30Vdc max.
Input Filter	Capacitive

OUTPUT SPECIFICATIONS:

Voltage Accuracy	±3.0% max.
Ripple and Noise, 20MHz BW	100mV pk-pk max.
Temperature Coefficient	±0.05%/°C max.
Short Circuit Protection	Momentary 1sec. max.
Line Regulation (note1)	±1.2% max.
Load Regulation (note2)	±10% max.

GENERAL SPECIFICATIONS :

Efficiency	See Table
Isolation Voltage	1000 VDC min.
Isolation Resistance	10 ⁹ ohm min.
Isolation Capacitance	10pF typ.
Switching Frequency	5&12V Input 90KHz typ.
	24V Input 80KHz typ.

Operating Ambient Temperature Range	-40°C to +85°C
De-rating, Above 85°C	Linearly to Zero power at 100°C
Case temperature (note4)	+100°C max.
Cooling	Natural Convection
Storage Temperature Range	-55°C to +125°C
Humidity	95% RH max. Non condensing
MTBF	MIL-STD-217F, GB 1.7Mhrs min.

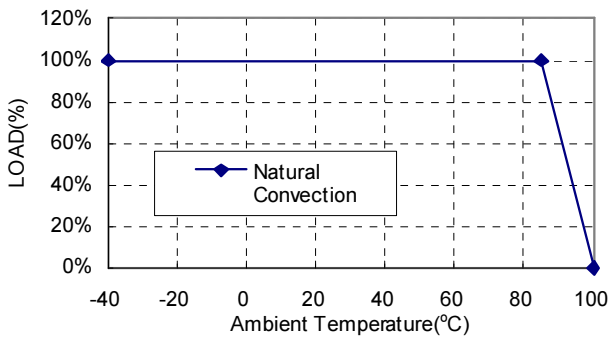
Dimensions:

5&12V input	0.46x0.24x0.40 inches(11.6x6.0x10.2 mm)
24V input	0.46x0.30x0.40 inches(11.6x7.5x10.2 mm)
Case Material	Non-conductive black plastic
Weight	5&12V Input 1.3g
	24V Input 1.7g

NOTE :

1. Line regulation is per 1.0% change in input voltage.
2. Load regulation is for load change from 100% to 20%.
3. The output noise is measured with 0.33uF ceramic capacitor.
4. Maximum case temperature under any operating condition should not be exceeded 100°C.
5. The EC1TA2XN input terminal need to parallel with 4.7uF ceramic capacitor.

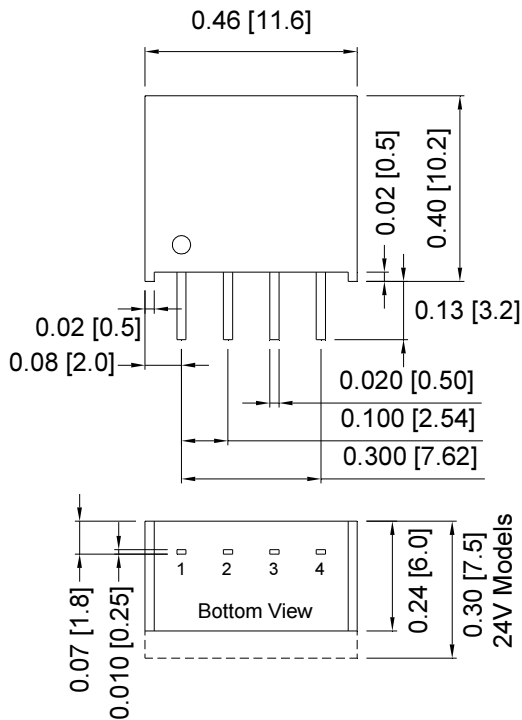
Typical Derating curve for Natural Convection



CASE SIP-4:

All Dimensions In Inches (mm)

Tolerances	Inches	Millimeters
	±0.01	±0.25
Pin	±0.002	±0.05



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

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