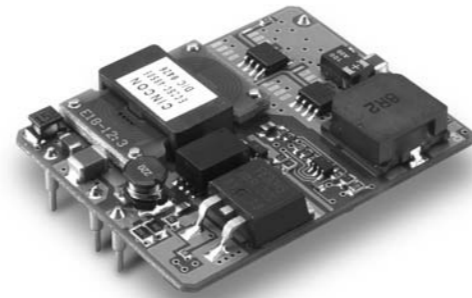


# EC2SC

## 14.4 TO 25 WATT WIDE INPUT DC-DC CONVERTERS SINGLE OUTPUT



### Features

- 14.4 - 25W Isolated Output
- High Efficiency Up to 91%
- Fixed 300KHz Switching Frequency
- 2 : 1 Input Range
- Regulated Outputs
- Continuous Short Circuit Protection
- Six-Sided Metal Case or Open-Frame
- 2" X 1.6" size
- Industry Standard Pin-Out

MODEL NUMBER	INPUT VOLTAGE	OUTPUT VOLTAGE	OUTPUT CURRENT	INPUT CURRENT		%EFF	SIZE
				NO LOAD	FULL LOAD		
EC2SC-24S18	18-36 VDC	1.8 VDC	8 A	70 mA	723 mA	83	SC
EC2SC-24S25	18-36 VDC	2.5 VDC	8 A	70 mA	970 mA	86	SC
EC2SC-24S33	18-36 VDC	3.3 VDC	6 A	70 mA	940 mA	88	SC
EC2SC-24S05	18-36 VDC	5.0 VDC	5 A	70 mA	1170 mA	89	SC
EC2SC-24S12	18-36 VDC	12 VDC	2 A	50 mA	1136 mA	88	SC
EC2SC-24S15	18-36 VDC	15 VDC	1.6 A	50 mA	1136 mA	88	SC
EC2SC-48S18	36-75 VDC	1.8 VDC	8 A	50 mA	353 mA	85	SC
EC2SC-48S25	36-75 VDC	2.5 VDC	8 A	50 mA	479 mA	87	SC
EC2SC-48S33	36-75 VDC	3.3 VDC	6 A	50 mA	465 mA	89	SC
EC2SC-48S05	36-75 VDC	5.0 VDC	5 A	50 mA	572 mA	91	SC
EC2SC-48S12	36-75 VDC	12 VDC	2A	30 mA	562 mA	89	SC
EC2SC-48S15	36-75 VDC	15 VDC	1.6A	30 mA	562 mA	89	SC

NOTE : 1. Nominal Input Voltage 24, 48 VDC

### Specifications

#### INPUT SPECIFICATIONS:

Input Voltage Range.....	24V.....18-36V	48V.....36-75V
Undervoltage lockout .....	24Vin power up ..... 17V	24Vin power down .....16V
	48Vin power up .....34V	48Vin power down .....32V
Positive Logic Remote ON/OFF <sup>4</sup>		
Input Filter .....		PI Type

#### OUTPUT SPECIFICATIONS:

Voltage Accuracy : .....	±1% max.
Transient Response: 75% - 100% Step Load Change	
Error Band .....	±5% Vout nominal
Recovery Time .....	< 300µ sec.
Output Voltage Adjustment Range , %Vo .....	90% - 110%
Ripple & Noise, 20MHz BW (Measured with 0.1µF MLCC)	
1.8V & 2.5V & 3.3V & 5V .....	20mV RMS, max. 75mV pk-pk, max.
12V & 15V .....	20mV RMS, max. 100mV pk-pk, max.
Temperature Coefficient.....	±0.02% / °C
Output Line Regulation <sup>1</sup> .....	±0.5% max.
Output Load Regulation <sup>2</sup> .....	±0.5% max.
Output Over Voltage Protection (Zener Diode Clamp)	
1.8V & 2.5V.....	3.3V
3.3V.....	3.9V
5V.....	6.2V
12V.....	15V
15V.....	18V
Output Current Limit, % Nominal Output .....	110% ~150%
Output Short Circuit Protection .....	Continuous (hiccup mode) .

#### GENERAL SPECIFICATIONS:

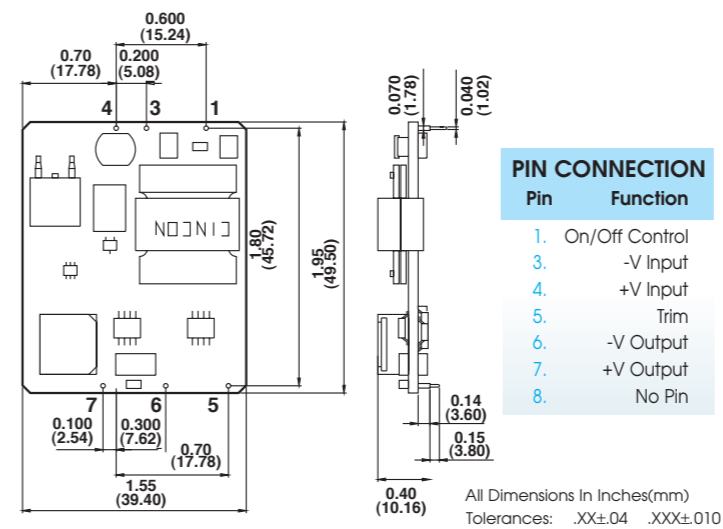
Efficiency.....	See Table
Isolation Voltage .....	1500VDC max.
Isolation Resistance .....	10 <sup>8</sup> ohm min.
Switching Frequency .....	300KHz, Typ
Operating Ambient Temperature <sup>5</sup> .....	-40°C to +85°C
Case Temperature.....	100°C max.
Storage Temperature .....	-55°C to +125°C
Thermal Shutdown Case Temp.....	110°C Typ.
Dimensions:	
Metal Case.....	2.00x1.60x0.45 inches(50.8x40.6x11.4 mm)
Open Frame.....	1.95x1.55x0.40 inches(49.5x39.4x10.16 mm)
Metal Case Material: Black Coated Copper with Non-Conductive Base	
Weight.....	.25g

#### NOTE:

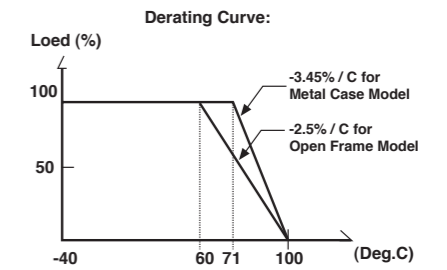
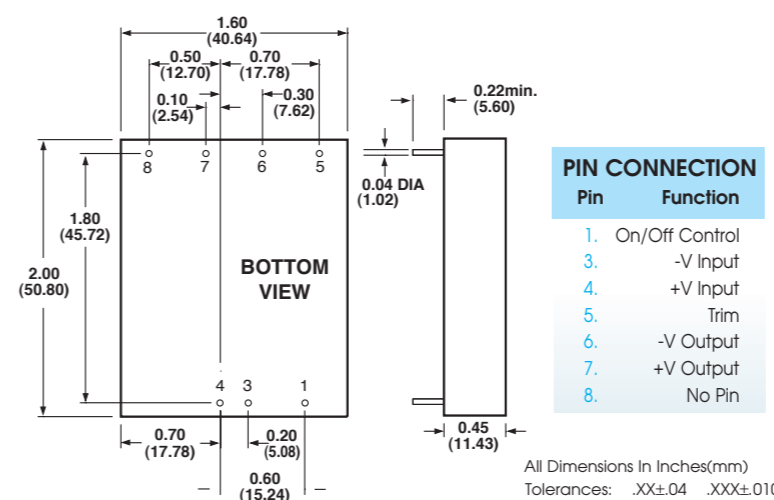
1. Measured From High Line to Low Line
2. Measured From Full Load to 10% Load
3. Logic Compatibility .... CMOS or Open Collector TTL, ref. to -Vin  
Module ON ..... > 3.5Vdc or Open Circuit  
Module OFF ..... < 1.8Vdc
4. Suffix "N" to the Model Number with Negative Logic Remote ON/OFF  
Module ON ..... < 1.8Vdc  
Module OFF ..... >3.5Vdc or Open Circuit
5. Derating :  
Metal Case : Above 71°C, Linearly to Zero power at 100°C  
Open Frame: Above 60°C, Linearly to Zero power at 100°C
6. Suffix "O" to the Model Number with Open Frame Type.

### Mechanical Specification

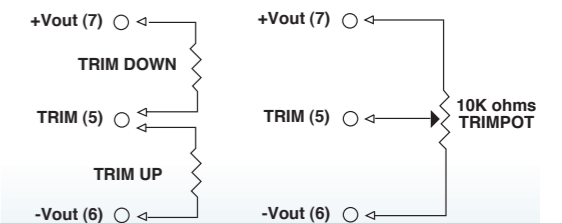
#### Open Frame (Suffix "O")



#### Metal Case



#### External Output Trim



#### Remote ON/OFF Control

