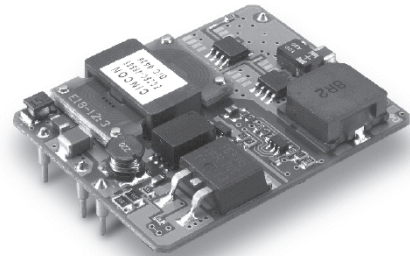
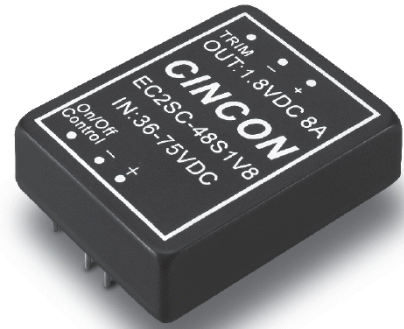


# EC2SC

S E R I E S

## 14.4-25 WATT DC-DC CONVERTERS



### Features

- 14.4-25W Isolated Output
- 2" x 1.6" Six-Sided Shield Metal Case or Open Frame Design
- Regulated Outputs
- Efficiency to 90%
- Fixed 300KHz Switching Frequency
- Continuous Short Circuit Protection
- Remote On/Off Control

MODEL NUMBER	INPUT VOLTAGE	OUTPUT VOLTAGE	OUTPUT CURRENT		INPUT CURRENT		% EFF.	SIZE
			MIN.	MAX.	NO LOAD	FULL LOAD		
EC2SC-12S18	9-18 VDC	1.8 VDC	0mA	8000mA	95mA	1411mA	85	2"x1.6"
EC2SC-12S25		2.5 VDC		8000mA	95mA	1894mA	88	
EC2SC-12S33		3.3 VDC		6000mA	100mA	1875mA	88	
EC2SC-12S05		5.0 VDC		5000mA	105mA	2431mA	89	
EC2SC-12S12		12 VDC		2000mA	60mA	2299mA	87	
EC2SC-12S15		15 VDC		1600mA	85mA	2325mA	86	
EC2SC-24S18	18-36 VDC	1.8 VDC	0mA	8000mA	60mA	714mA	84	2"x1.6"
EC2SC-24S25		2.5 VDC		8000mA	55mA	947mA	88	
EC2SC-24S33		3.3 VDC		6000mA	55mA	927mA	89	
EC2SC-24S05		5.0 VDC		5000mA	60mA	1157mA	90	
EC2SC-24S12		12 VDC		2000mA	30mA	1149mA	87	
EC2SC-24S15		15 VDC		1600mA	50mA	1162mA	86	
EC2SC-48S18	36-75 VDC	1.8 VDC	0mA	8000mA	30mA	357mA	84	2"x1.6"
EC2SC-48S25		2.5 VDC		8000mA	30mA	473mA	88	
EC2SC-48S33		3.3 VDC		6000mA	40mA	463mA	89	
EC2SC-48S05		5.0 VDC		5000mA	40mA	579mA	90	
EC2SC-48S12		12 VDC		2000mA	20mA	568mA	88	
EC2SC-48S15		15 VDC		1600mA	20mA	574mA	87	

NOTE: 1. Nominal Input Voltage 12, 24 or 48 VDC

### Specifications

**INPUT SPECIFICATIONS:**

Input Voltage Range.....9-18V  
 12V.....18-36V  
 24V.....36-75V  
 48V.....8.8V  
 Under Voltage locket.....12Vin Power Up.....8.0V  
 12Vin Power Down.....17V  
 24Vin Power Up.....16V  
 24Vin Power Down.....34V  
 48Vin Power Up.....32V  
 48Vin Power Down.....Pi Type

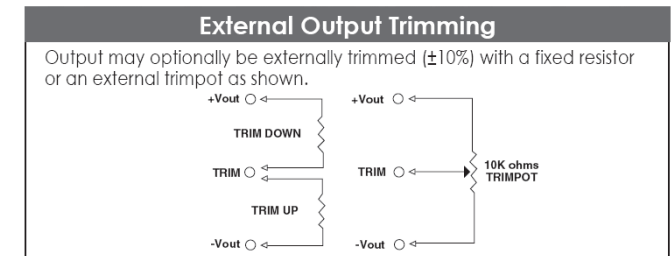
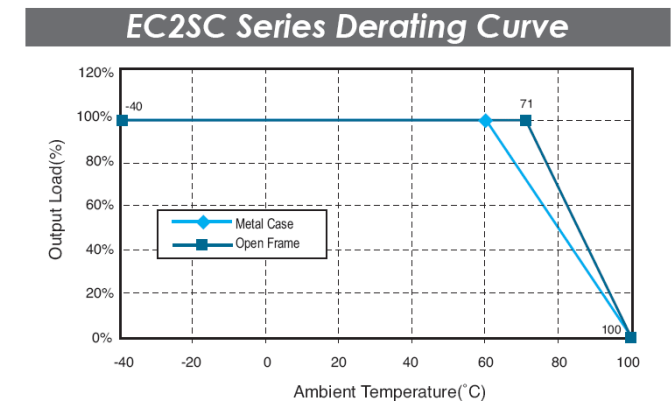
Positive Logic Remote ON/OFF (see note 3 & 4)  
 Input Filter.....

**OUTPUT SPECIFICATIONS:**

Voltage Accuracy.....±1.0% max.  
 Transient Response: 75% - 100% Step Load Change  
 Error Band.....±5% Vout Nominal, Recovery Time.....<300us  
 Output Voltage Adjustment Range.....90% - 110%Vo  
 Ripple & Noise, 20MHz BW (Measured with 0.1µF MLCC)  
 1.8V & 2.5V & 3.3V & 5V.....20mVrms max., 75mVpk-pk max.  
 12V & 15V.....20mVrms max., 100mVpk-pk max.  
 Temperature Coefficient.....±0.02%/°C  
 Line Regulation<sup>1</sup>.....± 0.5% max.  
 Load Regulation<sup>2</sup>.....± 0.5% max.  
 Over Voltage Protection (Zener Diode Clamp)  
 1.8V.....3.3VDC Typ., 2.5V.....3.3VDC Typ.  
 3.3V.....3.9VDC Typ., 5V.....6.2VDC Typ.  
 12V.....15VDC Typ., 15V.....18VDC Typ.  
 Output Current Limit, % Nominal Output.....110% ~ 150%  
 Output Short Circuit Protection.....Continuous (Hiccup Mode)

**GENERAL SPECIFICATIONS:**

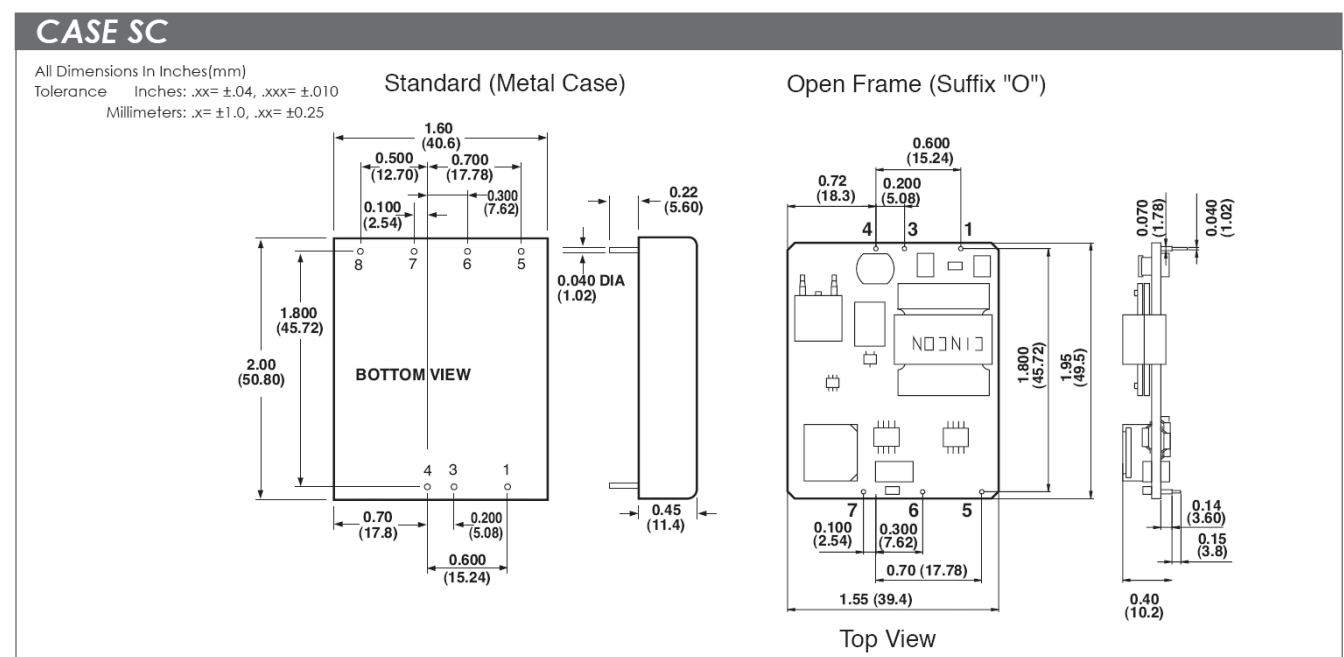
Efficiency.....See Table  
 Isolation Voltage.....Input/Output.....1500VDC max.  
 Isolation Resistance.....10<sup>9</sup> Ohm min.  
 Switching Frequency.....300KHz, Typical  
 Operating Ambient Temperature .....-40°C to + 85°C  
 De-Rating:  
 Metal Case: Above 71°C.....Linearly to Zero Power at 100°C  
 Open Frame: Above 60°C.....Linearly to Zero Power at 100°C  
 Case Temperature<sup>2</sup>.....100°C max.  
 Cooling .....Natural Convection  
 Storage Temperature.....-55°C to + 125°C  
 Thermal Shutdown, Case Temperature.....110°C Typical  
 Dimensions:  
 Metal Case.....2.00 x 1.60 x 0.45 inches(50.8 x 40.6 x 11.4mm)  
 Open Frame.....1.95 x 1.55 x 0.40 inches(49.5 x 39.4 x 10.2mm)  
 Metal Case Material..Black Coated Copper with Non-Conductive Base  
 Weight.....Metal Case: 55g , Open Frame: 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 to 75VDC 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 to 75VDC or Open Circuit
  5. Suffix 'O' to the Model Number with Open Frame Type.
  6. Maximum case temperature under any operating condition should not exceed 100°C.

### PIN CONNECTION

Pin	Function
1	On/Off Control
3	-V Input
4	+V Input
5	Trim
6	-V Output
7	+V Output
8	No Pin



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