

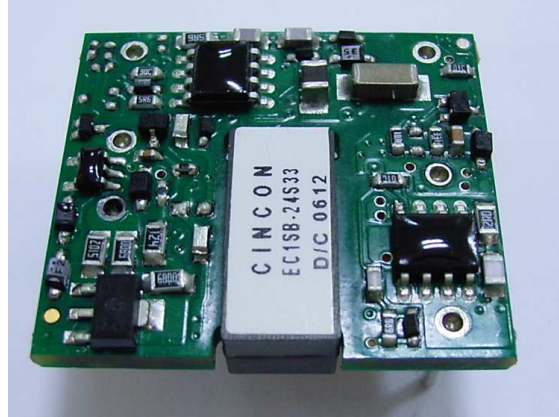


## EC1SB SERIES 13.2 TO 15 WATT OPEN FRAME DC-DC CONVERTERS



### FEATURES

- \* 13.2 – 15W Isolated Output
- \* 1.1"x1" Open Frame Design
- \* Efficiency to 89%
- \* Regulated Outputs
- \* Fixed Switching Frequency
- \* Input Under Voltage Protection
- \* Over Current Protection
- \* Remote On/Off
- \* Continuous Short Circuit Protection
- \* Fully Isolated 2250VDC
- \* CE Mark Meets 2004/108/EC
- \* UL60950-1 Approval



MODEL NUMBER	INPUT VOLTAGE	OUTPUT VOLTAGE	OUTPUT CURRENT		INPUT CURRENT		% EFF.	CAPACITOR LOAD MAX.
			MIN.	MAX.	NO LOAD	FULL LOAD		
EC1SB -24S33	18-36 VDC	3.3 VDC	0 mA	4000 mA	50 mA	639 mA	86	4000uF
EC1SB -24S05	18-36 VDC	5 VDC	0 mA	3000 mA	50 mA	718 mA	87	3000uF
EC1SB -24S12	18-36 VDC	12 VDC	0 mA	1250 mA	40 mA	718 mA	87	1250uF
EC1SB -24S15	18-36 VDC	15 VDC	0 mA	1000 mA	40 mA	718 mA	87	1000uF
EC1SB -48S33	36-75 VDC	3.3 VDC	0 mA	4000 mA	30 mA	320 mA	86	4000uF
EC1SB -48S05	36-75 VDC	5 VDC	0 mA	3000 mA	30 mA	359 mA	87	3000uF
EC1SB -48S12	36-75 VDC	12 VDC	0 mA	1250 mA	30 mA	351 mA	89	1250uF
EC1SB -48S15	36-75 VDC	15 VDC	0 mA	1000 mA	30 mA	351 mA	89	1000uF

NOTE: 1. Nominal Input Voltage 24 or 48VDC

# SPECIFICATIONS

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

## INPUT SPECIFICATIONS:

Input Voltage Range.....	24V .....18 - 36V
	48V ..... 36 - 75V
Input Surge Voltage (100ms max.) .....	24V ..... 50Vdc max.
	48V ..... 100Vdc max.
Under Voltage Lockout .....	24Vin power up ..... 17V
	24Vin power down ..... 16V
	48Vin power up ..... 34V
	48Vin power down ..... 32.5V
Input Filter .....	Capacitive Type
Positive Logic Remote on/off Control:	
Logic Compatibility .....	CMOS or Open Collector TTL
Module ON .....	>+5.5VDC to 75Vdc or Open Circuit
Module OFF .....	<1.2VDC

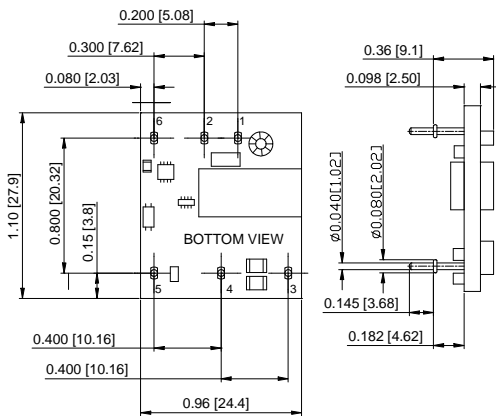
## OUTPUT SPECIFICATIONS:

Voltage Accuracy .....	±1.5% max.
Transient Response: 25% Step Load Change .....	<500us
Ripple and Noise 20MHz BW .....	Vo=3.3 & 5V ..... 75mV pk-pk max.
	Vo=12 & 15V ... 100mV pk-pk max.
Temperature Coefficient .....	±0.03%/°C max.
Short Circuit Protection .....	Continuous
Line Regulation (note1) .....	±0.2% max.
Load Regulation (note2) .....	±0.2% max.
Over Voltage Protection .....	Zener or TVS Clamp
External Trim Adj. Range .....	±10%
Current Limit .....	110% - 140% Nominal Output
Start up time .....	8ms typ.

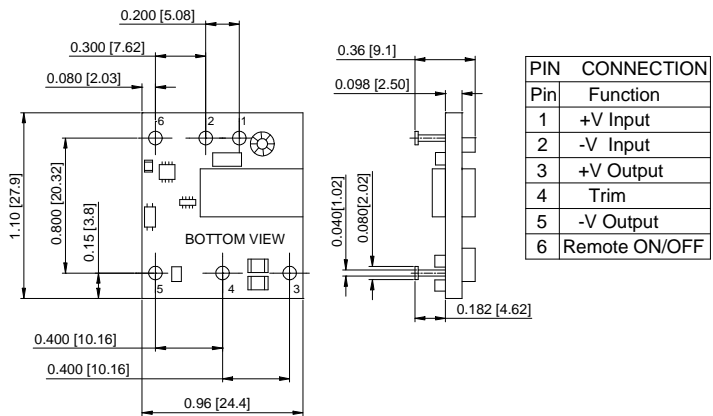
## SIZE SB Dimensions :

All Dimmension in inches(mm)  
 Tolerances: x.xx in ± 0.02 in (x.x mm ± 0.5 mm)  
 x.xxx in ± 0.010 in (x.xx mm ± 0.25 mm)

THROUGH-HOLE PACKAGE

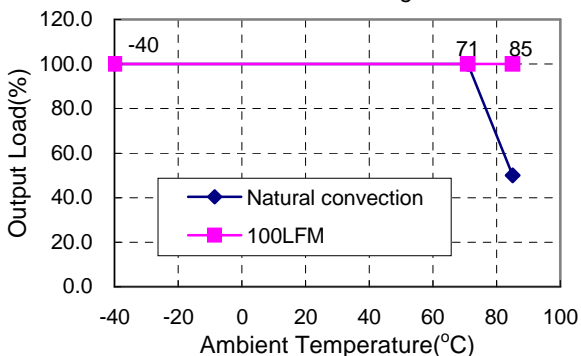


SMD-PACKAGE



PIN	CONNECTION
Pin	Function
1	+V Input
2	-V Input
3	+V Output
4	Trim
5	-V Output
6	Remote ON/OFF

EC1SB Series Derating Curve



## EXTERNAL OUTPUT TRIM

