



EC2SB SERIES 10 WATT 2:1 INPUT DC-DC CONVERTERS

FEATURE

- * 10W Isolated Output
- * Efficiency to 87%
- * 2:1 INPUT RANGE
- * Regulated Outputs
- * Fixed Switching Frequency
- * Input under-voltage Protection
- * Over Current Protection
- * Remote ON/OFF
- * Continuous Short Circuit Protection
- * Without Tantalum Capacitors inside

EC2SB Series

MODEL NUMBER	INPUT VOLTAGE	OUTPUT VOLTAGE	OUTPUT CURRENT		INPUT CURRENT		% EFF.	SIZE
			MIN.	MAX.	NO LOAD	FULL LOAD		
EC2SB -12S33	9-18 VDC	3.3 VDC	0 mA	2500 mA	25 mA	838 mA	82	1"x1"
EC2SB -12S05	9-18 VDC	5 VDC	0 mA	2000 mA	25 mA	980 mA	85	1"x1"
EC2SB -12S12	9-18 VDC	12 VDC	0 mA	833 mA	25 mA	957 mA	87	1"x1"
EC2SB -12S15	9-18 VDC	15 VDC	0 mA	666 mA	25 mA	956 mA	87	1"x1"
EC2SB -24S33	18-36 VDC	3.3 VDC	0 mA	2500 mA	20 mA	419 mA	82	1"x1"
EC2SB -24S05	18-36 VDC	5 VDC	0 mA	2000 mA	20 mA	490 mA	85	1"x1"
EC2SB -24S12	18-36 VDC	12 VDC	0 mA	833 mA	20 mA	478 mA	87	1"x1"
EC2SB -24S15	18-36 VDC	15 VDC	0 mA	666 mA	20 mA	478 mA	87	1"x1"
EC2SB -48S33	36-75 VDC	3.3 VDC	0 mA	2500 mA	20 mA	212 mA	81	1"x1"
EC2SB -48S05	36-75 VDC	5 VDC	0 mA	2000 mA	20 mA	245 mA	85	1"x1"
EC2SB -48S12	36-75 VDC	12 VDC	0 mA	833 mA	20 mA	239 mA	87	1"x1"
EC2SB -48S15	36-75 VDC	15 VDC	0 mA	666 mA	20 mA	239 mA	87	1"x1"

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

SPECIFICATIONS

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

INPUT SPECIFICATIONS:

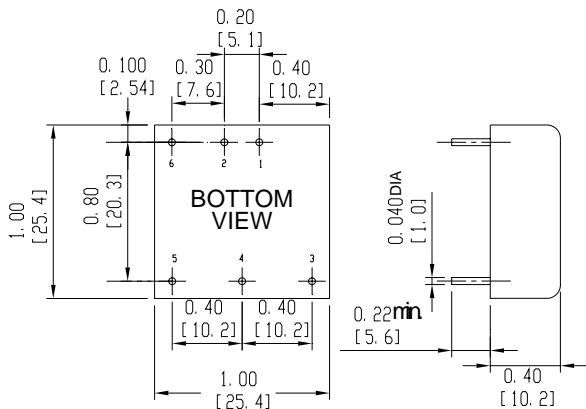
Input Voltage Range	12V	9 - 18V
	24V	18 - 36V
	48V	36 - 75V
Under voltage lockout	12Vin power up	9V
	12Vin power down	8V
	24Vin power up	17V
	24Vin power down	16V
	48Vin power up	34V
	48Vin power down	32V
Input Filter	PI Type	
Positive Logic Remote on/off Control :		
Logic Compatibility	CMOS or Open Collector TTL	
Module ON	>+5.5V to 75VDC or Open Circuit	
Module OFF	<1.2VDC	

OUTPUT SPECIFICATIONS:

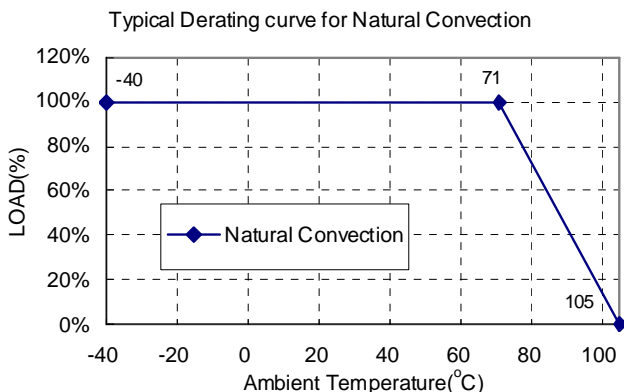
Voltage Accuracy	±1.5% max.
Transient Response: 25% Step Load Change	<500u sec.
Ripple and Noise, 20MHz BW	Vo=3.3 & 5V 50mV p-p max.
	Vo=12 & 15V 50mV p-p max.
Temperature Coefficient	±0.03%/C max.
Short Circuit Protection	Continuous
Line Regulation, Note1	±0.2% max.
Load Regulation, Note2	±0.2% max.
Over Voltage Protection	Zener or TVS Clamp
External Trim Adj. Range	±10%
Current Limit	110% - 140% Nominal Output

SIZE SB Dimensions:

Tolerances Inches: X.XX= ±0.04 , X.XXX= ±0.010
 Millimeters: X.X= ±1.0 , X.XX=±0.25



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



GENERAL SPECIFICATIONS:

Efficiency	See Table
Isolation Voltage	1500 VDC min.
Isolation Resistance	10 ⁹ Ohms min.
Switching Frequency	350KHz typ.
Operating Ambient Temperature Range	-40°C to +85°C
Derating, Above 71°C	Linearly to Zero Power at +105°C
Case Temperature (note 6)	105°C
Cooling	Natural Convection
Storage Temperature Range	-55°C to +125°C
Dimensions	1.00x1.00x0.4 inches (25.4x25.4x10.2mm)

Case Material Black Coated Copper with Non-Conductive Base
 Weight.....18.4g

NOTE :

1. Measured From High Line to Low Line
2. Measured From Full Load to min. Load
3. The output ripple and noise is measured with 10uF tantalum and 1uF Ceramic capacitor across output.
4. Maximum case temperature under any operating condition should Not be exceeded 105°C.

EXTERNAL OUTPUT TRIM

