

EC2SA

S E R I E S

NEW



2 WATT REGULATED DC-DC CONVERTERS



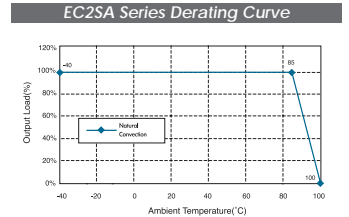
Features

- 2W Isolated Output
- SIP-8 Package
- Efficiency to 83%
- 2:1 Input Range
- Regulated Outputs
- Remote On/Off Control
- 1500VDC Isolation
- Continuous Short Circuit Protection

MODEL NUMBER	INPUT VOLTAGE	OUTPUT VOLTAGE	OUTPUT CURRENT		INPUT CURRENT		% EFF.	CASE
			MIN.	MAX.	NO LOAD	FULL LOAD		
EC2SA-05S33	4.5-9.0 VDC	3.3VDC	0 mA	500 mA	60 mA	458 mA	72	SIP-8
EC2SA-05S05		5VDC	0 mA	400 mA		526 mA	76	
EC2SA-05S12		12VDC	0 mA	167 mA		507 mA	79	
EC2SA-05S15		15VDC	0 mA	134 mA		503 mA	80	
EC2SA-05D05		±5VDC	±0 mA	±200 mA		526 mA	76	
EC2SA-05D12	±12VDC	±0 mA	±83 mA	498 mA	80	SIP-8		
EC2SA-05D15	±15VDC	±0 mA	±67 mA	503 mA	80			
EC2SA-12S33	9-18 VDC	3.3VDC	0 mA	500 mA	30 mA		186 mA	74
EC2SA-12S05		5VDC	0 mA	400 mA			214 mA	78
EC2SA-12S12		12VDC	0 mA	167 mA			206 mA	81
EC2SA-12S15		15VDC	0 mA	134 mA		204 mA	82	
EC2SA-12D05		±5VDC	±0 mA	±200 mA		208 mA	80	
EC2SA-12D12	±12VDC	±0 mA	±83 mA	202 mA	82	SIP-8		
EC2SA-12D15	±15VDC	±0 mA	±67 mA	204 mA	82			
EC2SA-24S33	18-36 VDC	3.3VDC	0 mA	500 mA	18 mA		90 mA	76
EC2SA-24S05		5VDC	0 mA	400 mA			107 mA	78
EC2SA-24S12		12VDC	0 mA	167 mA			103 mA	81
EC2SA-24S15		15VDC	0 mA	134 mA		102 mA	82	
EC2SA-24D05		±5VDC	±0 mA	±200 mA		107 mA	78	
EC2SA-24D12	±12VDC	±0 mA	±83 mA	102 mA	81	SIP-8		
EC2SA-24D15	±15VDC	±0 mA	±67 mA	102 mA	82			
EC2SA-48S33	36-75 VDC	3.3VDC	0 mA	500 mA	9 mA		46 mA	74
EC2SA-48S05		5VDC	0 mA	400 mA			53 mA	78
EC2SA-48S12		12VDC	0 mA	167 mA			51 mA	82
EC2SA-48S15		15VDC	0 mA	134 mA		50 mA	83	
EC2SA-48D05		±5VDC	±0 mA	±200 mA		53 mA	78	
EC2SA-48D12	±12VDC	±0 mA	±83 mA	50 mA	83	SIP-8		
EC2SA-48D15	±15VDC	±0 mA	±67 mA	51 mA	82			

NOTE: 1. Nominal Input Voltage 5, 12, 24 or 48 VDC

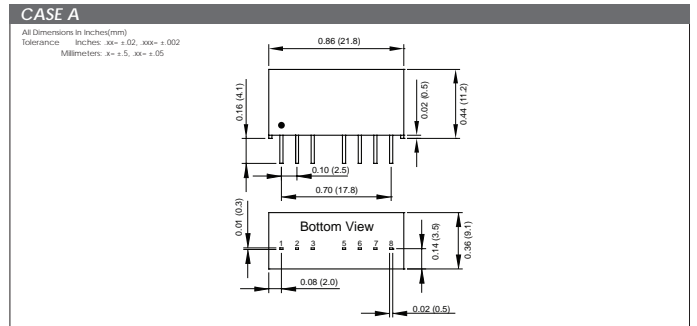
Specifications	
INPUT SPECIFICATIONS:	
Input Voltage Range	5V.....4.5-9V 12V.....9-18V 24V.....18-36V 48V.....36-75V
Input Filter	Capacitive
Remote on/off control:	
Module On	< 1.2VDC or Open Circuit
Module Off	5.5...15VDC
Module Off (input idle current)	1mA max.
OUTPUT SPECIFICATIONS:	
Voltage Accuracy	±1.5% max.
Voltage Balance (Dual)	±1.0% max.
Cross regulation (Dual)	Asymmetrical load 25%/100% ±5.0% max.
Transient Response: 25% Step Load Change	
Error Band	±6% Vout nominal
Recovery Time	< 500µs
Ripple & Noise: 20MHz BW	75mV pk-pk, max.
Temperature Coefficient	±0.03%/°C
Line Regulation ¹	±0.5% max.
Load Regulation ¹	±0.5% max.
Dual	±1.0% max.
Output Short Circuit Protection	Continuous
GENERAL SPECIFICATIONS:	
Efficiency	See Table
Isolation Voltage	1500VDC min.
Isolation Resistance	10 ¹⁰ ohm min.
Switching Frequency	100kHz min.
Operating Ambient Temperature	-40°C to +85°C
De-rating, Above 85°C	Linearly to Zero power at 100°C
Case Temperature ²	100°C max.
Cooling	Natural Convection
Storage Temperature	-55°C to +125°C
Dimensions	0.86×0.36×0.44 inches (21.8×9.2×11.10 mm)
Case Material	Non-Conductive Black Plastic
Weight	4.8g



NOTE:

1. For asymmetric loading, Both channels must be at 25% load or more.
2. Measured From High Line to Low Line.
3. Measured from Full Load to 10% Load.
4. Maximum case temperature under any operating condition should not exceed 100°C.

PIN CONNECTION		
Pin	Single Output	Dual Outputs
1	-V Input	-V Input
2	+V Input	+V Input
3	CTRL	CTRL
5	NC	NC
6	+V Output	+V Output
7	-V Output	Common
8	NC	-V Output



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