

EC2SA Series

2 WATTS - DC/DC SINGLE & MULTIPLE OUTPUT

FEATURES

- Industry Standard SIP and SMD Packages
- Input range
- Single and Multiple Outputs
- Efficiency up to 83%
- 1500VDC Isolation
- Low Cost
- Regulated Outputs
- Low Ripple and Noise
- Remote On/Off control
- Short circuit protection



SPECIFICATIONS

INPUT		
DC input voltage range	5V	4.5-9V
	12V	9-18V
	24V	8-36V
	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.
Isolation voltage	1500 VDC min	
Isolation resistance	10 ⁹ Ohms min	
OUTPUT		
Output voltage	See table	
Output current	See table	
Voltage accuracy	±1.5.0% max.	
Voltage balance	±1.0% max. Dual	
Cross regulation (Note1)	Asymmetrical load 25%/100% ±5.0% max. Dual	
Transient Response	25% Step Load Change	
	Error Band	±6% Vout nominal
	Recovery Time	< 500us
Ripple and noise, 20MHz BW	75mV p-p max	
Temperature coefficient	±0.03%/C max	
Short circuit protection	Momentary 1sec max	
Line regulation (Note2)	±0.5% max	
Load regulation (Note3)	±0.5% max, Single	
	±1.0% max, Dual	
Efficiency	See table	
Switching frequency	100kHz	
Short circuit protection	Continuous	

ENVIRONMENTAL	
Operating ambient temperature range	
De-rating	See curve
Case temperature (Note4)	+100°C max
Cooling	Natural convection
Storage temperature range	-55°C to +125°C
Humidity	95% RH max. Non condensing
MTBF	MIL-STD-217F,GB 1.7Mhrs min
MECHANICAL	
Dimensions	21.8 x 9.2 x 11.1mm
Weight	4.8g
Case material	Non-conductive black plastic

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	MULTIPLE OUTPUT
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

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DC-DC PCB MOUNTED CONVERTERS & POWER MODULES

SELECTION TABLE

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

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

TECHNICAL ILLUSTRATION

