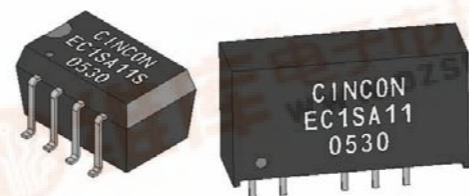


# EC1SA

NEW

PRELIMINARY



## 1 WATT DC-DC CONVERTERS

### Features

- Industry Standard SIP and SMD Packages
- Efficiency up to 82%
- 1000VDC Isolation
- Low Cost
- Unregulated Outputs
- Low Ripple and Noise

MODEL NUMBER	INPUT VOLTAGE	OUTPUT VOLTAGE	OUTPUT CURRENT	INPUT CURRENT NO LOAD	INPUT CURRENT FULL LOAD	%EFF	CASE
EC1SA01N	5 VDC	5 VDC	200 mA	30 mA	250mA	80	Miniature
EC1SA02N	5 VDC	12 VDC	84 mA	30 mA	252mA	80	Miniature
EC1SA03N	5 VDC	15 VDC	67 mA	30 mA	248mA	81	Miniature
EC1SA04N	5 VDC	±12 VDC	42 mA	30 mA	255mA	79	Miniature
EC1SA05N	5 VDC	±15 VDC	33 mA	30 mA	251mA	79	Miniature
EC1SA06N	5 VDC	±5 VDC	100 mA	30 mA	267mA	75	Miniature
EC1SA11N	12 VDC	5 VDC	200 mA	15 mA	103mA	81	Miniature
EC1SA12N	12 VDC	12 VDC	84 mA	15 mA	104mA	81	Miniature
EC1SA13N	12 VDC	15 VDC	67 mA	15 mA	102mA	82	Miniature
EC1SA14N	12 VDC	±12 VDC	42 mA	15 mA	105mA	80	Miniature
EC1SA15N	12 VDC	±15 VDC	33 mA	15 mA	103mA	80	Miniature
EC1SA16N	12 VDC	±5 VDC	100 mA	15 mA	111mA	75	Miniature

NOTE: 1. Nominal Input Voltage 5 or 12 VDC

### Specifications

#### INPUT SPECIFICATIONS:

Input Voltage Range.....±10%  
Input Filter.....Capacitive

#### OUTPUT SPECIFICATIONS:

Voltage Accuracy.....± 3.0% max.  
Ripple and Noise, 20MHz BW...SIP Models.....75mV p-p max.  
SMD Models.....120mV p-p max.  
Temperature Coefficient.....± 0.02% / °C max.  
Short Circuit Protection.....Momentary 1sec. max.  
Line Regulation<sup>1</sup>.....± 1.2% max.  
Load Regulation<sup>2</sup>.....± 10% max.

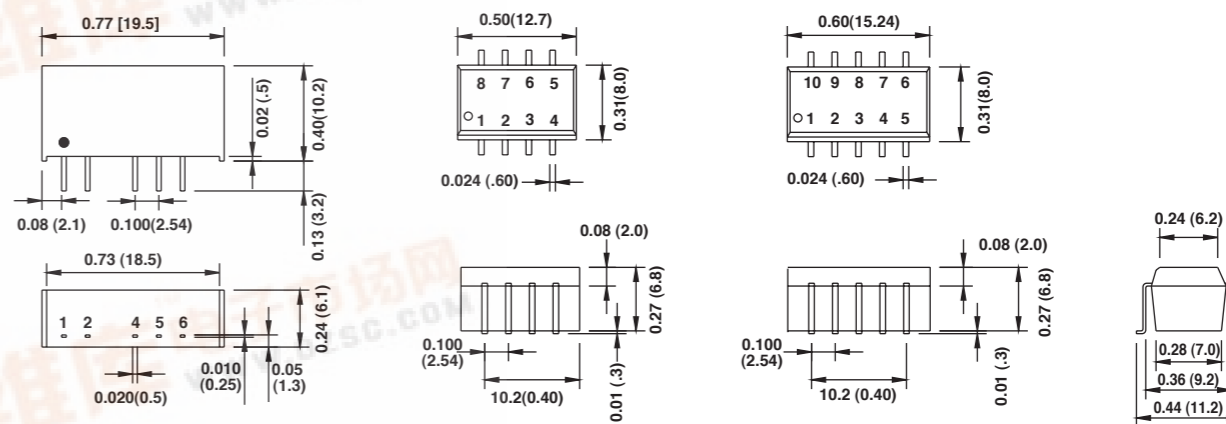
#### GENERAL SPECIFICATIONS:

Efficiency.....See Table  
Isolation Voltage.....1000 VDC min.  
Isolation Resistance.....10<sup>9</sup> ohms min.  
Switching Frequency.....100KHz, typ.  
Operating Ambient Temperature Range.....-40°C to + 85°C  
Case Temperature.....+95°C max.  
Cooling.....Free-Air Convection  
Storage Temperature Range.....-55°C to + 125°C  
Dimensions :  
SIP Models.....0.77 x 0.24 x 0.40inches(19.5 x 6.1 x 10.2mm)  
SMD Models(Single).....0.5 x 0.31 x 0.27inches(12.7 x 8.0 x 6.8mm)  
SMD Models(Dual).....0.6 x 0.31 x 0.27inches(15.24 x 8.0 x 6.8mm)  
Case Material.....SIP Models.....Non-conductive black plastic  
SMD Models.....Epoxy molding compound  
Weight.....1.8g

#### NOTE:

1. Line regulation is per 1.0% change in input voltage
2. Load regulation is for load change from 100% to 20%
3. Suffix "S" to the model number with SMD packages

### CASE Miniature



PIN CONNECTION		
Pin	Single Output	Dual Output
1	+Vin	+Vin
2	-Vin	-Vin
4	-Vout	-Vout
5	No Pin	Common
6	+Vout	+Vout

PIN CONNECTION	
Pin	Single Output
1	-Vin
2	+Vin
3	NA
4	-Vout
5	+Vout
6	NA
7	NA
8	NA

PIN CONNECTION	
Pin	Dual Output
1	-Vin
2	+Vin
3	NA
4	Common
5	-Vout
6	NA
7	+Vout
8	NA
9	NA
10	NA