

EC1SC

**20 WATT WIDE INPUT
DC-DC CONVERTERS**



Features

- 20W Isolated Output
- Efficiency to 84%
- 4:1 Input Range
- Pi Input Filter
- Continuous Short Circuit Protection
- Meets EN55022 Class A, Conducted
- Remote On/Off Control

MODEL NUMBER	INPUT VOLTAGE	OUTPUT VOLTAGE	OUTPUT CURRENT	INPUT CURRENT NO LOAD	INPUT CURRENT FULL LOAD	%EFF	CASE
EC1SC01		5 VDC	4000mA	15mA	1029 mA	81	
EC1SC02		12 VDC	1670mA	15mA	1006 mA	83	
EC1SC03		15 VDC	1330mA	15mA	1004 mA	83	
EC1SC04	9-36 VDC	±12 VDC	±833mA	20mA	1004 mA	83	SC
EC1SC05		±15 VDC	±666mA	20mA	1004 mA	83	
EC1SC06		±5 VDC	±2000mA	20mA	1004 mA	83	
EC1SC07		3.3 VDC	4000mA	15mA	705 mA	78	
EC1SC11		5 VDC	4000mA	10mA	508 mA	82	
EC1SC12		12 VDC	1670mA	10mA	497 mA	84	
EC1SC13		15 VDC	1330mA	10mA	496 mA	84	
EC1SC14	18-72 VDC	±12 VDC	±833mA	15mA	496 mA	84	SC
EC1SC15		±15 VDC	±666mA	15mA	496 mA	84	
EC1SC16		±5 VDC	±2000mA	15mA	496 mA	84	
EC1SC17		3.3 VDC	4000mA	10mA	353 mA	78	

NOTE : 1. Nominal Input Voltage 24 or 48 VDC

Specifications

INPUT SPECIFICATIONS:

Input Voltage Range 24V 9-36V
 48V 18-72V

Input Filter Pi Type
 Positive Logic Remote ON/OFF Control See Note3

OUTPUT SPECIFICATIONS:

Voltage Accuracy Single Output ±1.0% max.
 Voltage Accuracy Dual + Output ±1.0% max.
 Voltage Accuracy Dual - Output ±2.0% max.
 Voltage Balance, Dual Output at Full Load ±1.0% max.
 Transient Response
 Single 25% Step Load Change <500µ sec.
 Dual-RL-1/2L ±1% Error Band <500µ sec.
 External Trim Adj. Range ±10%
 Ripple & Noise, 20MHz BW 20mV RMS, max.
 75mV p-p max.
 Temperature Coefficient ±0.02%/°C max.
 Short Circuit Protection Continuous
 Line Regulation, Single / Dual Output ±0.5% max.
 Load Regulation, Single / Dual Output ±0.5% max.

GENERAL SPECIFICATIONS:

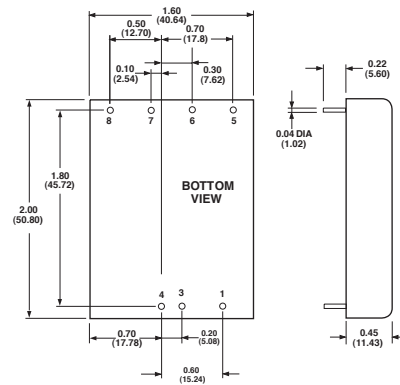
Efficiency See Table
 Isolation Voltage 1500 VDC min.
 Isolation Resistance 10⁹ Ohms min.
 Switching Frequency 300kHz typ.
 Operating Temperature Range -25°C to +71°C
 Derating, Above 50°C Linearly to Zero Power at +100°C
 Case Temperature 100°C max.
 Storage Temperature Range -55°C to +105°C
 EMI / RFI Six Sided Continuous Shield
 Dimensions 2 x 1.6 x 0.45 inches
 (50.8 x 40.64 x 11.43mm)
 Case Material Black Coated Copper with Non-Conductive Base
 Weight 53g

NOTE:

1. Measured From High Line to Low Line.
2. Measured From Full Load to 1/4 Load.
3. Remote On/Off Control:
 Logic Compatibility CMOS or Open Collector TTL
 EC-ON >+5.5VDC or Open Circuit
 EC-OFF <1.8 VDC
 Control Common Referenced to Input Minus

CASE SC

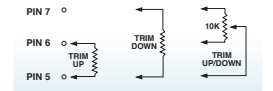
All Dimensions in Inches(mm)
 Tolerance .xxx ±.04, .xxxx ±.010



Pin	Single Output	Dual Output
1	On/Off Control	On/Off Control
3	-Vin	-Vin
4	+Vin	+Vin
5	Trim	Trim
6	-Vout	-Vout
7	+Vout	Common
8	No Pin	+Vout

External Output Trimming

Output may optionally be externally trimmed (±10%) with a fixed resistor or an external trimpot as shown.



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