

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 -FL-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 ¹ , Single / Dual Output		±0.5% max.
Load Regulation ² , Single / Dual Output.....		±0.5% max.

GENERAL SPECIFICATIONS:

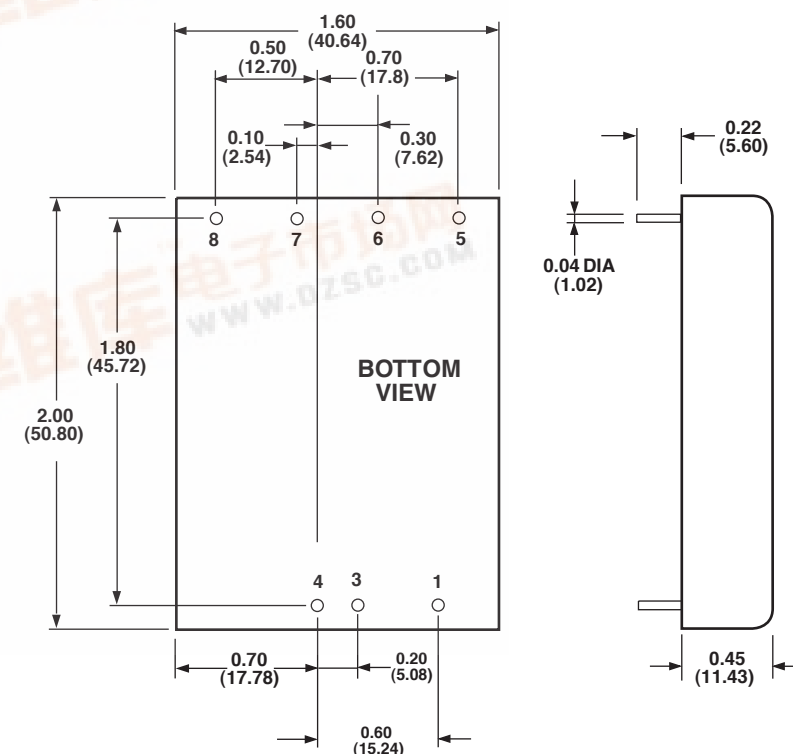
Efficiency.....	See Table
Isolation Voltage.....	1500 VDC min.
Isolation Resistance.....	10 ⁸ Ohms min.
Switching Frequency	300KHz Typ.
Operating Temperature Range.....	-25°C to +71°C
Derating, Above 60°C.....	Linearly to Zero Power at + 100°C
Case Temperature.....	100°C max.
Storage Temperature Range.....	-55°C to +105°C
EMI / RFI.....	Six Sided Continuous Shield
Dimensions	2 x1.6 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 .xx= ±.04, .xxx= ±.010



PIN CONNECTION

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.

