

FEATURES:

- Fixed voltage input, unregulated single/dual output, 2W
- Continuous short-circuit protection, self recover
- I/O isolation voltage 3KV
- Working temperature: $-40^{\circ}\text{C} \sim +105^{\circ}\text{C}$
- No additional components required
- Stable performance and high reliability (MTBF \geq 3500K hours)
- Industry standard pin-out
- Flame-retardant case to meet UL94-V0 requirements
- DIP package

Selection Guide

Part No.	INPUT		OUTPUT			Full Load Efficiency (%/Typ)	Capacitive Load (μF)
	Normal (Vdc)	Range (Vdc)	Voltage (Vdc)	Min current (mA)	Max current (mA)		
E0503D-2WR3	5	4.5-5.5	± 3.3	± 30	± 303	78	1200
E0505D-2WR3			± 5	± 20	± 200	84	1200
E0509D-2WR3			± 9	± 11	± 111	85	470
E0512D-2WR3			± 12	± 8	± 83	85	220
E0515D-2WR3			± 15	± 7	± 67	86	220
E0524D-2WR3			± 24	± 4	± 42	86	100
F0503D-2WR3			3.3	40	400	78	2400
F0505D-2WR3			5	40	400	84	2400
F0509D-2WR3			9	22	222	85	1000
F0512D-2WR3			12	17	167	85	560
F0515D-2WR3			15	13	133	86	560
F0524D-2WR3			24	8	83	86	220

customized accepted, pls contact sales for details

Input Specifications

Input Filter	Capacitive Filter	
Ctrl	NONE	
	NONE	
Hot Plug	Unavailable	

Output Specifications

Item	Typ	Max	Test Conditions
Voltage Accuracy	$\pm 1\%$	$\pm 3\%$	input voltage range and load
Line Regulation	$\pm 0.2\%$	$\pm 0.5\%$	Input voltage from low to high voltage, full load
Load Regulation	$\pm 0.5\%$	$\pm 1\%$	10% to 100% full load
Ripple & Noise	50mVp-p	150mVp-p	20MHz Bandwidth, full load

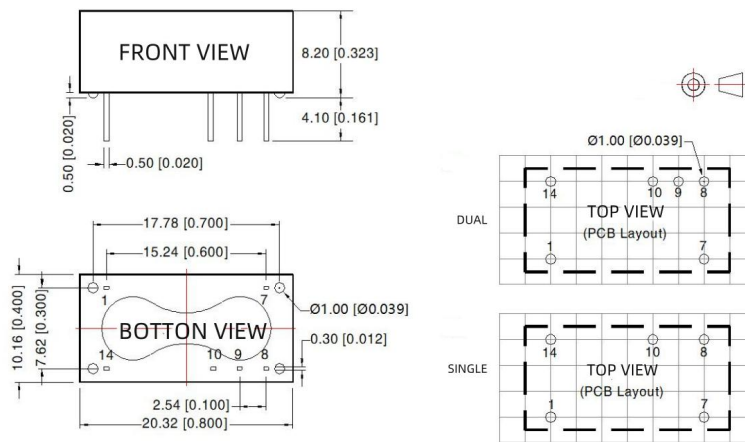
General Specifications

Switching Frequency	300KHz(Typ)	100% full load, nominal input voltage
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Short-Circuit Protection	Continuous, self-recovery	
Case Temperature Rise	15°C (Typ)	
Temperature Coefficient	0.03%/°C	100% full load
Pin Soldering Resistance Temperature	300°C	Soldering spot is 1.5mm away from case for 10 seconds
Isolation (Input-Output)	1.5KVDC	Input-output electric strength test for 1 minute with a leakage current
Insulation Resistance (Input-Output)	1000MΩ	Input-output resistance 500Vdc
Operating Temperature	-40~+105°C	
Storage Temperature	-55~+125°C	
Storage Humidity	<95%	Non-condensing
Cooling Method	Free air convection	
Case Material	Black plastic; flame-retardant and heat-resistant (UL94 V-0)	
Weight	2.1g (Typ)	

**Unless specified, otherwise all other parameters are tested under the following conditions: nominal input voltage, pure resistive load, 25°C room temperature environment.

Dimensions and Recommended Layout



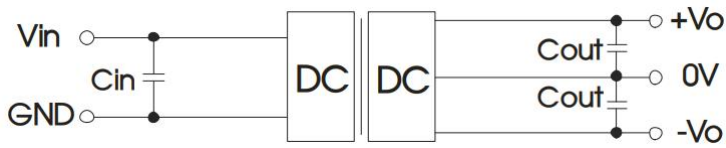
Note:
Unit: mm[inch]
Pin section tolerances: ± 0.10 [± 0.004]
General tolerances: ± 0.25 [± 0.010]

Pinout

Pin	Single	Dual	
1	GND	GND	
7	NC	NC	
8	+Vo	+Vo	
9	No Pin	0V	
10	0V	-Vo	
14	Vin	Vin	

Recommended Circuit

Dual



Single



Recommended input and output capacitor values					
Vin	Cin	Dual Vout	Cout	Single Output	Cout
5VDC	4.7uF/16V	±3.3VDC	4.7uF/16V	3.3VDC	10uF/16V
-	-	±5VDC	4.7uF/16V	5VDC	10uF/16V
-	-	±9VDC	1uF/25V	9VDC	2.2uF/25V
-	-	±12VDC	1uF/25V	12VDC	2.2uF/25V
-	-	±15VDC	1uF/25V	15VDC	2.2uF/25V
-	-	±24VDC	0.47uF/50VDC	24VDC	1uF/50V

Noted

1. Input current: Ensure that the output current of the power supply meets the instantaneous starting current of the power module (that is, twice the average input current of the power module).
2. Output load requirements: Avoid no-load use. When the actual power consumption of the load is less than 10% of the rated output power of the module or no load occurs, connect an external resistance to the output end (the sum of the external resistance and the load power is greater than or equal to 10% of the rated load) or select a module with a smaller rated power.
3. The external capacitance of the output end should not be too large; otherwise, the module may be overcurrent or poorly started. For details, see the external capacitance recommendation table.
4. External LC filter circuit can be connected for occasions with high ripple noise requirements.