

Features:

Dual In Line Package
Up To 3W Regulated Output Power
100% Burned In
High Efficiency
Five-Sided Shield To Reduce EMI
Low Cost
No External Components Required
UL 94V-0 Package Material
Custom Solutions Available
RoHS Compliant

Specifications:

Output Specifications	Voltage Setpoint Accuracy Temperature Coefficient Ripple & Noise (20MHz BW) ¹ Line Regulation ² Load Regulation ³ Minimum Load Short Circuit Protection Short Circuit Restart Transient Response ⁴	+/-5% max +/-0.05%/°C 100mVp-p max +/-1% max +/-1% max 10% of Full Load Current Limit Protection Automatic 200uS max
Input Specifications	Input Voltage Range Input Filter Protection	+/-10% max Pi Network Fuse Recommended
Environmental Specifications	Operating Temperature Storage Temperature Humidity Cooling	Operating Temperature Storage Temperature Humidity Cooling
General Specifications	Efficiency Isolation Voltage ⁵ Isolation Resistance Isolation Capacitance Switching Frequency MTBF ⁶ Weight Case Material Case Size Conducted Emissions Radiated Emissions	58% min 2000 VDC min 109 ohms min 80pF max 50KHz min >850,000 Hours 12.0g-14.4g Non-Conductive Plastic Or Five-Sided Shield Case 31.8mm*20.3mm*10.2mm EN55022 Class A EN55022 Class A

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

Footnotes: ¹ Measured with 1uF ceramic capacitor connect to the output pins. ² High Line to Low Line.
³ Load Regulation is for output load current change from 10% to 100%. ⁴ 25% Step Load Change.
⁵ For 3 seconds. ⁶ MIL-HDBK-217F @25°C , Ground Benign.

Selection Guide 3W Output

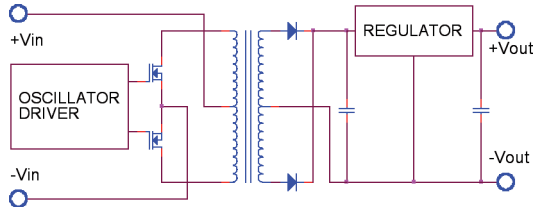
MODEL NUMBER ¹	INPUT VOLTAGE (VDC)	OUTPUT VOLTAGE (VDC)	OUTPUT CURRENT (mA)	INPUT ² CURRENT(mA)		EFF ³ (%)	ISOLATION (VDC)
				FULL LOAD	NO LOAD		
EP305-05S600-2K(M)	4.5-5.5	5	600	970	70	62	2000
EP305-09S330-2K(M)	4.5-5.5	9	330	950	70	63	2000
EP305-12S250-2K(M)	4.5-5.5	12	250	930	70	65	2000
EP305-15S200-2K(M)	4.5-5.5	15	200	950	70	63	2000
EP305-24S125-2K(M)	4.5-5.5	24	125	940	70	64	2000
EP312-05S600-2K(M)	10.8-13.2	5	600	410	30	61	2000
EP312-09S330-2K(M)	10.8-13.2	9	330	400	30	63	2000
EP312-12S250-2K(M)	10.8-13.2	12	250	380	30	66	2000
EP312-15S200-2K(M)	10.8-13.2	15	200	360	30	69	2000
EP312-24S125-2K(M)	10.8-13.2	24	125	360	30	69	2000
EP324-05S600-2K(M)	21.6-26.4	5	600	200	20	63	2000
EP324-09S330-2K(M)	21.6-26.4	9	330	190	20	66	2000
EP324-12S250-2K(M)	21.6-26.4	12	250	190	20	66	2000
EP324-15S200-2K(M)	21.6-26.4	15	200	190	20	66	2000
EP324-24S125-2K(M)	21.6-26.4	24	125	190	20	66	2000
EP348-05S600-2K(M)	43.2-52.8	5	600	100	10	63	2000
EP348-09S330-2K(M)	43.2-52.8	9	330	100	10	63	2000
EP348-12S250-2K(M)	43.2-52.8	12	250	100	10	63	2000
EP348-15S200-2K(M)	43.2-52.8	15	200	100	10	63	2000
EP348-24S125-2K(M)	43.2-52.8	24	125	100	10	63	2000

Note: Other input to output voltages may be available. Please contact factory.

Footnotes: 1 EP3*-****------ Non-Conductive Plastic EP3*-****M ----- Five-sided shield case
2 Nominal Input Voltage.
3 Nominal Input Voltage, Full Load.

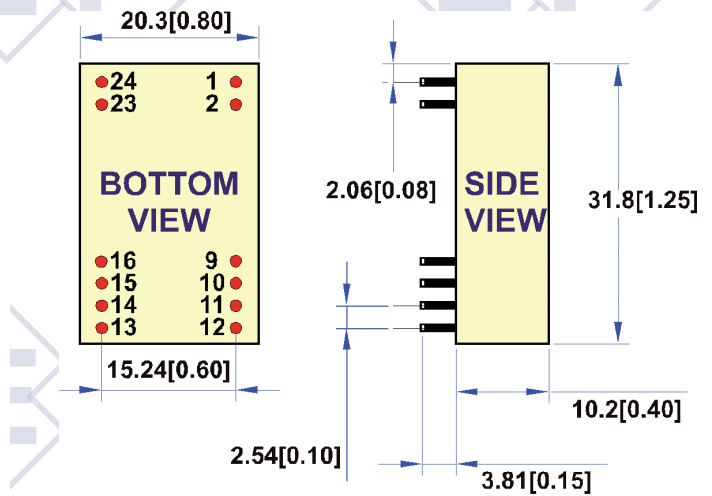
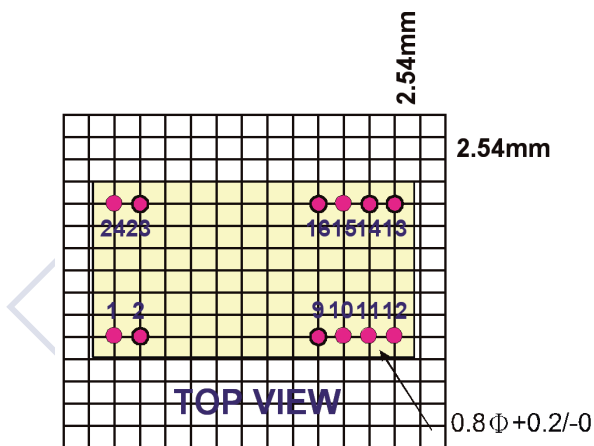
Simplified Schematic

Single Output



Mechanical Dimensions & Recommended Footprint Details

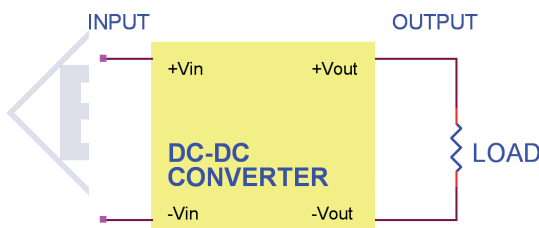
PIN	SINGLE
1 & 2	+Vin
23 & 24	-Vin
9 & 10	-Vout
11 & 12	+Vout
13 & 14	NC
15 & 16	NC



All dimensions are in mm [inches]

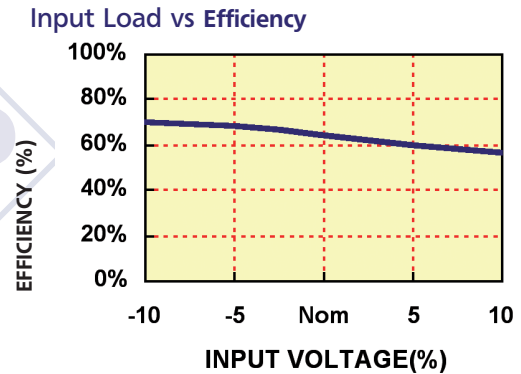
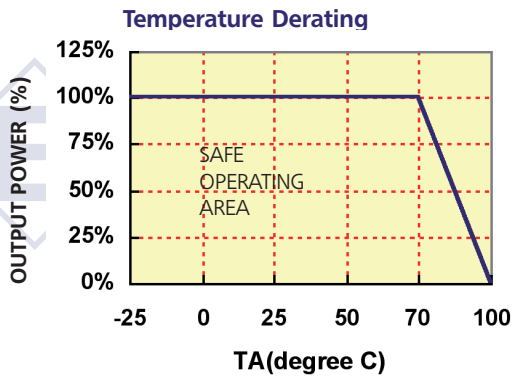
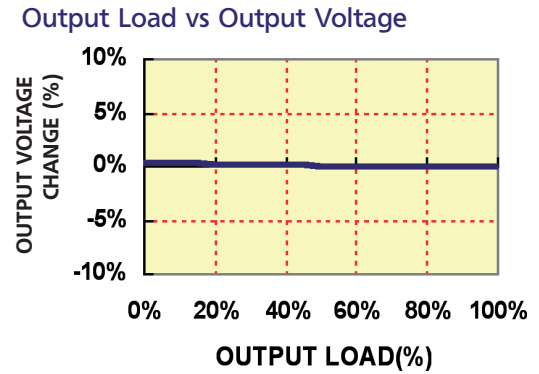
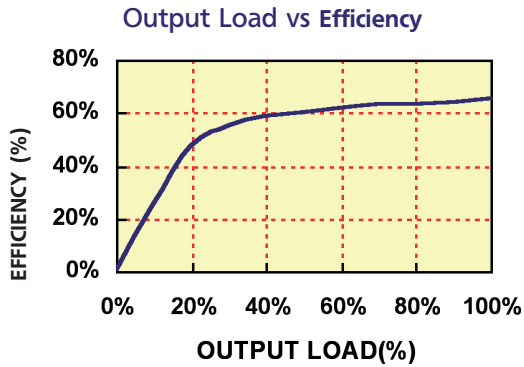
Typical Applications

Single Output



Typical Performance Curves

Specifications typical at Ta=25 °C, nominal input voltage, rated output current unless otherwise specified.



Input Fuse Selection Guide

4.5-5.5V Input Voltage(VDC)	10.8-13.2V Input Voltage(VDC)	21.6-26.4V Input Voltage(VDC)	43.2-52.8V Input Voltage(VDC)
1600mA	800mA	400mA	200mA
Slow-Blow Type	Slow-Blow Type	Slow-Blow Type	Slow-Blow Type



Note: Certain applications may require the installation of external fuse in front of the input.

EP300-2K Series Application Notes

External Capacitance Requirements:

No external capacitance is required for operation of the EP300-2K series. To meet the reflected ripple requirements of the converter, an input impedance of less than 0.5 ohm from DC to 100KHz is required.

External output capacitance is not required for operation, however it is recommended that 10uF tantalum and 0.1uF ceramic capacitance be selected for reduced system noise.

Additional output capacitance may be added for increased filtering, but should not exceed 220uF.

We Can Offer EMC-Filter According To EN55011/22 Class B.

Negative Outputs:

A negative output voltage may be obtained by connecting the +OUT to circuit ground and connecting -OUT as the negative output.

Spezifikationen können jederzeit ohne Vorankündigung geändert werden.