

Features:

- 7W to 8W DIL Package
- 4.5-9 V, 9-18 V, 18-36 V, 36-72 V, 9-36 V
- Wide Input Range
- 100% Burned In
- High Efficiency
- UL94-V0 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 Over Load Protection Transient Response ⁴	+/-2% max +/-0.05%/°C 100mVp-p max +/-1% max +/-0.5% max 10% of Full Load Continuous Automatic 110%~180% 200uS max
Input Specifications	Input Voltage Range Input Filter Protection	2:1 or 4:1 Input Range Pi Network Fuse Recommended
Environmental Specifications	Operating Temperature Storage Temperature Case Temperature Humidity Cooling	-40°C to +71°C -55°C to +125°C +95°C max 95% max Free-Air Convection
General Specifications	Efficiency Isolation Voltage ⁵ Isolation Resistance Isolation Capacitance Switching Frequency MTBF ⁶ Weight Case Material Case Size Potting Material Conducted Emissions Radiated Emissions	70% min 1000VDC min 109 ohms min 250pF max 50KHz min >900,000 Hours 17.5g Typ Five-Side Shielded Case 31.8mm*20.3mm*12.2mm Epoxy(UL94-V0) 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 20% to 100%. ⁴ 25% Step Load Change.
⁵ 1000 VDC for 10 seconds. ⁶ MIL-HDBK-217F @25°C , Ground Benign.

Selection Guide 2:1 7 W-8 W Output

MODEL NUMBER	INPUT VOLTAGE (VDC)	OUTPUT VOLTAGE (VDC)	OUTPUT CURRENT (mA)	INPUT ¹ CURRENT(mA)		EFF ² (%)	PACKAGE
				FULL LOAD	NO LOAD		
EP4-07-12D310	4.5-7	+/-12	+/-310	1870	20	80	A
EP4-07-15D250	4.5-7	+/-15	+/-250	1910	30	79	A
EP9-18-03,3S2000	9-18	3.3	2000	735	20	75	A
EP9-18-05S1600	9-18	5	1600	888	50	75	A
EP9-18-09S888	9-18	9	888	833	50	80	A
EP9-18-12S670	9-18	12	670	833	50	80	A
EP9-18-15S533	9-18	15	533	833	50	80	A
EP9-18-05D800	9-18	+/-5	+/-800	867	50	77	A
EP9-18-09D444	9-18	+/-9	+/-444	860	40	78	A
EP9-18-12D335	9-18	+/-12	+/-335	833	50	80	A
EP9-18-15D267	9-18	+/-15	+/-267	833	50	80	A
EP18-36-03,3S2000	18-36	3.3	2000	355	25	78	A
EP18-36-05S1600	18-36	5	1600	426	25	78	A
EP18-36-09S888	18-36	9	888	423	25	79	A
EP18-36-12S670	18-36	12	670	417	25	80	A
EP18-36-15S533	18-36	15	533	417	25	80	A
EP18-36-05D800	18-36	+/-5	+/-800	426	25	78	A
EP18-36-09D444	18-36	+/-9	+/-444	423	30	79	A
EP18-36-12D335	18-36	+/-12	+/-335	417	25	80	A
EP18-36-15D267	18-36	+/-15	+/-267	417	25	80	A
EP36-72-03,3S2121	36-72	3.3	2121	187	15	78	A
EP36-72-05S1600	36-72	5	1600	215	15	78	A
EP36-72-09S888	36-72	9	888	210	15	79	A
EP36-72-12S670	36-72	12	670	208	15	80	A
EP36-72-15S533	36-72	15	533	208	15	80	A
EP36-72-05D800	36-72	+/-5	+/-800	215	15	78	A
EP36-72-09D444	36-72	+/-9	+/-444	210	15	79	A
EP36-72-12D335	36-72	+/-12	+/-335	208	15	80	A
EP36-72-15D267	36-72	+/-15	+/-267	208	15	80	A

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

Footnotes: ¹ Nominal Input Voltage

² Nominal Input Voltage, Full Load

Selection Guide 4:1 7.5 W-8 W Output

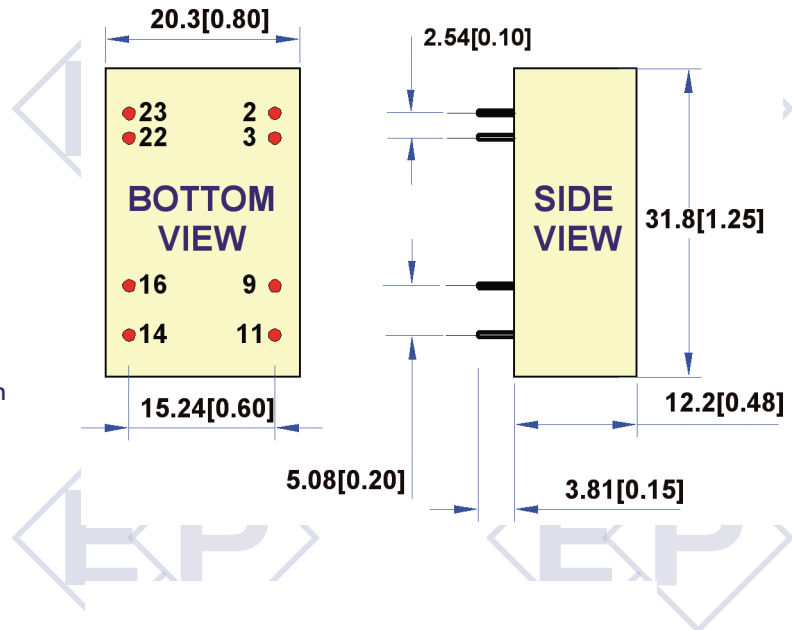
MODEL NUMBER	INPUT VOLTAGE (VDC)	OUTPUT VOLTAGE (VDC)	OUTPUT CURRENT (mA)	INPUT ¹ CURRENT(mA)		EFF ² (%)	PACKAGE
				FULL LOAD	NO LOAD		
EP9-36-05S1600	9-36	5	1600	888	50	75	A
EP9-36-12D335	9-36	+/-12	+/-335	840	50	79	A

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

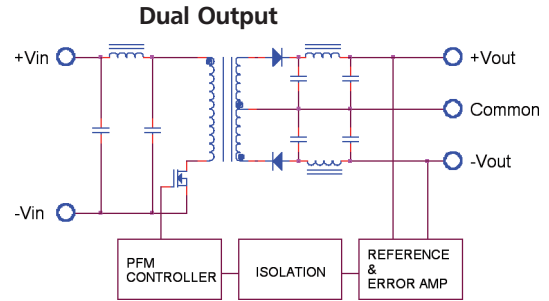
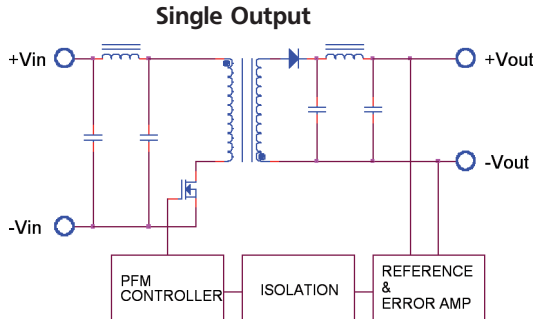
Mechanical Dimensions & Recommended Footprint Details

PIN	SINGLE	DUAL
2 & 3	-Vin	-Vin
9	NC	Common
11	NC	-Vout
14	+Vout	+Vout
16	-Vout	Common
22 & 23	+Vin	+Vin

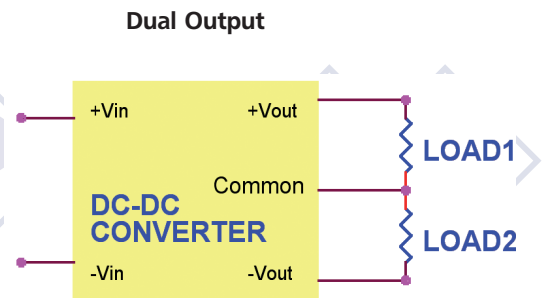
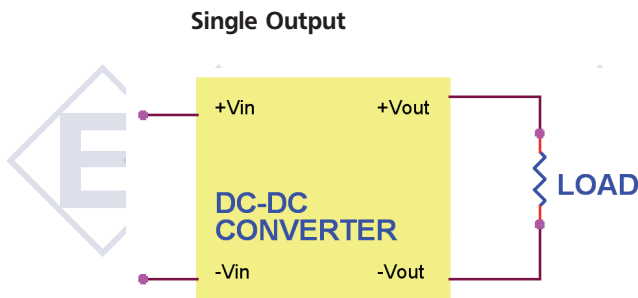
All dimensions are in mm (inches)
Note: Pin Size is Tolerance 0.6 ± 0.05mm
Tolerance .X or .XX= ± 0.5mm



Simplified Schematic



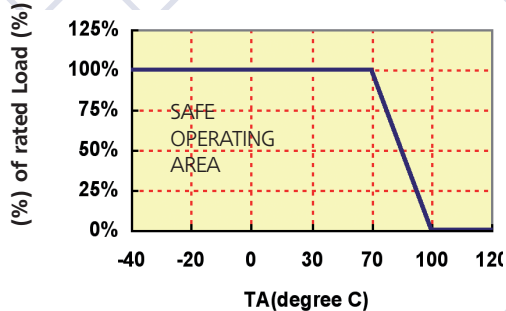
Typical Applications



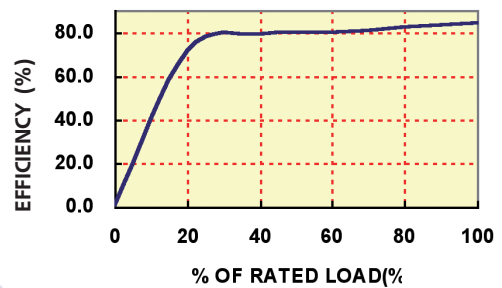
Typical Performance Curves

Specifications typical at $t_a=25$ OC, nominal input voltage, rated output current unless otherwise specified.

Temperature Derating

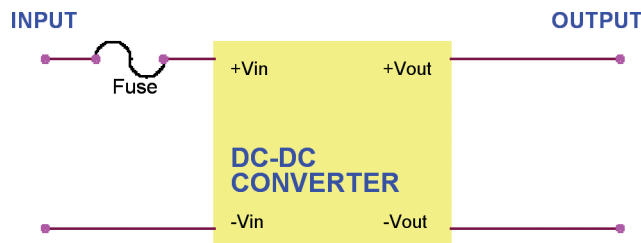


Output Load vs Efficiency



Input Fuse Selection Guide

4.5-6.0V or 4.5-9V Input Voltage(VDC)	9-18V or 9-36V Input Voltage(VDC)	18-36V or 18-72V Input Voltage(VDC)	36-72V Input Voltage(VDC)
3000mA Slow- Blow Type	1500mA Slow- Blow Type	800mA Slow- Blow Type	400mA Slow- Blow Type



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

EP Series Application Notes

External Capacitance Requirements:

No external capacitance is required for operation of the EP 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 1000uF.

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./Subject to change without notice.