

Features:

- 10W DIL Package
- Industry Standard Package
- 9-18V, 18-36V, 36-72V, 9-27V, 18-54V, 9-36V, 18V-72V
- Wide Input Range
- Short Circuit Protection
- Regulated Output
- 100% Burned In
- High Efficiency
- 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 Over Load Protection Transient Response ⁴	+/-2% max +/-0.05%/°C 100mVp-p max +/-0.5% max +/-0.5% max 10% of Full Load Continuous Automatic 180% Typ 200uS max
Input Specifications	Input Voltage Range Input Filter Protection	2:1 3:1 4:1 Input Range Pi Network Fuse Recommended
Environmental Specifications	Operating Temperature Storage Temperature Humidity Cooling	-25°C to +71°C -55°C to +125°C 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 500pF max 200 KHz min >700,000 Hours 31.2g Typ Six-Side Shielded Case 50.8mm*25.4mm*11.2mm 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 10% to 100%.
 - ⁴ 25% Step Load Change.
 - ⁵ For 10 seconds.
 - ⁶ MIL-HDBK-217F @25°C , Ground Benign.

Selection Guide 2:1 7 W-10 W Output

MODEL NUMBER	INPUT VOLTAGE (VDC)	OUTPUT VOLTAGE (VDC)	OUTPUT CURRENT (mA)	INPUT ¹ CURRENT(mA)		EFF (%) ²	ISOLATION (VDC)
				FULL LOAD	NO LOAD		
EP5-7-05D700	4.7-7.25	+/-5	+/-700	1772	40	79	1000
EP5-7-15D275	4.7-7.25	+/-15	+/-275	2089	40	79	1000
EP9-18-03,3S2400	9-18	3.3	2400	891	30	74	1000
EP9-18-05S2000	9-18	5	2000	1068	30	78	1000
EP9-18-09S1111	9-18	9	1111	1050	30	79	1000
EP9-18-12S830	9-18	12	830	1040	28	80	1000
EP9-18-15S670	9-18	15	670	1020	28	81	1000
EP9-18-24S416	9-18	24	416	1020	28	82	1000
EP9-18-05D1000	9-18	+/-5	+/-1000	1068	30	78	1000
EP9-18-09D556	9-18	+/-9	+/-556	1046	30	80	1000
EP9-18-12D416	9-18	+/-12	+/-416	1029	28	81	1000
EP9-18-15D333	9-18	+/-15	+/-333	1020	28	82	1000
EP9-18-24D208	9-18	+/-24	+/-208	1052	30	79	1000
EP18-36-03,3S2400	18-36	3.3	2400	434	16	76	1000
EP18-36-05S2000	18-36	5	2000	527	16	79	1000
EP18-36-09S1111	18-36	9	1111	523	20	80	1000
EP18-36-12S830	18-36	12	830	508	15	82	1000
EP18-36-15S670	18-36	15	670	502	15	83	1000
EP18-36-24S416	18-36	24	416	502	15	83	1000
EP18-36-05D1000	18-36	+/-5	+/-1000	527	16	79	1000
EP18-36-09D556	18-36	+/-9	+/-556	523	18	80	1000
EP18-36-12D416	18-36	+/-12	+/-416	508	15	82	1000
EP18-36-15D333	18-36	+/-15	+/-333	510	15	82	1000
EP18-36-24D208	18-36	+/-24	+/-208	520	20	80	1000

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 2:1 8 W-10 W Output

MODEL NUMBER	INPUT VOLTAGE (VDC)	OUTPUT VOLTAGE (VDC)	OUTPUT CURRENT (mA)	INPUT ¹ CURRENT(mA)		EFF (%) ²	ISOLATION (VDC)
				FULL LOAD	NO LOAD		
EP36-72-03,3S2400	36-72	3.3	2400	217	8	76	1000
EP36-72-05S2000	36-72	5	2000	264	8	79	1000
EP36-72-09S1111	36-72	9	1111	254	8	80	1000
EP36-72-12S830	36-72	12	830	254	7	82	1000
EP36-72-15S670	36-72	15	670	254	7	82	1000
EP36-72-24S416	36-72	24	416	264	7	82	1000
EP36-72-05D1000	36-72	+/-5	+/-1000	262	8	79	1000
EP36-72-09D556	36-72	+/-9	+/-556	254	8	80	1000
EP36-72-12D416	36-72	+/-12	+/-416	254	7	82	1000
EP36-72-15D333	36-72	+/-15	+/-333	254	7	82	1000
EP36-72-24D208	36-72	+/-24	+/-208	254	16	82	1000

Selection Guide 3:1 8 W-10 W Output

MODEL NUMBER	INPUT VOLTAGE (VDC)	OUTPUT VOLTAGE (VDC)	OUTPUT CURRENT (mA)	INPUT ¹ CURRENT(mA)		EFF (%) ²	ISOLATION (VDC)
				FULL LOAD	NO LOAD		
EP9-27-03,3S2400	9-27	3.3	2400	880	40	76	1000
EP9-27-05S2000	9-27	5	2000	1082	40	77	1000
EP9-27-09S1111	9-27	9	1111	1065	40	78	1000
EP9-27-12S830	9-27	12	830	1054	40	79	1000
EP9-27-15S670	9-27	15	670	1041	40	80	1000
EP9-27-24S417	9-27	24	417	1057	40	79	1000
EP9-27-05D1000	9-27	+/-5	+/-1000	1082	40	77	1000
EP9-27-09D556	9-27	+/-9	+/-556	1068	40	78	1000
EP9-27-12D416	9-27	+/-12	+/-416	1041	40	80	1000
EP9-27-15D333	9-27	+/-15	+/-333	1028	40	81	1000
EP18-54-03,3S2400	18-54	3.3	2400	434	20	76	1000
EP18-54-05S2000	18-54	5	2000	527	20	79	1000
EP18-54-09S1111	18-54	9	1111	515	20	81	1000
EP18-54-12S830	18-54	12	830	520	20	80	1000
EP18-54-15S670	18-54	15	670	514	20	81	1000
EP18-54-24S416	18-54	24	416	510	20	81	1000
EP18-54-05D1000	18-54	+/-5	+/-1000	527	20	79	1000
EP18-54-09D556	18-54	+/-9	+/-556	526	20	79	1000
EP18-54-12D416	18-54	+/-12	+/-416	520	20	80	1000
EP18-54-15D333	18-54	+/-15	+/-333	514	20	81	1000

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 8 W-10 W Output

MODEL NUMBER	INPUT VOLTAGE (VDC)	OUTPUT VOLTAGE (VDC)	OUTPUT CURRENT (mA)	INPUT ¹ CURRENT(mA)		EFF (%) ²	ISOLATION (VDC)
				FULL LOAD	NO LOAD		
EP9-36-03,3S2400	9-36	3.3	2400	880	40	76	1000
EP9-36-05S2000	9-36	5	2000	1082	40	77	1000
EP9-36-09S1111	9-36	9	1111	1065	40	78	1000
EP9-36-12S830	9-36	12	830	1054	40	79	1000
EP9-36-15S670	9-36	15	670	1041	40	80	1000
EP9-36-24S417	9-36	24	417	1057	40	79	1000
EP9-36-05D1000	9-36	+/-5	+/-1000	1082	40	77	1000
EP9-36-0D5569	9-36	+/-9	+/-556	1063	40	78	1000
EP9-36-12D416	9-36	+/-12	+/-416	1041	40	80	1000
EP9-36-15D333	9-36	+/-15	+/-333	1028	40	81	1000
EP18-72-03,3S2400	18-72	3.3	2400	434	20	76	1000
EP18-72-05S2000	18-72	5	2000	527	20	79	1000
EP18-72-09S1111	18-72	9	1111	515	20	81	1000
EP18-72-12S830	18-72	12	830	520	20	80	1000
EP18-72-15S670	18-72	15	670	514	20	81	1000
EP18-72-24S416	18-72	24	416	510	20	81	1000
EP18-72-05D1000	18-72	+/-5	+/-1000	527	20	79	1000
EP18-72-09D556	18-72	+/-9	+/-556	525	20	79	1000
EP18-72-12D416	18-72	+/-12	+/-416	520	20	80	1000
EP18-72-15D333	18-72	+/-15	+/-333	514	20	81	1000

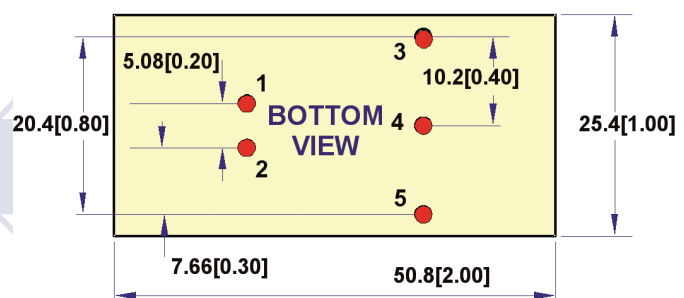
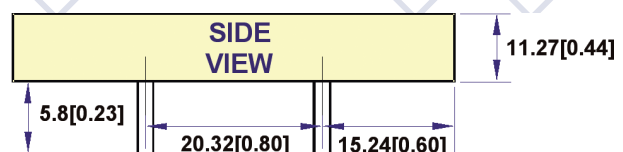
Note: Other input to output voltages may be available. Please contact factory.

Mechanical Dimensions

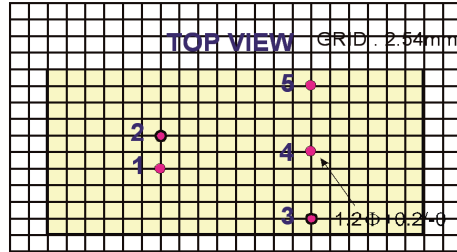
PIN	SINGLE	DUAL
1	+Vin	+Vin
2	-Vin	-Vin
3	+Vout	+Vout
4	No Pin	Common
5	-Vout	-Vout

All dimensions are in mm (inches)

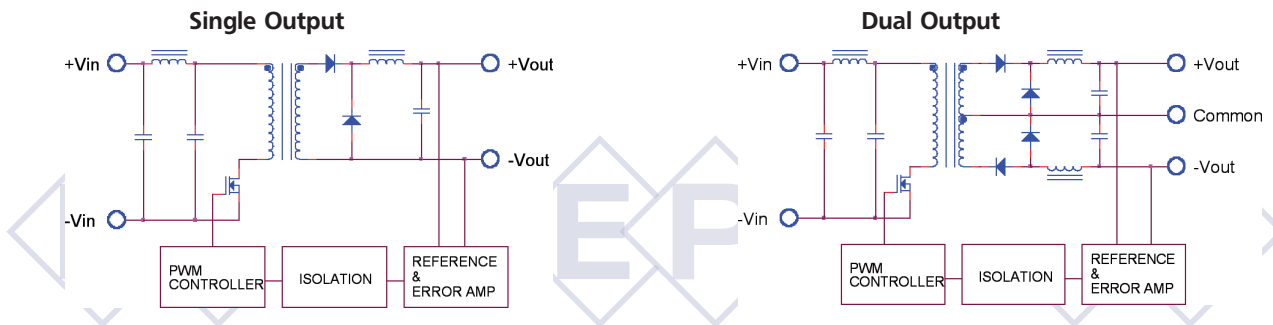
Note: Tolerance mm $\pm 0,25$ /(inch) $\pm 0,01$



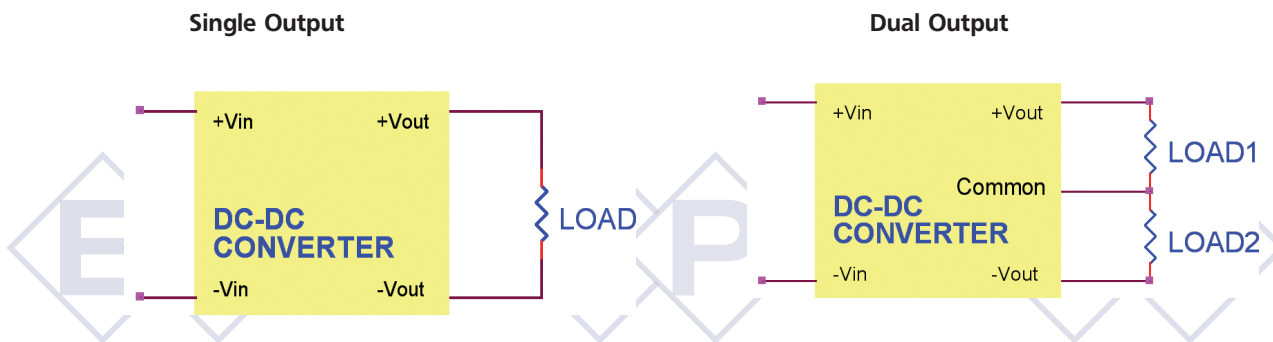
Recommended Footprint Details



Simplified Schematic

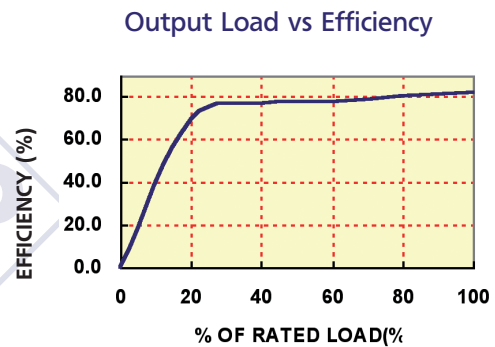
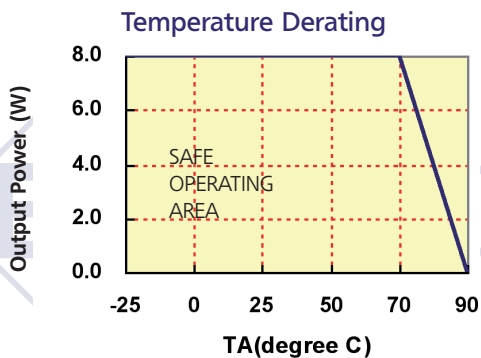


Typical Applications



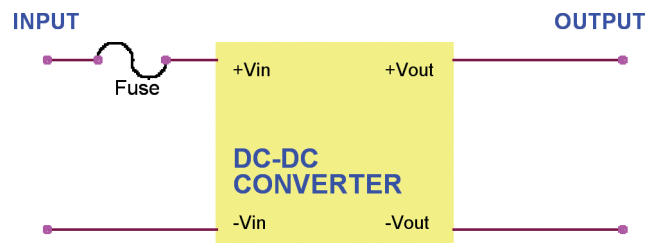
Typical Performance Curves

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



Input Fuse Selection Guide

4.7-7.25V Input Voltage(VDC)	9-18V or 9-27V or 9-36V Input Voltage(VDC)	18-36V or 18-54V or 18-72V Input Voltage(VDC)	36-72V Input Voltage(VDC)
3800mA Slow- Blow Type	2000mA Slow-Blow Type	900mA Slow-Blow Type	450mA 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 220KHz 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.