

Features:

Dual In Line Package
Up To 1W Unregulated Output Power
100% Burned In
High Efficiency
Internal SMD Technology
Low Cost
UL 94V-0 Package Material
Custom Solutions Available
MTBF>2,000,000 Hours
RoHS Compliant

Specifications:

Output Specifications

Voltage Setpoint Accuracy
Temperature Coefficient
Ripple & Noise (20MHz BW)¹
Line Regulation²
Load Regulation³
Minimum Load
Short Circuit Protection
Transient Response⁴

+/-2% max
+/-0.05%/°C
100mVp-p max
+/-1.2% max
+/-8% max
10% of Full Load
Momentary
200uS max

Input Specifications

Input Voltage Range
Input Filter
Protection

+/-10% max
Capacitor Typ
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 Voltage⁵
Isolation Resistance
Isolation Capacitance
Switching Frequency
MTBF⁶
Weight
Case Material
Case Size

70%-82%
1000 VDC min
109 ohms min
80pF max
100KHz min
>2,000,000 Hours
1.7g Typ
Non-Conductive Plastic
12.7mm*10.16mm*6.87mm
12.7mm*10.16mm*7.62mm
EN55022 Class A
EN55022 Class A

Conducted Emissions
Radiated Emissions

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.

³ Load Regulation is for output load current change from 20% to 100%.

⁵ For 10 seconds.

² Line Regulation is for a 1.0% change in input Voltage.

⁴ 25% Step Load Change.

⁶ MIL-HDBK-217F @25°C , Ground Benign.

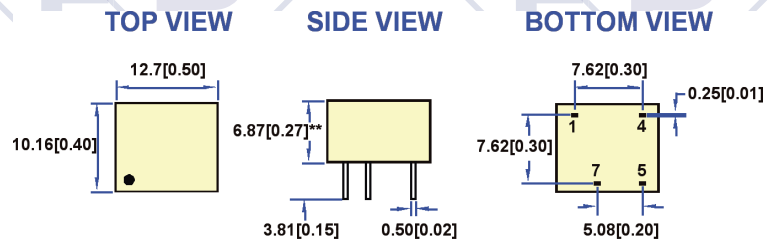
Selection Guide 1 W Output

MODEL NUMBER	INPUT VOLTAGE (VDC)	OUTPUT VOLTAGE (VDC)	OUTPUT CURRENT (mA)	INPUT ¹ CURRENT(mA)		EFF (%) ²	ISOLATION (VDC)
				FULL LOAD	NO LOAD		
EPM-BUD-0305	3	5	200	475	35	70	1000
EPM-BUD-03.305	3.3	5	200	428	35	71	1000
EPM-BUD-0505	5	5	200	260	26	77	1000
EPM-BUD-0509	5	9	110	260	27	77	1000
EPM-BUD-0512	5	12	84	253	26	79	1000
EPM-BUD-0515	5	15	67	253	28	79	1000
EPM-BUD-1205	12	5	200	107	11	78	1000
EPM-BUD-1209	12	9	110	105	11	79	1000
EPM-BUD-1212	12	12	84	102	11	82	1000
EPM-BUD-1215	12	15	67	102	12	82	1000
EPM-BUD-2405	24	5	200	54	8	77	1000
EPM-BUD-2409	24	9	110	54	8	77	1000
EPM-BUD-2412	24	12	84	54	8	77	1000
EPM-BUD-2415	24	15	67	52	7	80	1000
EPM-BUD-4805	48	5	200	29	4	72	1000
EPM-BUD-4809	48	9	110	27	4	77	1000
EPM-BUD-4812	48	12	84	27	4	77	1000
EPM-BUD-4815	48	15	67	26	4	79	1000

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

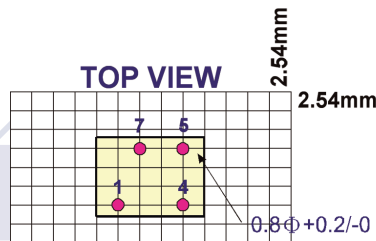
Mechanical Dimensions & Recommended Footprint Details

PIN	SINGLE
1	-Vin
4	+Vin
5	+Vout
7	-Vout



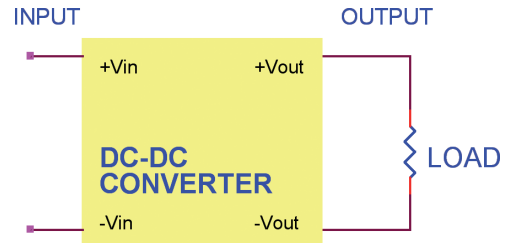
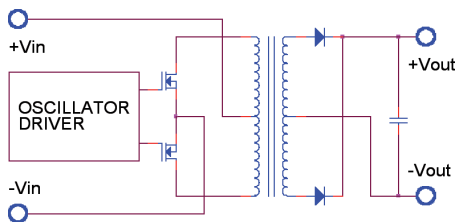
All dimensions are in mm (inches)

Note: 7.62[0.30] for 24V and 48V input Voltage



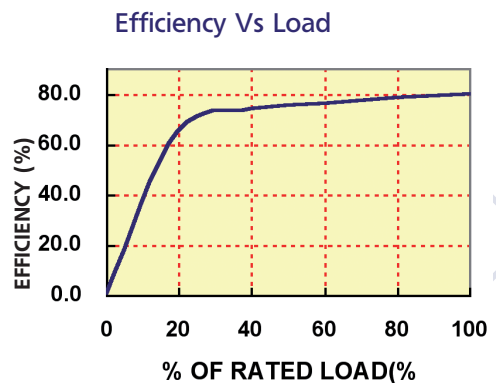
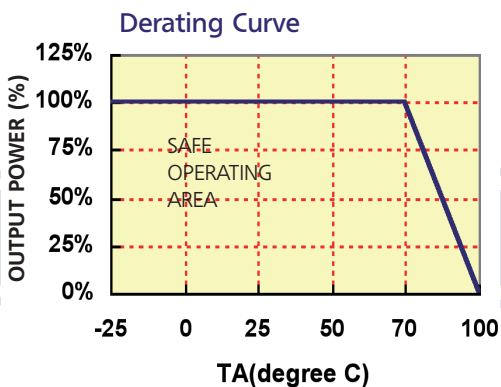
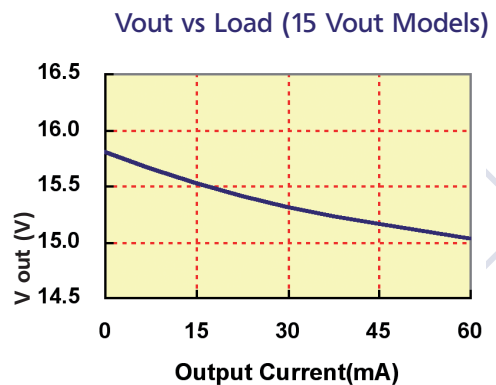
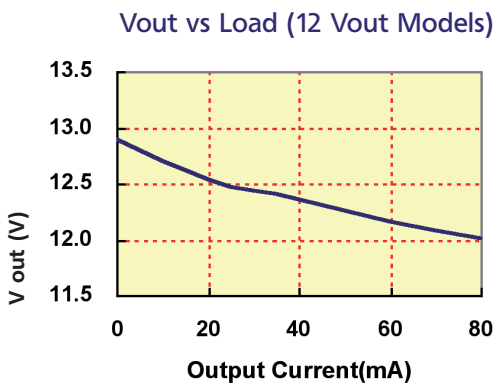
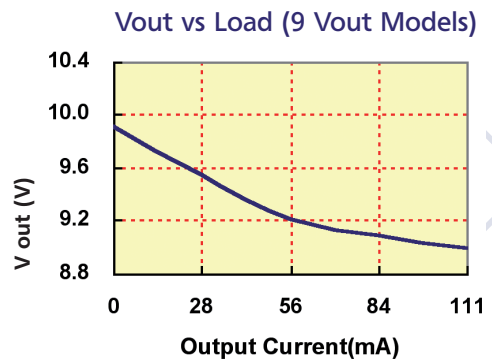
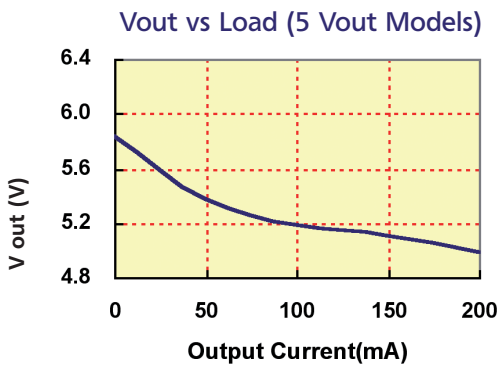
Footnotes: 1 Nominal Input Voltage.
2 Nominal Input Voltage, Full Load.

Simplified Schematic & Typical Applications



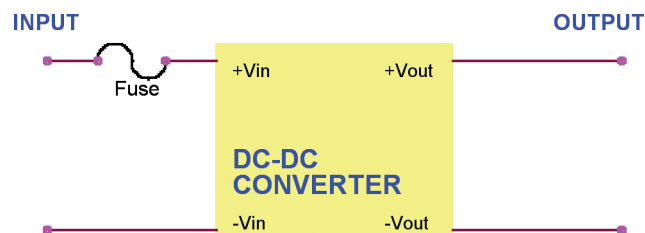
Typical Performance Curves

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



Input Fuse Selection Guide

2.7-3.6V Input Voltage(VDC)	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)
1000mA Slow-Blow Type	400mA Slow-Blow Type	170mA Slow-Blow Type	90mA Slow-Blow Type	50mA Slow-Blow Type



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

EPM-BUD Series Application Notes

External Capacitance Requirements:

Output filtering is required for operation. A minimum of 10uF is needed. Output capacitance may be increased for additional filtering, not to exceed 220uF.

To meet the reflected ripple requirements of the converter, an input impedance of less than 0.5 ohm from DC to 250KHz is required.

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.