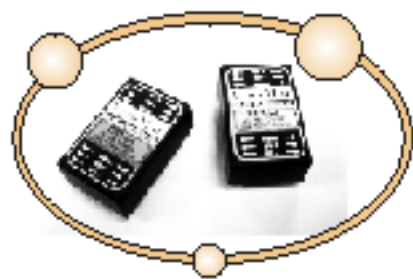




3Watt DC to DC Converters



FEATURES

24-Pin DIP Package
Efficiency to 80%
2:1 & 4:1 Input Range
Regulated Output

SPECIFICATIONS

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

- ◆ Input Voltage Range:.....See Note
- ◆ Input Filter:.....Pi Type
- ◆ Voltage Accuracy:..... $\pm 2\%$ max.
- ◆ Voltage Balance (Dual):..... $\pm 1\%$ max.
- ◆ Temperature Coefficient:..... $\pm 0.05\%/^{\circ}\text{C}$
- ◆ Ripple and Noise, 20MHz BW 5V/3.3V 100mVp-p max
.....12/15V.....1%p-p max
- ◆ Short Circuit Protection:.....Continuous
- ◆ Line Regulation, Single/Dual:...(HL-LL)..... $\pm 0.5\%$ max
- ◆ Load Regulation, Single:...(FL-10%FL)..... $\pm 0.5\%$ max
Dual...(FL-25%FL)..... $\pm 1.0\%$ max
- ◆ Efficiency:.....See Table
- ◆ Isolation Resistance:..... $10^9\Omega$ min
- ◆ Switching Frequency:.....100KHz, min
- ◆ Operating Temperature Range:.....-25°C to +71°C
- ◆ Storage Temperature Range:.....-40°C to +100°C
- ◆ EMI/RFI (optional).....EMI meet EN55022 Class B
- ◆ Dimension:.....(31.8x20.3x10.2mm)
(Class B Models).....(31.8x20.3x12.7mm)
- ◆ Case Material..Standard Model.. Black Plastic Optional
Black Coated Copper With Non-Conductiv Base.

Pi Input Filter

Continuous Short Circuit Protection

EMI meet En55022 Class B (Option)

Remote On/off (Option)

MODEL LIST

MODEL NUMBER	INPUT VOLTAGE	OUTPUT VOLTAGE	OUTPUT CURRENT	%EFF	CASE
E03-X0(B/M/M1/P 3/T)	See Note	3.3VDC	600mA	64 min	D
E03-X1(B/M/M1/P 3/T)	See Note	5VDC	600mA	73 min	D
E03-X2(B/M/M1/P 3/T)	See Note	12VDC	250mA	78 min	D
E03-X3(B/M/M1/P 3/T)	See Note	15VDC	200mA	78 min	D
E03-X4(B/M/M1/P 3/T)	See Note	± 5 VDC	± 300 mA	73 min	D
E03-X5(B/M/M1/P 3/T)	See Note	± 12 VDC	± 125 mA	78 min	D
E03-X6(B/M/M1/P 3/T)	See Note	± 15 VDC	± 100 mA	78 min	D

Note:

Input Voltage "x":

1.X=0, Input Voltage: 5VDC $\pm 10\%$

2.X=1, Input Voltage: 9~18VDC, Nominal=12VDC

3.X=2, Input Voltage: 18~36VDC, Nominal=24VDC

4.X=3, Input Voltage: 36~72VDC, Nominal=48VDC

5.X=4, Input Voltage: 9~36VDC, Nominal=24VDC

6.X=5, Input Voltage: 18~72VDC, Nominal=48VDC

Model Number Suffix

1."B": Optional for EN55022 Class B, For Input Range 2:1 Only.

2."M": Optional for 500V I/O Isolation With metal Case.

3."M1": Optional for 1.5KV I/O Isolation With metal Case.

4."P3": Optional for 3KV I/O Isolation With Plastic Case.

5."T": Optional Remote On/Off For Class B version,

M1/P3 Models Only.

6.Dual Output Models With Separate Output available.

7.UL Approved Models Optional For Input Range 2:1 & Class B

Version With Isolation 1.5KV/3KV Models Only.

CASE D

[Click to enlarge](#)

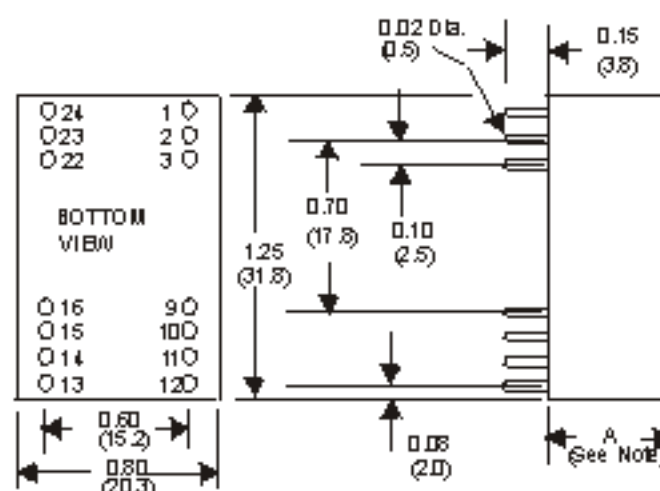
All Dimensions in Inches (mm)

PIN CONNECTION		
500VDC		
PIN	SINGLE	DUAL
1	+V Input	+V Input
2	NC	-V Output
3	NC	Common
5	NP	NP
9	NP	NP
10	-V Output	Common
11	+V Output	+V Output
12	-V Input	-V Input
13	-V Input	-V Input
14	+V Output	+V Output
15	-V Output	Common
16	NP	NP
22	NC	Common
23	NC	-V Output
24	+V Input	+V Input

PIN CONNECTION		
1.5K/3K VDC		
PIN	SINGLE	DUAL
1	NP	NP
2	-V Input	-V Input
3	-V Input	-V Input
5	NP or Remote On/Off	
9	NC	Common
10	NC	NC
11	NC	-V Output
12	NP	NP
13	NP	NP
14	+V Output	+V Output
15	NC	NC
16	-V Output	Common
22	+V Input	+V Input
23	+V Input	+V Input
24	NP	NP

Remote On/Off Control

Logic Compatibility..... CMOS or Open Collector TTL
EC-On..... $> +5.5$ VDC or Open Circuit
EC-Off..... < 1.8 VDC
Shutdown Idle Current..... 10mA
Input Resistance..... 100K ohms (Ein 0VDC to 9VDC)
Control Common..... Referenced to Input Minus



Note:

A=0.40(10.2) For Standard or Input Range 4:1 Models.

A=0.50(12.7) For Class B Version.

All Dimensions in Inches (mm)