



**COIL TECHNOLOGY  
CORPORATION**

## **1.25W DC/DC CONVERTERS**

<b>SERIES</b>	<b>DESCRIPTION</b>	<b>Page</b>
<b>CG</b>	<b>8 pin DIP package Single output 1kv isolation; 2kv option</b>	<b>2</b>
<b>CG-xyyyD</b>	<b>8 pin DIP package Dual output 1kv isolation; 2kv option</b>	<b>4</b>
<b>CH</b>	<b>8 pin DIP package Single output 1kv isolation; 2kv option Industry standard footprint</b>	<b>6</b>

**ELECTRICAL SPECIFICATIONS: UNREGULATED**

- Input voltage range -----  $\pm 10\%$
- Input filter----- Capacitor.
- Output voltage accuracy -----  $\pm 5\%$
- Line voltage regulation ----- 1.2%Typ./1%Of Vin
- Load voltage regulation (10% ~ 100%)-  
5V Output Types----- 15% Max.  
9V,12V and 15V Output Types----- 10% Max.
- Ripple&noise/20MHZ BW ----- 75mV P-P Max.
- Efficiency at full load----- 70% Min.
- Isolation voltage ----- 1000 Vdc/1sec.
- Short circuit protection ----- 1.0 Second
- Operating temperature range -----  $-40^{\circ}\text{C}$  to  $85^{\circ}\text{C}$
- Storage temperature range -----  $-55^{\circ}\text{C}$  to  $125^{\circ}\text{C}$
- Isolation resistance ----- 10G  $\Omega$
- Isolation capacity ----- 75pF Typ.
- Package weight----- 1.8g



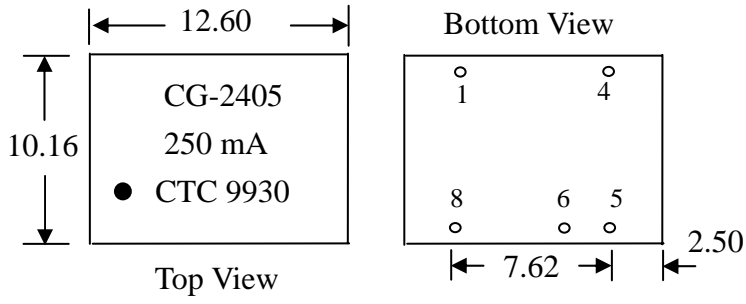
\*Note: Measured @ 25 With The Condition of  
Vin = Nominal And Full Load.

**Note: Add H after P/N for isolation 2000Vdc**

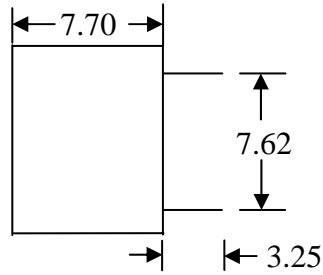
**Selection Guide**

Part Number	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (mA)	Efficiency (%)
CG-0305	3.3	5	250	70
CG-0309	3.3	9	139	70
CG-0312	3.3	12	104	72
CG-0315	3.3	15	83	75
CG-0503	5	3.3	378	70
CG-0505	5	5	250	70
CG-0509	5	9	139	76
CG-0512	5	12	104	80
CG-0515	5	15	83.	82
CG-1205	12	5	250	70
CG-1209	12	9	139	76
CG-1212	12	12	104	80
CG-1215	12	15	83	82
CG-1505	15	5	250	70
CG-1509	15	9	139	76
CG-1512	15	12	104	80
CG-1515	15	15	83	82
CG-2405	24	5	250	70
CG-2409	24	9	139	76
CG-2412	24	12	104	80
CG-2415	24	15	83	82

# Package Style And Pinning (mm)



PIN	FUNCTION
1	-VIN
4	+VIN
5	+VOUT
6	NC
8	-VOUT



Note : Terminal ----- 0.51" Dia. Typical  
 TOL. :  $\pm 0.25$ mm  
 UNIT : mm

**ELECTRICAL SPECIFICATIONS: UNREGULATED**

- Input voltage range -----  $\pm 10\%$
- Input filter----- Capacitor.
- Output voltage accuracy -----  $\pm 5\%$
- Line voltage regulation ----- 1.2%Typ./1%Of Vin
- Load voltage regulation (10% ~ 100%)-  
5V Output Types----- 15% Max  
9V,12V and 15V Output Types----- 10% Max
- Ripple&noise/20MHZ BW -----  $\pm 75\text{mV P-P Max.}$
- Efficiency at full load----- 70% Min
- Isolation voltage ----- 1000 Vdc/1sec
- Short circuit protection ----- 1.0 Second
- Operating temperature range -----  $-40^{\circ}\text{C to } 85^{\circ}\text{C}$
- Storage temperature range -----  $-55^{\circ}\text{C to } 125^{\circ}\text{C}$
- Isolation resistance ----- 10G  $\Omega$
- Isolation capacity ----- 75pF Typ
- Package weight----- 1.8g



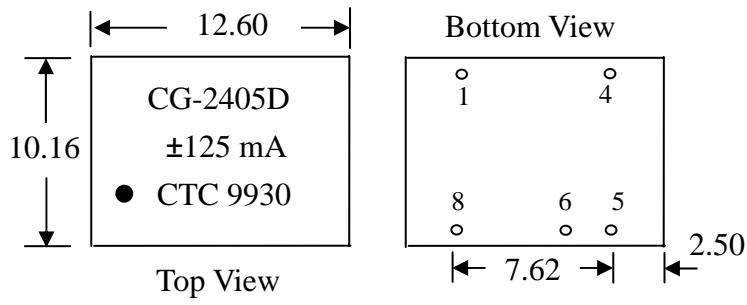
\*Note: Measured @ 25 With The Condition of  
Vin = Nominal And Full Load.

**Note: Add H after P/N for isolation 2000Vdc**

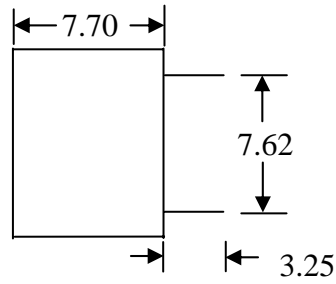
**Selection Guide**

Part Number	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (mA)	Efficiency (%)
CG-0305D	3.3	$\pm 5$	$\pm 125$	70
CG-0309D	3.3	$\pm 9$	$\pm 70$	70
CG-0312D	3.3	$\pm 12$	$\pm 52$	72
CG-0315D	3.3	$\pm 15$	$\pm 42$	75
CG-0505D	5	$\pm 5$	$\pm 125$	70
CG-0509D	5	$\pm 9$	$\pm 70$	75
CG-0512D	5	$\pm 12$	$\pm 52$	78
CG-0515D	5	$\pm 15$	$\pm 42$	80
CG-1205D	12	$\pm 5$	$\pm 125$	70
CG-1209D	12	$\pm 9$	$\pm 70$	75
CG-1212D	12	$\pm 12$	$\pm 52$	78
CG-1215D	12	$\pm 15$	$\pm 42$	80
CG-1505D	15	$\pm 5$	$\pm 125$	70
CG-1509D	15	$\pm 9$	$\pm 70$	75
CG-1512D	15	$\pm 12$	$\pm 52$	78
CG-1515D	15	$\pm 15$	$\pm 42$	80
CG-2405D	24	$\pm 5$	$\pm 125$	70
CG-2409D	24	$\pm 9$	$\pm 70$	75
CG-2412D	24	$\pm 12$	$\pm 52$	78
CG-2415D	24	$\pm 15$	$\pm 42$	80

# Package Style And Pinning (mm)



PIN	FUNCTION
1	-VIN
4	+VIN
5	+VOUT
6	COM.
8	-VOUT



Note : Terminal ----- 0.51" Dia. Typical  
 TOL. :  $\pm 0.25$ mm  
 UNIT : mm

**ELECTRICAL SPECIFICATIONS: UNREGULATED**

- Input voltage range -----  $\pm 10\%$
- Input Filter----- Capacitor.
- Output voltage accuracy -----  $\pm 5\%$
- Line voltage regulation ----- 1.2%Typ./1%Of Vi
- Load voltage regulation (10% ~ 100%)-  
   3.3V Output Types----- 20% Max.  
   5V Output Types----- 15% Max.  
   9V,12V,15V,24V Output Types----- 10% Max.
- Ripple&noise/20MHZ BW ----- 75mV P-P Max.
- Efficiency at full load----- 70% Min.
- Isolation voltage ----- 1000 Vdc/1sec.
- Short circuit protection ----- 1.0 Second
- Operating temperature range -----  $-40^{\circ}\text{C}$  to  $85^{\circ}\text{C}$
- Storage temperature range -----  $-55^{\circ}\text{C}$  to  $125^{\circ}\text{C}$
- Isolation resistance ----- 10G  $\Omega$  Min
- Isolation capacity ----- 75pF Typ.
- Package weight----- 1.9g
- Meet CE EN-60601-1 Certified



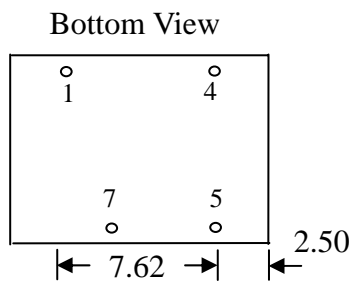
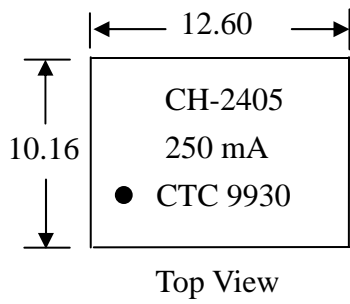
\*Note: Measured @  $25^{\circ}\text{C}$  With The Condition of  
Vin = Nominal And Full Load.

**Note: Add H after P/N for isolation 2000Vdc**

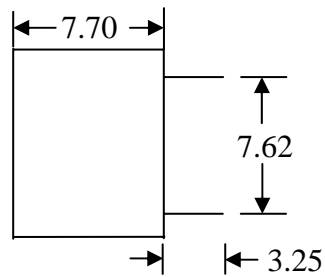
**Selection Guide**

Part Number	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (mA)	Efficiency (%)
CH-0305	3.3	5	250	70
CH-0309	3.3	9	139	70
CH-0312	3.3	12	104	72
CH-0315	3.3	15	83	75
CH-0503	5	3.3	378	70
CH-0505	5	5	250	70
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CH-1505	15	5	250	70
CH-1509	15	9	139	76
CH-1512	15	12	104	80
CH-1515	15	15	83	82
CH-2405	24	5	250	70
CH-2409	24	9	139	76
CH-2412	24	12	104	80
CH-2415	24	15	83	82

## Package Style And Pinning (mm)



PIN	FUNCTION
1	-VIN
4	+VIN
5	+VOUT
7	-VOUT



Note : Terminal -----  $\phi$  0.51" Dia. Typical  
TOL. :  $\pm 0.25$ mm  
UNIT : mm