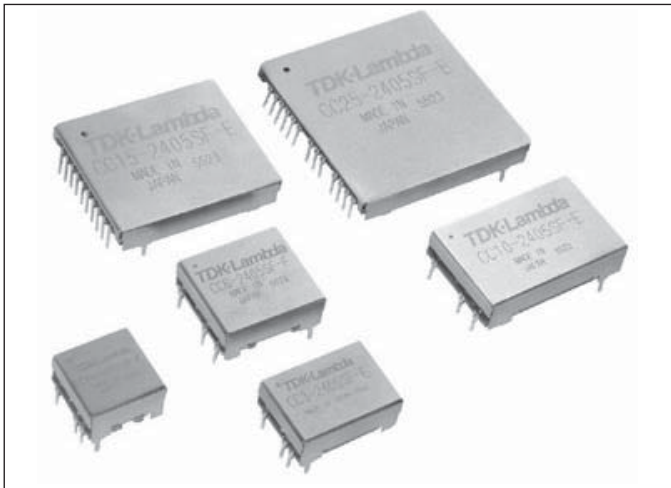


# CC SERIES

DC/DC Single & Dual Output: 1.5 - 25 Watts



## Features

- Compact/High Density product
- 2.1 input range
- Input - Output isolation
- 5V, 12V, 24V and 48V input options
- Single and Dual output models
- Output voltage trim (1.5W to 10W models)
- No tantalum or aluminium capacitor
- Safety: UL1950, EN60950
- Remote ON/OFF standard on all models (except SIP)
- Lightweight (no potting)
- Through Hole/DIP and SMD type available
- International safety approvals

## General Specifications

<b>Input Voltage:</b>	<b>5V</b> (4.5 - 9) <b>12V</b> (9 - 18) <b>24V</b> (18 - 36) <b>48V</b> (36 - 76)
<b>Efficiency:</b>	Model dependant 71 - 90%
<b>Output Voltage Accuracy:</b>	±3% 1.5 - 10W, ±5% 15 - 25W
<b>Minimum Load:</b>	Zero
<b>Voltage Trim:</b>	<b>3V</b> (3.15 - 3.6) <b>5V</b> (4.76 - 6) (1.5-10W) <b>12/15V</b> (11.4 - 15) <b>±12/15V</b> (±11.4 - 15)
<b>Load Regulation:</b>	3.3V/5V 40mV (120mV CC15, 200mV CC25) 12/15V 100mV, ±12/15V 600mV
<b>Protection:</b>	Output current limiting with auto recovery, CC15, CC25 shutdown type.
<b>Remote On/OFF:</b>	Yes
<b>Safety:</b>	UL1950-1, EN60950-1
<b>Case Material:</b>	Steel
<b>Operating Temp:</b>	-40°C to +85°C derate linearly to 40% from 50°C
<b>Dimensions &amp; Weight:</b>	CC1RS: 16.6 x 16.5 x 8.5mm 3.2g CC3: 22.9 x 16.6 x 8.5mm 4.5g CC6: 22.9 x 21.1 x 8.5mm 5.8g CC10: 35.6 x 22.6 x 8.5mm 10g CC15: 38.1 x 32.1 x 7.5mm 12.5g CC25: 43.2 x 44.9 x 7.5mm 20g

## Description

The **CCE** series DC/DC converters offer industry leading power density in power levels from 1.5 - 25watts.

A large range of input voltage options from 5 - 48VDC are available in single and dual output.

The 1.5 - 10 watt models have a simple "trim" function allowing the voltage to be set from 12V to 15V by one simple connection. The same applies for the ±12V to ±15V models.

The dual output models (±12V to ±15V) can have their outputs connected in series to provide 24V or 30V output.

Surface mount (**SMD**) is available across all models, whilst the 3 Watt models are also available in Single-in-Line Package (**SIP**).

**For more detailed information on the CC Series, request Long Data Sheet Specification.**

## Options

- R** 1.5 - 25W models: Replace F as part number with "R" for Horizontal SMD type package (**CC3-0505SR-E**).
  - S** 3W models: Replace F with "S" in model for SIP style packaging (**CC3-4812SS-E**).
1. The output voltage of 12V and ±12V, can be set to 15V, ±15V by connecting the TRIM pin to -V out. (1.5 - 10W models).
  2. 24V output is possible by connecting the ±12 in series.
  3. 30V output is possible by connecting the ±15V in series.

Pin	Single	Dual
1	+V in	+V in
2	RC	RC
3	-V in	-V in
4	NC	-V out
5	-V out	Com
6	TRIM	TRIM
7	+V out	+V out

Pin	Single	Pin	Dual
1	NC	10	NC
2	NC	11	NC
3	RC	12	+V out
4	NC	13	+V out
5	NC	14	+V out
6	+V in	15	-V out
7	+V in	16	-V out
8	-V in	17	NC
9	-V in		

## CC SERIES

### AC/DC Single & Dual Output: 1.5 - 25 Watts

Model	Input V	Output	
		V	A
CC1R5 - 0503SF - E	5V	3.3V	400mA
CC1R5 - 0505SF - E		5V	300mA
CC1R5 - 0512SF - E		12V/15V	125/100mA
CC1R5 - 0512DF - E		±12V/±15V	±60/±50mA
CC1R5 - 1203SF - E	12V	3.3V	400mA
CC1R5 - 1205SF - E		5V	300mA
CC1R5 - 1212SF - E		12V/15V	125/100mA
CC1R5 - 1212DF - E		±12V/±15V	±60/±50mA
CC1R5 - 2403SF - E	24V	3.3V	400mA
CC1R5 - 2405SF - E		5V	300mA
CC1R5 - 2412SF - E		12V/15V	125/100mA
CC1R5 - 2412DF - E		±12V/±15V	±60/±50mA
CC1R5 - 4803SF - E	48V	3.3V	400mA
CC1R5 - 4805SF - E		5V	300mA
CC1R5 - 4812SF - E		12V/15V	125/100mA
CC1R5 - 4812DF - E		±12V/±15V	±60/±50mA

**Note:**

1. Replace F with "R" in model for **SMD** style package (CC1R5-2412SR-E)

Model	Input V	Output	
		V	A
CC3 - 0503SF - E	5V	3.3V	800mA
CC3 - 0505SF - E		5V	600mA
CC3 - 0512SF - E		12V/15V	250/200mA
CC3 - 0512DF - E		±12V/±15V	±125/±100mA
CC3 - 1203SF - E	12V	3.3V	800mA
CC3 - 1205SF - E		5V	600mA
CC3 - 1212SF - E		12V/15V	250/200mA
CC3 - 1212DF - E		±12V/±15V	±125/±100mA
CC3 - 2403SF - E	24V	3.3V	800mA
CC3 - 2405SF - E		5V	600mA
CC3 - 2412SF - E		12V/15V	250/200mA
CC3 - 2412DF - E		±12V/±15V	±125/±100mA
CC3 - 4803SF - E	48V	3.3V	800mA
CC3 - 4805SF - E		5V	600mA
CC3 - 4812SF - E		12V/15V	250/200mA
CC3 - 4812DF - E		±12V/±15V	±125/±100mA

**Note:**

1. Replace F with "R" in model for **SMD** style package (CC1R5-2412SR-E)

2. Replace F with "S" in model for **SIP** style package (CC3-4812SS-E)

Model	Input V	Output	
		V	A
CC6 - 0503SF - E	5V	3.3V	1200mA
CC6 - 0505SF - E		5V	1000mA
CC6 - 0512SF - E		12V/15V	500/400mA
CC6 - 0512DF - E		±12V/±15V	±250/±200mA
CC6 - 1203SF - E	12V	3.3V	1200mA
CC6 - 1205SF - E		5V	1200mA
CC6 - 1212SF - E		12V/15V	500/400mA
CC6 - 1212DF - E		±12V/±15V	±250/±200mA
CC6 - 2403SF - E	24V	3.3V	1200mA
CC6 - 2405SF - E		5V	1200mA
CC6 - 2412SF - E		12V/15V	500/400mA
CC6 - 2412DF - E		±12V/±15V	±250/±200mA
CC6 - 4803SF - E	48V	3.3V	1200mA
CC6 - 4805SF - E		5V	1200mA
CC6 - 4812SF - E		12V/15V	500/400mA
CC6 - 4812DF - E		±12V/±15V	±250/±200mA

**Note:**

1. Replace F with "R" in model **SMD** style package (CC6-2412SR-E)

Model	Input V	Output	
		V	A
CC10 - 0503SF - E	5V	3.3V	2500mA
CC10 - 0505SF - E		5V	2000mA
CC10 - 0512SF - E		12V/15V	1000/800mA
CC10 - 0512DF - E		±12V/±15V	±450/±360mA
CC10 - 1203SF - E	12V	3.3V	2500mA
CC10 - 1205SF - E		5V	2000mA
CC10 - 1212SF - E		12V/15V	800/640mA
CC10 - 1212DF - E		±12V/±15V	±400/±320mA
CC10 - 2403SF - E	24V	3.3V	2500mA
CC10 - 2405SF - E		5V	2000mA
CC10 - 2412SF - E		12V/15V	1000/800mA
CC10 - 2412DF - E		±12V/±15V	±450/±360mA
CC10 - 4803SF - E	48V	3.3V	2500mA
CC10 - 4805SF - E		5V	2000mA
CC10 - 4812SF - E		12V/15V	1000/800mA
CC10 - 4812DF - E		±12V/±15V	±450/±360mA

**Note:**

1. Replace F with "R" in model **SMD** style package (CC10-2412SR-E)

Model	Input V	Output	
		V	A
CC15 - 2403SF - E	24V	3.3V	4500mA
CC15 - 2405SF - E		5V	3000mA

**Note:**

1. Replace F with "R" in model **SMD** style package (CC15-2405SR-E)

Model	Input V	Output	
		V	A
CC25 - 2403SF - E	24V	3.3V	7500mA
CC25 - 2405SF - E		5V	5000mA

**Note:**

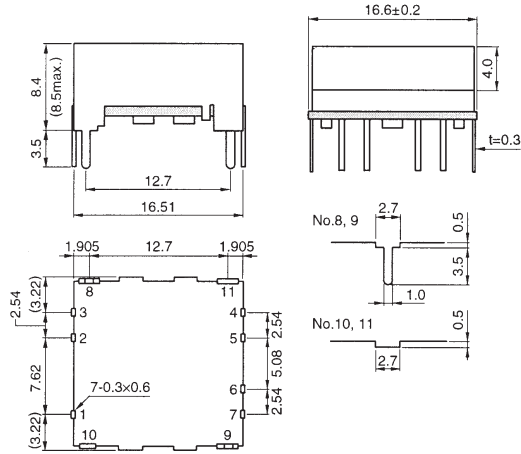
1. Replace F with "R" in model **SMD** style package (CC25-2405SR-E)

# CC SERIES

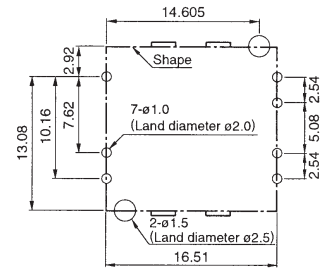
AC/DC Single & Dual Output: 1.5 - 25 Watts

## CC1RS Type

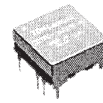
SHAPES AND DIMENSIONS  
CC1R5-□□□□□F-E (DIP TYPE)



RECOMMENDED PWB HOLE SIZE, LOCATION  
[TOP VIEW]

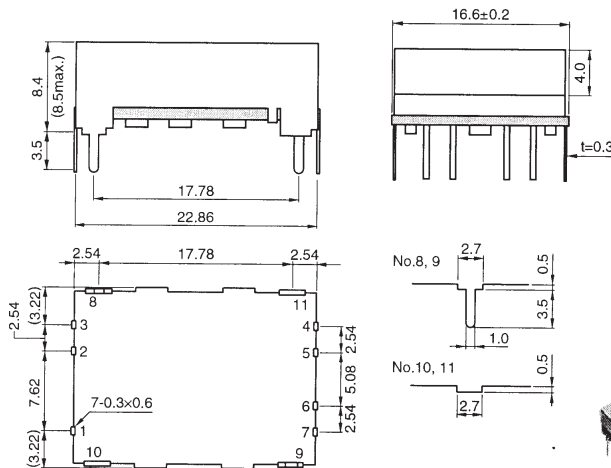


Dimensions in mm  
Tolerance: ±0.5

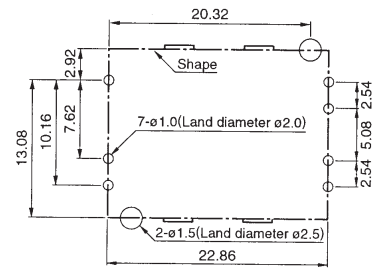


## CC3 Type

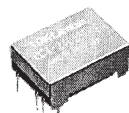
SHAPES AND DIMENSIONS  
CC3-□□□□□F-E (DIP TYPE)



RECOMMENDED PWB HOLE SIZE, LOCATION  
[TOP VIEW]

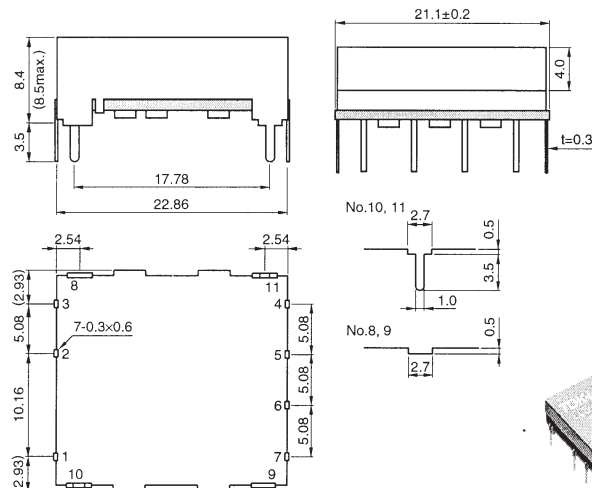


Dimensions in mm  
Tolerance: ±0.5

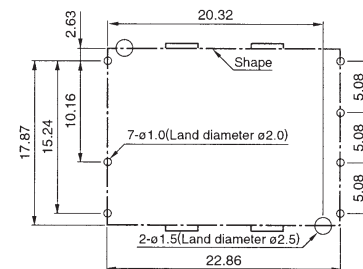


## CC6 Type

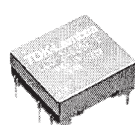
SHAPES AND DIMENSIONS  
CC6-□□□□□F-E (DIP TYPE)



RECOMMENDED PWB HOLE SIZE, LOCATION  
[TOP VIEW]



Dimensions in mm  
Tolerance: ±0.5

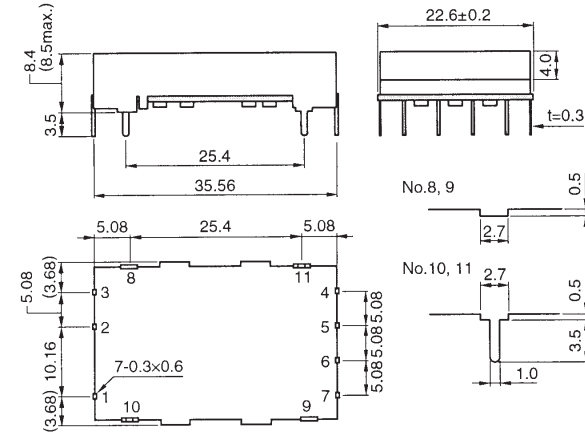


# CC SERIES

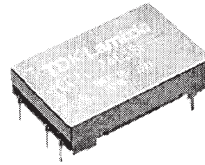
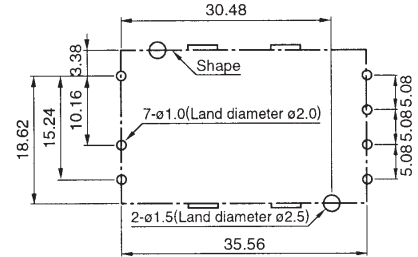
AC/DC Single & Dual Output: 1.5 - 25 Watts

## CC10 Type

SHAPES AND DIMENSIONS  
CC10-□□□□F-E (DIP TYPE)



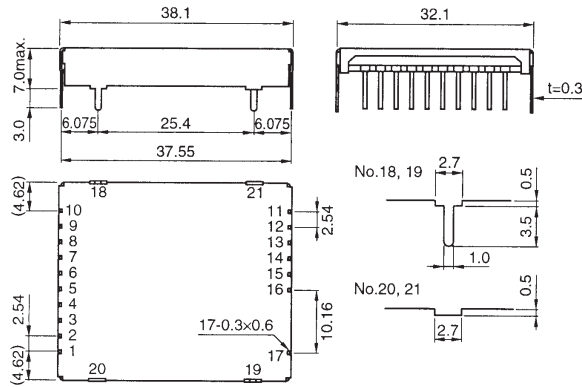
RECOMMENDED PWB HOLE SIZE, LOCATION  
[TOP VIEW]



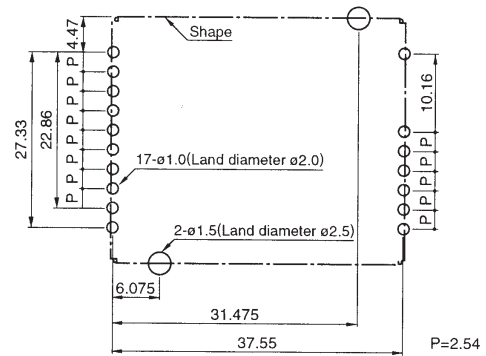
Dimensions in mm  
Tolerance: ±0.5

## CC15 Type

SHAPES AND DIMENSIONS  
CC15-□□□□SF-E (DIP TYPE)



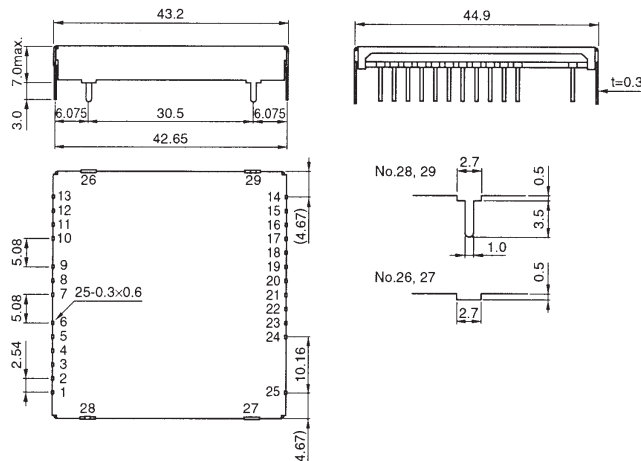
RECOMMENDED PWB HOLE SIZE, LOCATION  
[TOP VIEW]



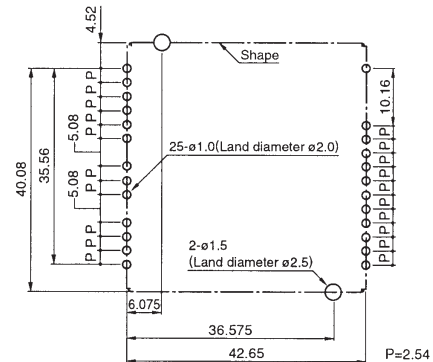
Dimensions in mm  
Tolerance: ±0.5

## CC25 Type

SHAPES AND DIMENSIONS  
CC25-□□□□SF-E (DIP TYPE)



RECOMMENDED PWB HOLE SIZE, LOCATION  
[TOP VIEW]



Dimensions in mm  
Tolerance: ±0.5