

CE Series

1.2 - 2.5A Point of Load
Converters

- 3 to 5V or 9 to 26V Input
- Outputs 1V to 12V
- Surface Mount
- Low 4.2mm to 5.5mm Profile
- Non Isolated Output

Key Market Segments & Applications

Telecommunications
Datacom
Instrumentation

CE Series Features and Benefits

Features

- Wide range output
- Constant switching frequency
- Five sided shielding

Benefits

- Reduces need for custom models
- Easier system filtering
- Reduced EMI

Specifications

MODELS		CE-1003	CE-1004	CE-1005	CE-1050
ITEMS					
Nominal Output Voltage VDC		1.5 to 3.3	3.3 to 5.0	1 to 3.3	(2) 3.3 tp 12.6
Input Voltage Range VDC		6 - 16		3 - 5.25	9 - 26.4
Input Current (max)	A	2.4			1.8
Ripple & Noise (typ) (pk - pk)	mV	100		50	
Total Regulation (max)	mV	±5%		±4%	±5%
Overload Protection (typ)	A	2		3	3.5
Remote On / Off (1)	-	ON = 2 - 6V; OFF= 0-0.6V		ON = <0.5V; OFF= >2V	ON = 3 -6V; OFF= 0-0.3V
Temperature (operating)	°C	-40°C to +85°C (CE1003, 80% load above 70°C)			-20°C to +85°C
Temperature (storage)	°C	-40°C to +85°C			-20°C to +85°C
Humidity (operating)	-	10 - 90% RH Non condensing @ max temp +38°C			
Humidity (storage)	-	Sealed packaging, see Technical Download			
Cooling	-	Convection or forced air			
Vibration (non operating)	-	Frequency: 10-2000Hz, Sweep time: 4 minutes per cycle Amplitude: 10G, 30 minutes each x, y, and z direction			
Shock	-	Peak Acceleration: 100G, Duration: 6msec; three times each axis			
Weight (max)	g	1.8		1.7	3.7
Size	mm	18.3 x 12.3 x 4.2			21.3 x 16.4 x 5.5
Warranty	yrs	1			

Notes: (1) Pin 5
(2) Input / output voltage differential must be at least 4V.

Model Selector

Model	Output Voltage (V)	Output Current (A)	Efficiency (typ)
CE-1003	1.5 - 3.3 ⁽²⁾	1.5	86.5%
CE-1004	3.3 - 5 ⁽²⁾	1.5	86.5%
CE-1005	1.0 - 3.3	2.5 ⁽³⁾	91.5%
CE-1050	3.3 - 12.6	2.5 ⁽⁴⁾	90.0%

Notes:

- (2) See Programming Table
- (3) See CE-1005 Derating Table
- (4) See CE-1050 Derating Curves

CE-1005 Derating Table

Vout	3.3 Vin	5.0 Vin
1.0	1.75A	1.5A
1.2	1.85A	1.65A
1.5	2.00A	1.85A
1.8	2.15A	2.0A
2.0	2.25A	2.2A
2.5	2.50A	2.5A
3.3	-	2.5A

CC-1005 can be trimmed with external resistor

CE-1003, 1004 Programming Table

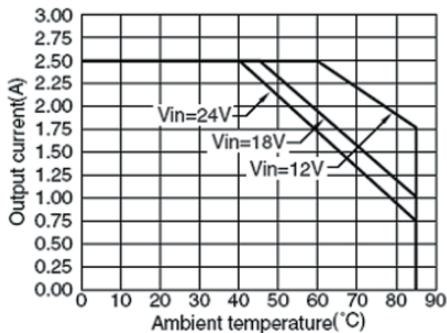
Pin 7	Pin 8	Pin 9	Output Voltage CE-1003	(Vout) CE-1004
0	0	0	3.3	5.0
0	0	1	3.0	4.8
0	1	0	2.8	4.5
0	1	1	2.5	4.3
1	0	0	2.3	4.0
1	0	1	2.0	3.8
1	1	0	1.8	3.5
1	1	1	1.5	3.3

0 = Short to GND 1 = Open

See web site for detailed specifications

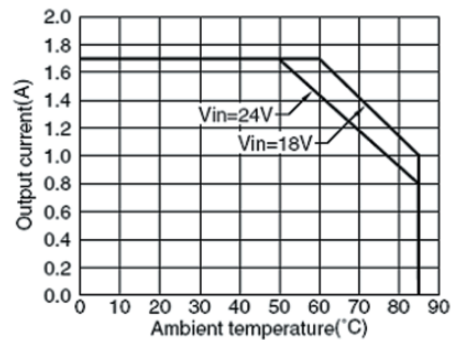
Derating Curve CE-1050 Series

Vout=3.3V



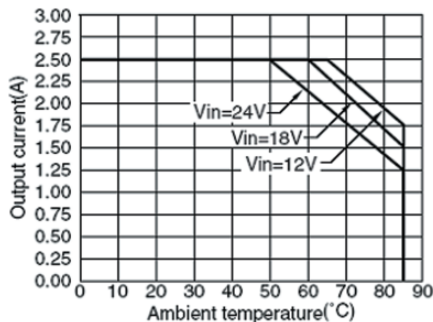
Vout=9.0V

Vout=9.0V



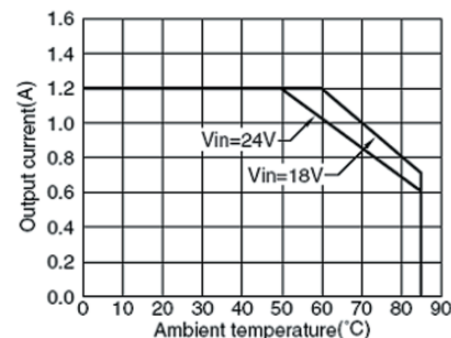
Vout=5.0V

Vout=5.0V

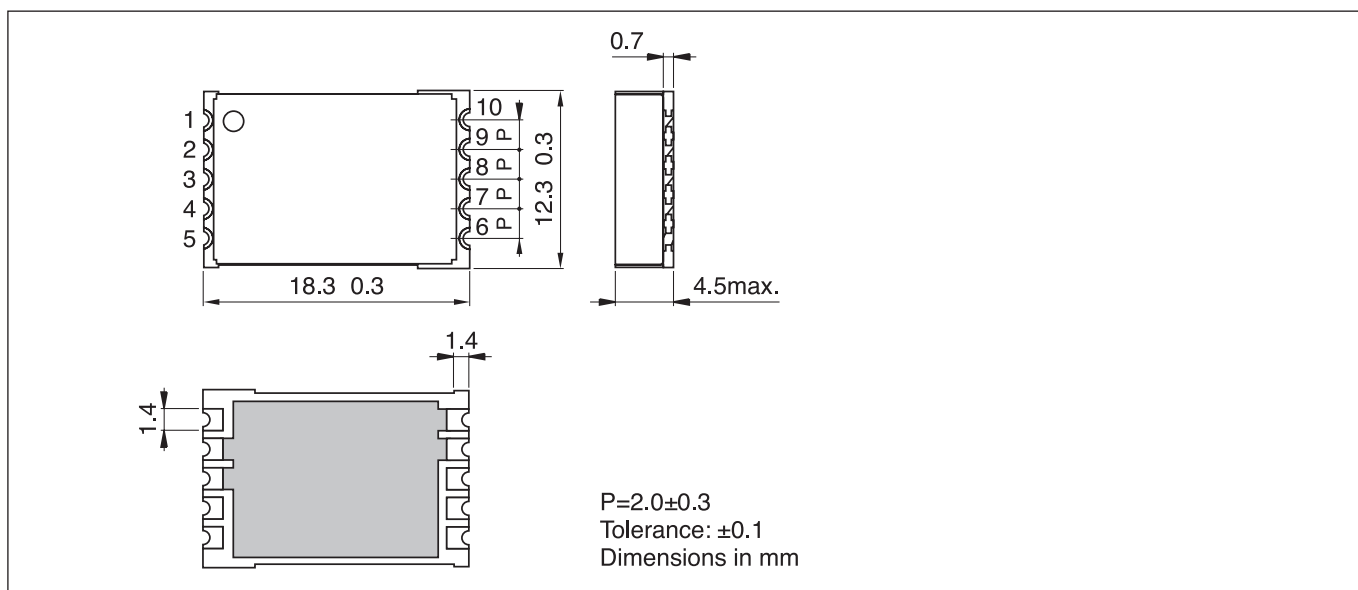


Vout=12V

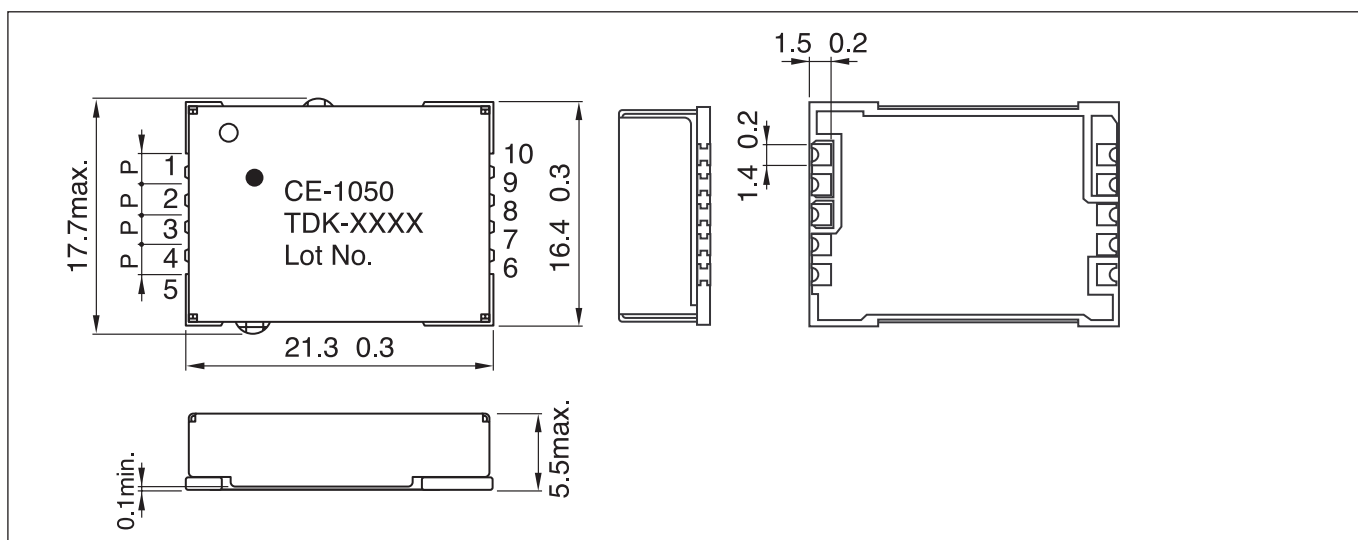
Vout=12V



Outline Drawing CE-1000 Series



Outline Drawing CE-1050 Series



Pinout

Pin	CE-1003	CE-1004	CE-1005	CE-1050
1	Vin	Vin	Vin	Vin
2	Vin	Vin	Vin	Vin
3	GND	GND	GND	GND
4	GND	GND	GND	GND
5	On / Off	On / Off	On/Off	On/Off
6	GND	GND	GND	GND
7	Vs-0	Vs-0	GND	GND
8	Vs-1	Vs-1	Vset	Vset
9	Vs-2	Vs-2	Vout	Vout
10	Vout	Vout	Vout	Vout

TDK-LAMBDA EMEA

www.emea.tdk-lambda.com



TDK-Lambda France SAS

Route de Grivery
ZAC des Delaches
CS 41077
91978 Courtaboeuf Cedex
France
Tel: +33 1 60 12 71 65
Fax: +33 1 60 12 71 66
france@fr.tdk-lambda.com
www.fr.tdk-lambda.com



Italy Sales Office
Via dei Lavoratori 128/130
20092 Cinisello Balsamo (MI)
Italy
Tel: +39 02 61 29 38 63
Fax: +39 02 61 29 09 00
info.italia@it.tdk-lambda.com
www.it.tdk-lambda.com



TDK-Lambda Germany GmbH

Karl-Bold-Strasse 40
77855 Achern
Germany
Tel: +49 7841 666 0
Fax: +49 7841 5000
info.germany@de.tdk-lambda.com
www.de.tdk-lambda.com



Austria Sales Office
Aredstrasse 22
2544 Leobersdorf
Austria
Tel: +43 2256 655 84
Fax: +43 2256 645 12
info.germany@de.tdk-lambda.com
www.de.tdk-lambda.com



TDK-Lambda UK Ltd.

Kingsley Avenue
Ilfracombe
Devon EX34 8ES
United Kingdom
Tel: +44 (0) 12 71 85 66 66
Fax: +44 (0) 12 71 86 48 94
powersolutions@uk.tdk-lambda.com
www.uk.tdk-lambda.com



Nemic Lambda Ltd.

Kibbutz
Givat Hashlosa 48800
Israel
Tel: +9 723 902 4333
Fax: +9 723 902 4777
info@nemic.co.il
www.nemic.co.il



Russia

Technical Support:
St Petersburg
Tel: +7 (812) 6580463
Sales:
Moscow
Tel: +7 (499) 7557732
info@tdk-lambda.ru
www.tdk-lambda.ru

LOCAL DISTRIBUTION