

# LC SERIES

# 12~15W AC-DC スイッチング電源



H20×W40×L60 (mm)

## Features

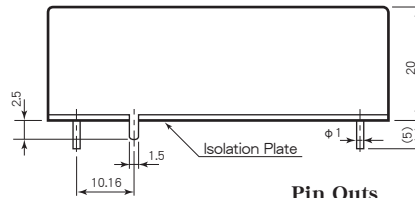
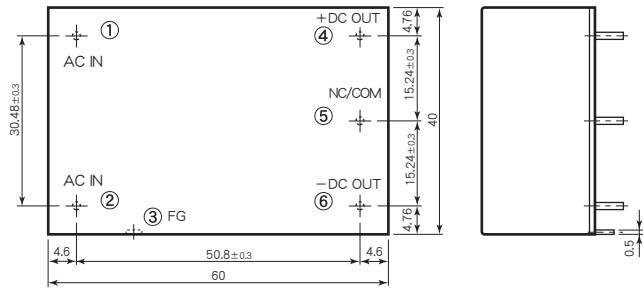
- Input-Output Isolation
- Completely Molding Device
- High Efficiency 75~85%
- High Reliability
- 6 Sided Metal Shielding
- Operating Ambient Temperature -30°C~+71°C
- VCCI Class B
- Conformity to RoHS2 Directive
- 入出力間絶縁
- 完全モールド製品
- 高効率 75~85%
- 高信頼性
- 6面メタルシールド
- 動作周囲温度 -30°C~+71°C
- VCCI クラスB 準拠
- RoHS2指令対応

## General Characteristics

- Input Voltage, Range AC100, 200V (See Table 1)
- Input Frequency 47~440Hz
- Output Voltage, Current See Table 1
- Output Voltage Accuracy ±2%
- ±3% (3.3, 5V Vout only)
- Efficiency See Table 1
- Line Regulation 0.5% max. (at Vin Range)
- Load Regulation Single : ±0.5% max. (0~100% Load)
- Dual : ±2% max. ±3% max. (±5V Vout only) (10~100% Load)
- Output Ripple (0.2% Vout+40mV) p-p max.
- Output Noise (0.5% Vout+50mV) p-p max.
- Short Circuit Protection Built-in, Auto-restart (See Fig. 2)
- Input Rush Current 20A max.
- Temperature Coefficient 0.02%/°C max.
- Operating Ambient Temp. -30°C~+71°C (See Fig. 1)
- Max. Case Temperature +85°C
- Storage Temperature -40°C~+85°C
- Isolation Voltage AC1500V one minute (Input-Output-Case)
- Isolation Impedance 100MΩ min. (at DC1000V) (Input-Output-Case)
- Weight 120g max.
- Humidity 20~95% RH
- Shock 490m/s<sup>2</sup> (11msec 3directions)
- Vibration 10~55Hz 98m/s<sup>2</sup> (30minutes 3directions)
- Surface Structure 6 Sided Metal Case
- Soldering Conditions Soldering DIP 260°C, for 15 seconds max.
- Soldering iron 360°C, for 5 seconds max.
- MTBF Single : 140,000H
- Dual : 120,000H (Ta : 25°C, 80% Load, Nominal Vin)
- Warranty 5 years

## Pin Outs & Dimensions (±0.5mm)

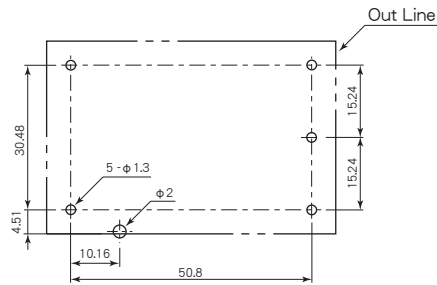
<Top View>



### Pin Outs

Single Output		Dual Outputs	
①	AC in	①	AC in
②	AC in	②	AC in
③	Frame Ground	③	Frame Ground
④	+Vdc out	④	+Vdc out
⑤	No Connection	⑤	Common
⑥	-Vdc out	⑥	-Vdc out

## Hole Configurations on PCB (Top View)



## Selection Guide

Table 1

Model Number	Input Volt. (Range) (V. AC)	Output Voltage (V. DC)	Output Current (A)	Efficiency (Typical) (%)	
LC100-3.3S 3.5A	100 (85~132)	3.3	3.5	81	
LC100-5S 3A		5	3	83	
LC100-12S 1.3A		12	1.3	85	
LC100-15S 1A		15	1	85	
LC100-24S 0.65A		24	0.65	85	
LC100-5D 1.5A		±5	±1.5	75	
LC100-12D 0.65A		±12	±0.65	80	
LC100-15D 0.52A		±15	±0.52	81	
LC200-3.3S 3.5A		200 (175~264)	3.3	3.5	81
LC200-5S 3A			5	3	83
LC200-12S 1.3A	12		1.3	85	
LC200-15S 1A	15		1	85	
LC200-24S 0.65A	24		0.65	85	
LC200-5D 1.5A	±5		±1.5	75	
LC200-12D 0.65A	±12		±0.65	80	
LC200-15D 0.52A	±15		±0.52	81	

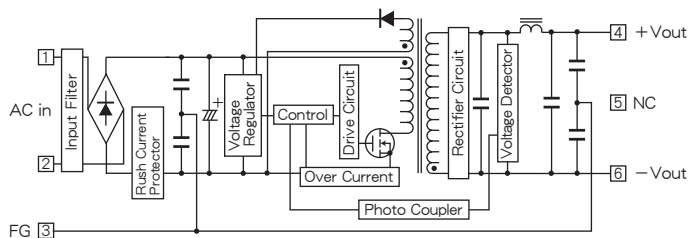
Note : Fuse is not included in this AC/DC converter, so fuse should be used outside.

※ 上記仕様以外にも対応可能ですので お問い合わせ下さい。 Please consult with us about other specification.

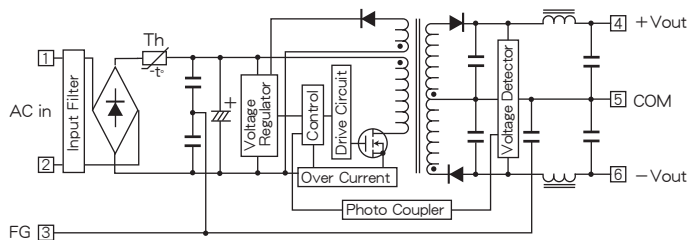
# LC SERIES DATA SHEET

## Block Diagram

### Single Output

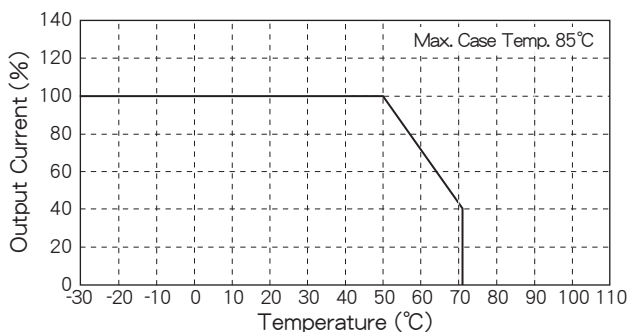


### Dual Outputs

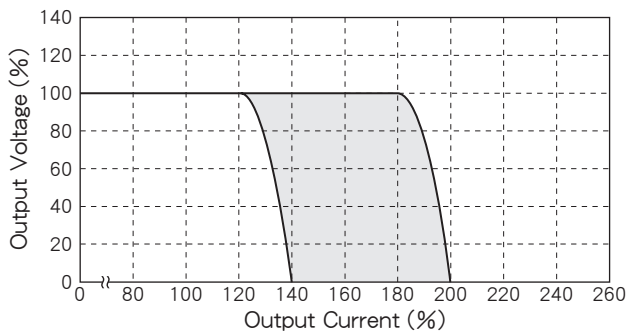


## Characteristic Curves

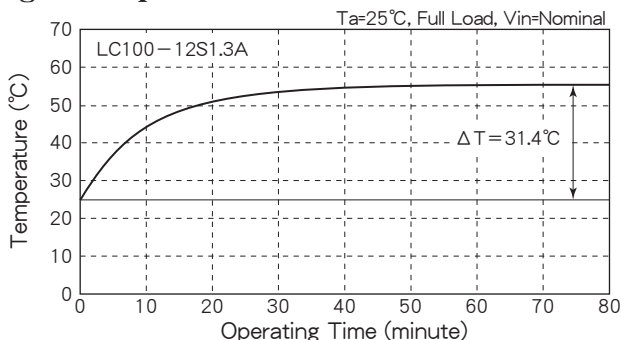
**Fig. 1 Derating Curve**



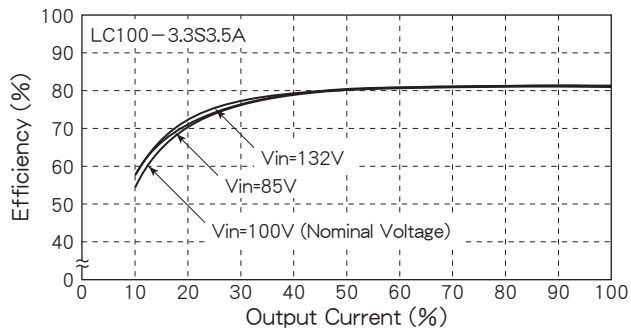
**Fig. 2 Short Circuit Operating Area**



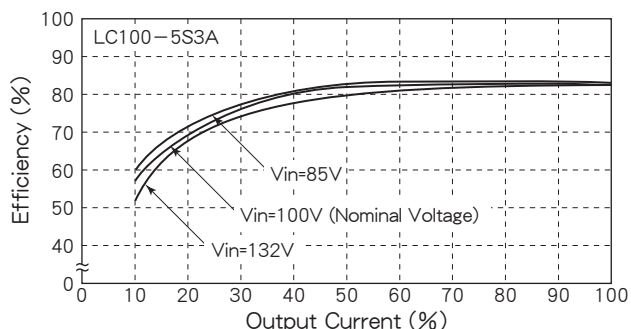
**Fig. 3 Temperature Characteristic on Case Surface**



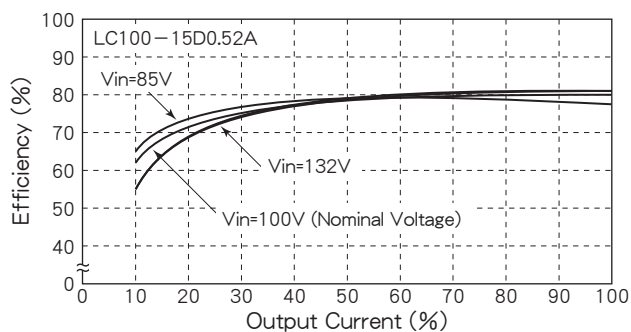
**Fig. 4 Efficiency vs. Output Current**



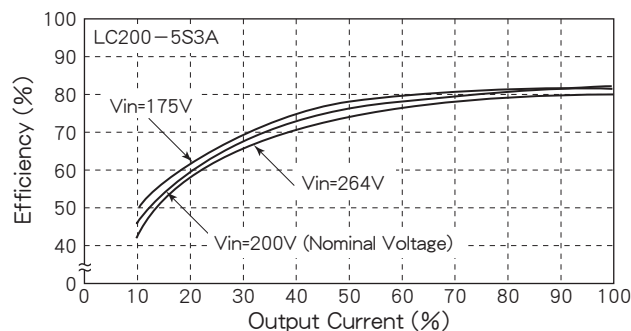
**Fig. 5 Efficiency vs. Output Current**



**Fig. 6 Efficiency vs. Output Current**



**Fig. 7 Efficiency vs. Output Current**



**Fig. 8 Efficiency vs. Output Current**

