

MC SERIES

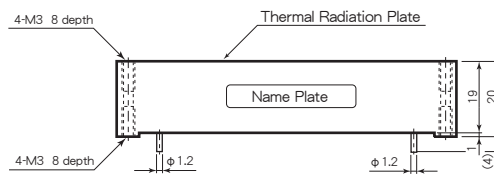
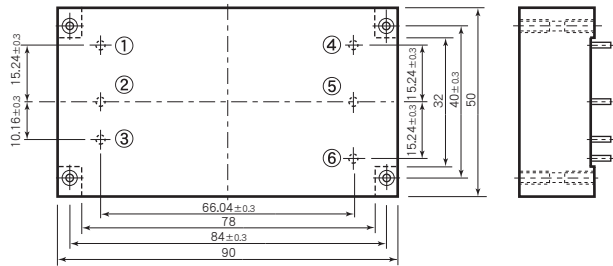
30W AC/DC CONVERTERS Single Output



H20×W50×L90 (mm)

Pin Outs & Dimensions (±0.5mm)

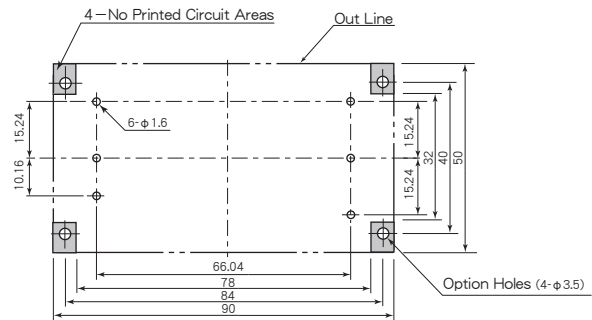
<Top View>



Pin Outs

①	AC in
②	AC in
③	Frame Ground
④	+Vdc out
⑤	0 Vdc out
⑥	No Connection

Hole Configurations on PCB (Top View)



Features

- Low Profile 20mm
- Input-Output Isolation (AC2000V)
- High Efficiency 82~85%
- Completely Molding Device
- 6 Sided Metal Shielding
- Output Over Voltage Protection
- Thermal Protection
+90°C~+100°C
- Operating Ambient Temperature
-30°C~+71°C
- VCCI Class B
- Conformity to RoHS Directive
- 薄型 20mm
- 入出力間絶縁 (AC2000V)
- 高効率 82~85%
- 完全モールド製品
- 6面メタルシールド
- 出力過電圧保護回路内蔵
- 過熱保護回路内蔵
+90°C~+100°C
- 動作周囲温度
-30°C~+71°C
- VCCI クラスB 準拠
- RoHS指令対応

General Characteristics

- Input Voltage, Range (at Ta:25°C, Full Load, Nominal Vin)
AC100V (See Table 1)
- Input Frequency
47~440Hz
- Output Voltage, Current
See Table 1
- Output Voltage Accuracy
±2% (2.5V, 3.3V, 5V Vout:±3%)
- Efficiency
See Table 1
- Line Regulation
±0.5% max. (at Vin Range)
- Load Regulation
±0.5% max. (0~100% 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)
- Over Voltage Protection
115~140% Output Voltage
- 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
AC2000V one minute
(Input-Output-Case)
- Isolation Impedance
100MΩ min. (at DC1000V)
(Input-Output-Case)
- Weight
200g max.
- Humidity
20~95% RH
- Shock
490m/s² (11msec 3directions)
- Vibration
10~55Hz 98m/s²
(30minutes 3directions)
- Surface Structure
6 Sided Aluminum Case
- Soldering Conditions
Soldering iron
360°C, for 5 seconds max.
- MTBF
130,000H
(Ta:25°C, 80%Load, Nominal Vin)
- Warranty
5 years

Selection Guide

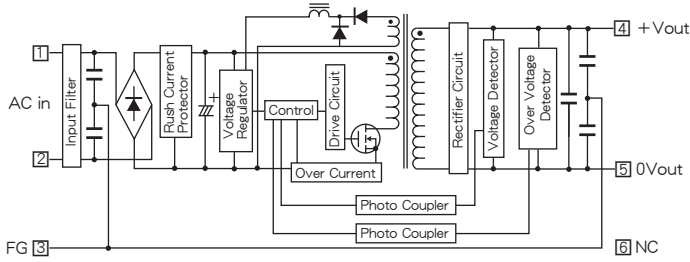
Table 1

Model Number	Input Volt. (Range) (V. AC)	Output Voltage (V. DC)	Output Current (A)	Efficiency (Typical)(%)	
				20% Load	80% Load
MC100 - 2.5 S 8.4 A	100 (85~132)	2.5	8.4	75	82
MC100 - 3.3 S 7.2 A		3.3	7.2	75	84
MC100 - 5 S 6 A		5	6	75	85
MC100 - 12 S 2.6 A		12	2.6	75	85
MC100 - 15 S 2 A		15	2	75	85
MC100 - 24 S 1.3 A		24	1.3	75	85

※ 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.

MC SERIES DATA SHEET

Block Diagram



Characteristic Curves

Fig 1 Derating Curve

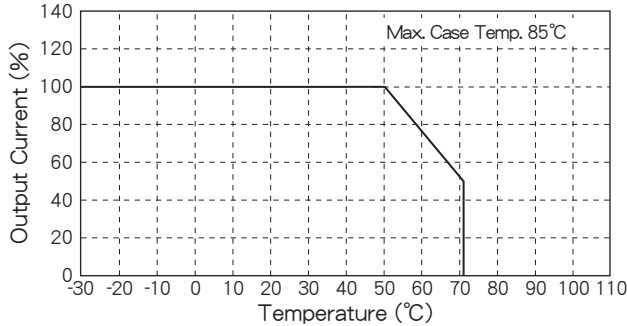


Fig 2 Short Circuit Operating Area

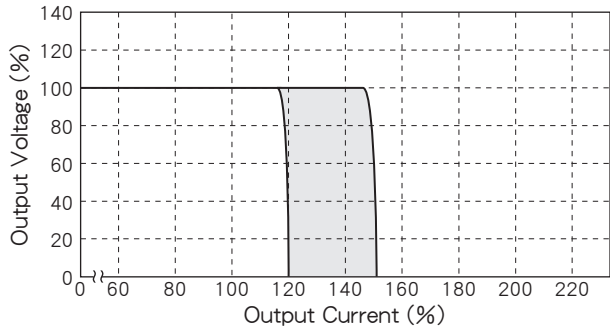


Fig 3 Temperature Characteristic on Case Surface

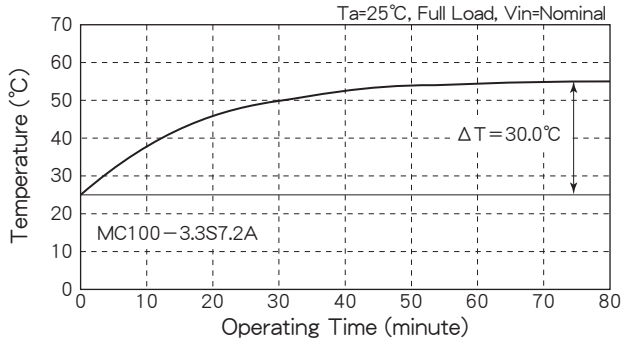


Fig 4 Efficiency vs. Output Current

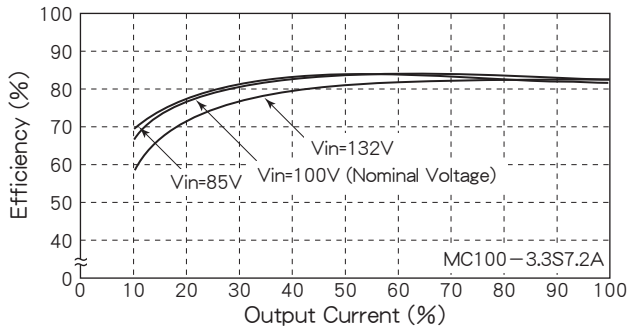


Fig 5 Efficiency vs. Output Current

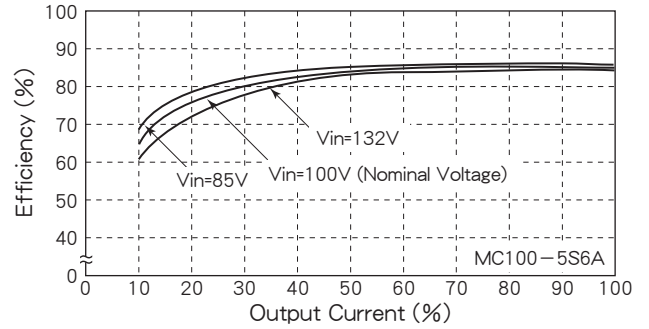


Fig 6 Efficiency vs. Output Current

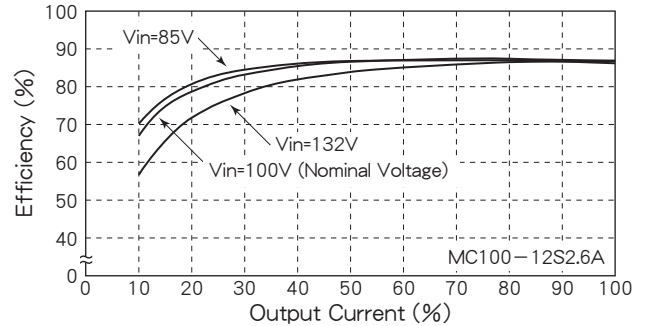


Fig 7 Efficiency vs. Output Current

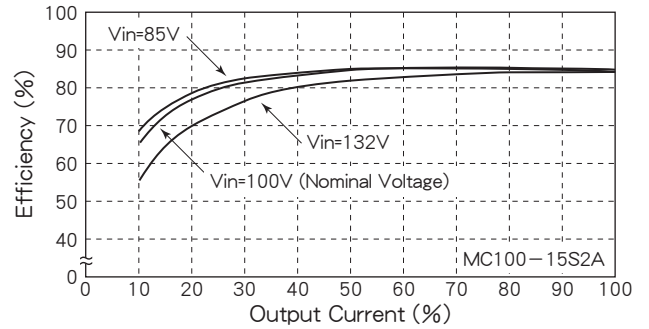


Fig 8 Efficiency vs. Output Current

