

HDC-50~150W Series

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特点 Features

Size 外形尺寸

- > 61.0x57.9x12.7mm
工业标准半砖封装和引脚
- > Industry-standard Half-brick Footprint And Pinout
高效率、高功率密度
- > High Efficiency, High Power Density
基板工作温度100℃
- > Substrate Temperature 100℃



特征 Features

Size 外形尺寸

- > 2.40x2.28x0.50inch
工业标准半砖封装和足迹
- > Industry Standard Half-Brick Package and Footprint
高效率、高功率密度
- > High Efficiency, High Power Density
100℃底板行动
- > 100℃ Baseplate Operation

输入特性 Input

注释 (Notes and Conditions)

| | | | |
|---|--------------------------------------|---|------------------------------|
| 输入电压范围 (Input Voltage Range) | | | |
| 标称(Nominal) | 48Vdc | 36~75Vdc | 80Vdc Max |
| 标称(Nominal) | 24Vdc | 18~36Vdc | 40Vdc Max |
| 输入欠压保护 Input Undervoltage Protection | <36Vdc (IN:48Vdc); <18Vdc (IN:24Vdc) | | |
| 遥控功能 Remote On/Off Function | | | |
| 1)正逻辑 Positive Logic | 开启(On) | 高电平(.5~18Vdc)或悬空 (High Level or Open Circuit) | 相对于-Vin(Reference to -Vin) |
| | 关闭(Off) | 低电平 (<1.4Vdc) 或与-Vin 短接 | Low Level or Connect to -Vin |
| 2)负逻辑 Negative Logic | 开启(On) | 低电平 (<0.4Vdc) 或与-Vin 短接 (Low Level or Connect to -Vin) | 相对于-Vin(Reference to -Vin) |
| | 关闭(Off) | 高电平(1.4~18Vdc) 或悬空 (High Level or Open Circuit) | |

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输出特性 Output

注释 (Notes and Conditions)

| | | |
|---|--|--------------------------|
| 输出电压精度 (Voltage Set-Point Accuracy) | ±1% | Vinom and Ionom |
| 输出电压调节范围 (Output Voltage Trim Range) | ±10% | |
| 源效应 (Line Regulation) | ±0.2%Vo | Vimin~Vimax, Ionom |
| 负载效应 (Load Regulation) | ±0.5%Vo | 10%~100%Ionom, Vinom |
| 输出过压保护 (Output Overvoltage Protection) | 120%~140%Vo | Self Recovering |
| 输出过流保护点 (Current Limit Threshold Range) | 110%~150%Io | |
| 短路保护 (Short-Circuit Protection) | 连续可恢复 (Continuous, Automatic Recovery) | |
| 瞬态响应 (Dynamic Response) | | |
| 过冲幅度 (Peak Deviation) | ±5%Vo | 25%-50%-25% of Ionom |
| 恢复时间 (Settling Time) | 200 μs | and 50%-75%-50% of Ionom |

一般特性 (General)

注释 (Notes and Conditions)

| | | |
|--|---|------------------------------|
| 温度系数 (Temperature Coefficient) | ±0.02%℃ | |
| 隔离电压 (Isolation Voltage) | | |
| 输入与输出 (Input-Output) | 1500Vdc 1min | |
| 输入与外壳 (Input-Case) | 1500Vdc 1min | |
| 输出与外壳 (Output-Case) | 500Vdc 1min | |
| 工作基板温度 (Operating Baseplate Temperature) | -40℃~+100℃ | |
| 贮存温度 (Storage Temperature) | -40℃~+125℃ | |
| 冷却方式 (Cooling) | 加装散热器或强制风冷 Attach Heatsink or Forced Convection | |
| 过温保护 (Thermal Shutdown Range) | 100℃~110℃ | 基板温度 (Baseplate Temperature) |
| 平均故障间隔时间 (MTBF) | 2X105h | MIL-HDBK-217 |
| 重量 (Weight) | 80g | |

注: 除非另有说明, 指标一般在标称输入电压、满载和25℃基板温度下测得。

Note: All specifications are typical at nominal input, full load at 25℃ baseplate temperature unless otherwise stated.

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型号列表(Models)

| 产品型号 (1 Model Number) | 标称输入电压 (Input Voltage) Vdc | 标称输出电压 (Output Voltage) Vdc | 标称负载 (Output Current) A | 额定输出功率 (Output Power) W | 效率 (Efficiency) % | 输出杂音电压峰值 (Ripple and Noise) mVp-p |
|--------------------------|----------------------------------|-----------------------------------|-------------------------------|-------------------------------|-------------------------|---|
| HDC120-48S09 | 48 | 9.0* | 13 | 120 | 84 | 200 |
| HDC50-48S12 | 48 | 12.0 | 4.2 | 50 | 86 | 100 |
| HDC100-48S12 | 48 | 12.0 | 8.4 | 100 | 85 | 100 |
| HDC150-48S12 | 48 | 12.0 | 12.5 | 150 | 84 | 100 |
| HDC150-48S12T | 48 | 12.0 | 12.5 | 150 | 90 | 100 |
| HDC50-48S15 | 48 | 15.0 | 3.3 | 50 | 87 | 100 |
| HDC75-48S15 | 48 | 15.0 | 5 | 75 | 87 | 100 |
| HDC100-48S15 | 48 | 15.0 | 6.67 | 100 | 85 | 100 |
| HDC150-48S15 | 48 | 15.0 | 10 | 150 | 85 | 100 |
| HDC100-48S24 | 48 | 24.0 | 4.2 | 100 | 86 | 200 |
| HDC150-48S24 | 48 | 24.0 | 6.3 | 150 | 87 | 200 |
| HDC150-48S26 | 48 | 26.0 | 5.8 | 150 | 87 | 200 |
| HDC150-48S26A | 48 | 26.0 | 5.8 | 150 | 87 | 200 |
| HDC50-24S12 | 24 | 12.0 | 4.2 | 50 | 85 | 100 |
| HDC100-24S12 | 24 | 12.0 | 8.4 | 100 | 85 | 100 |
| HDC150-24S12 | 24 | 12.0 | 12.5 | 150 | 88 | 100 |
| HDC50-24S15 | 24 | 15.0 | 3.3 | 50 | 85 | 100 |
| HDC100-24S15 | 24 | 15.0 | 6.67 | 100 | 85 | 100 |
| HDC150-24S15 | 24 | 20.0 | 7.5 | 150 | 86 | 200 |
| HDC50-24S24 | 24 | 24.0 | 2.1 | 50 | 86 | 200 |
| HDC100-24S24 | 24 | 24.0 | 4.2 | 100 | 85 | 200 |
| HDC50-24S28 | 24 | 28.0 | 1.8 | 50 | 86 | 200 |
| HDC50-24S48 | 24 | 48.0 | 1.04 | 50 | 86 | 200 |
| HDC150-24S48 | 24 | 48.0 | 3.1 | 150 | 86 | 300 |

注：1、负逻辑遥控功能的产品在定货时须在型号中加“L”。如HDC100-48S12 为正逻辑遥控功能，要定负逻辑遥控功能的产品型号为HDC100-L48S12。型号中有后缀“-T”的产品其输出电压调节方式不同。

2、-注：HDC120-48S09 的输出电压可以下调到6V。

(Notes: 1,The standard product features Remote on/off Positive Logic ,the Negative Logic is optional by adding the big letter `L` to the Model number,for example,HDC100-L48S12 model number indicates Negative Logic,but HDC100-48S12 indicates Positive Logic. Model Numbers with suffix`-T` have different output voltage adjustment.

2,*note: Output voltage of HDC120-48S09 model number can be adjusted to 6V.)

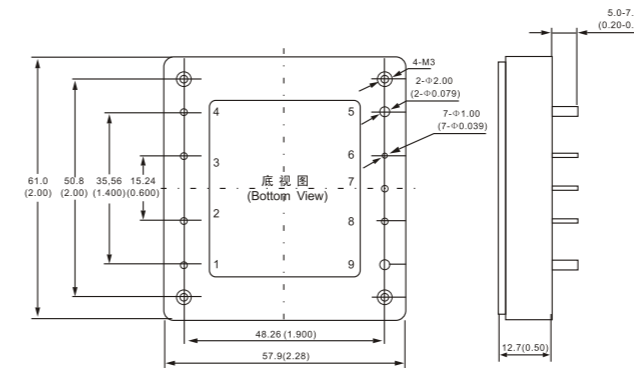
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安装尺寸(Mechanical Drawing)

尺寸单位是mm(inches); All Dimensions in mm (inches)



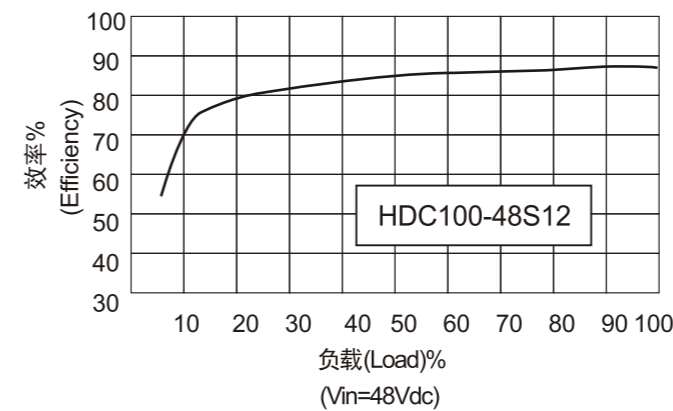
引脚定义(Pin Definition)

| Pin No. | Function | Pin No. | Function |
|---------|----------|---------|----------|
| 1 | +Vin | 6 | -S |
| 2 | Rem | 7 | Trim |
| 3 | FG | 8 | +S |
| 4 | -Vin | 9 | +Vout |
| 5 | -Vout | | |

未注公差按下表

| (Tolerances Unless Otherwise Specified) | |
|---|------------|
| mm | inches |
| x±0.5 | .xx±0.02 |
| xx±0.13 | .xxx±0.005 |

效率负载曲线(Curve of Efficiency vs.Load)



输出电压调节(Output Voltage Trim)

