



Industrial



Test



Comm



Broadcast

85W, 12A Non-isolated SMT Point of Load



| Features | Benefits |
|---|------------------------------|
| • DOSA Compatible Footprint | • Ideal for Second Sourcing |
| • Constant Switching Frequency | • Predictable EMI |
| • No external Loop Tuning Components Needed | • Less Board Area Needed |
| • Excellent Transient response | • For Sensitive Applications |

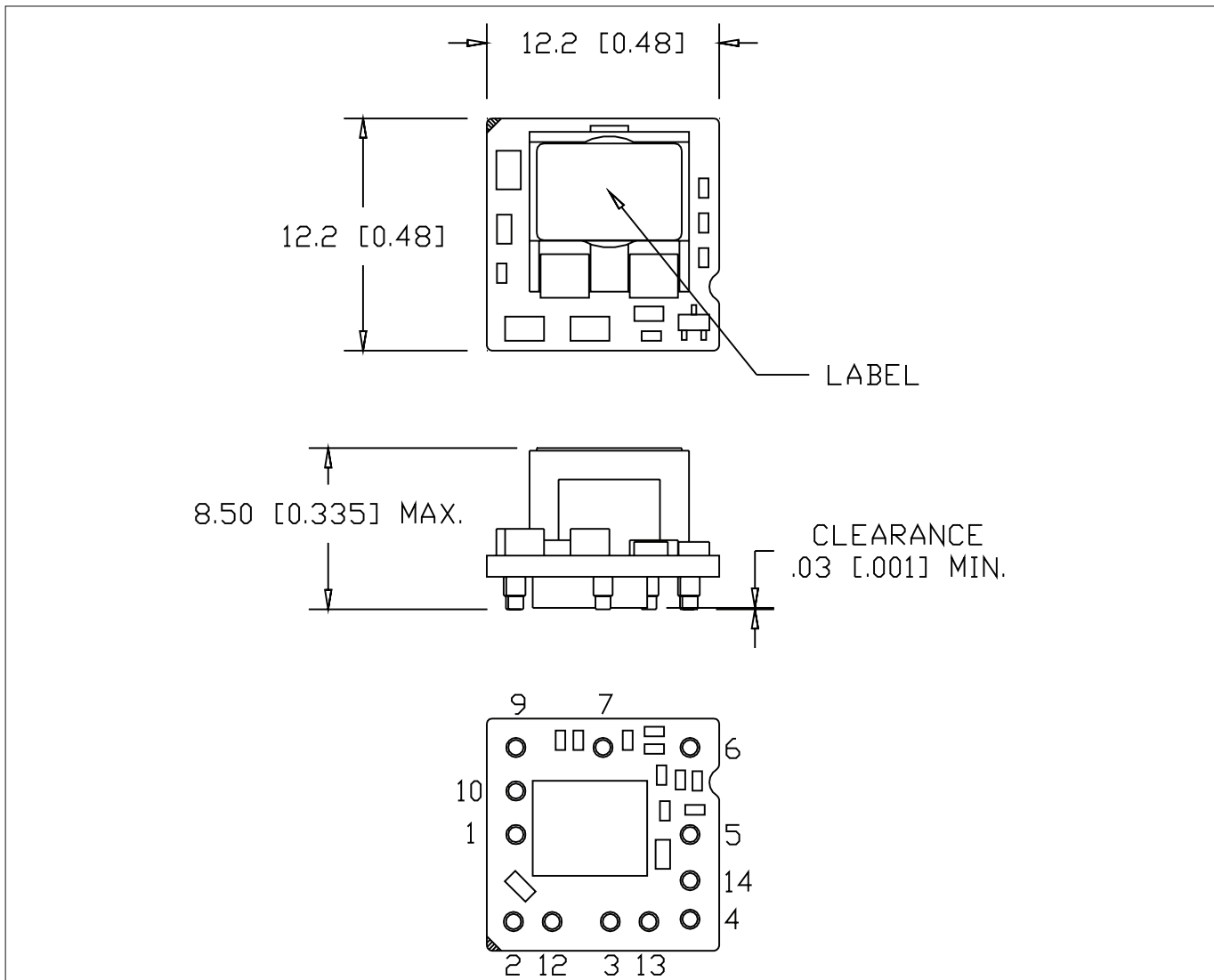
| Specification | | |
|---------------------------|--------|---|
| Model | iCH | |
| DC Output Voltage | V | 0.7 - 8.5 |
| DC Input Voltage | V | 4.5 - 14 |
| Efficiency | % | 88.5 - 97 |
| Output Voltage Tolerance | % | ±3 |
| Switching Frequency | kHz | 500 |
| Line Regulation | mV | 5 |
| Load Regulation | mV | 6 |
| External Load Capacitance | uF | 200 - 2000 |
| Output Ripple and Noise | mVpp | 15 |
| Overcurrent Protection | A | 22A typical |
| Remote On / Off | - | Positive Logic (For Negative Logic Contact Factory) |
| Remote Sense | - | (+) Sense, compensating up to 0.5V |
| Power Good | - | Yes, Low on fail |
| Operating Temperature | °C | -40°C to 115°C (see thermal data on website) |
| Storage Temperature | °C | -55°C to 125°C |
| Safety Agency Approvals | - | IEC/UL/CSA/EN62368-1, 60950-1, CE Mark |
| Weight | g / oz | 2.5g / 0.088 oz |
| Size (LxWxH) | mm | 12.2 x 12.2 x 8.5 |
| Warranty | yrs | 3 |

Model Selector

| Input Model | Input Voltage (V) | Output Current (A) | Output Voltage (V) | Positive Logic On/Off | Negative Logic On/Off |
|---------------------|-------------------|--------------------|--------------------|-----------------------|-----------------------|
| iCH12012A007V-007-R | 4.5 - 14 | 12 | 0.7 - 8.5 | - | yes |
| iCH12012A007V-006-R | 4.5 - 14 | 12 | 0.7 - 8.5 | yes | - |

Preferred

Outline Drawing iCH Series



Pin Assignment

| PIN | Function | PIN | Function |
|-----|-----------|-----|---------------|
| 1 | ON / OFF | 8 | Not Fitted |
| 2 | VIN | 9 | Not Connected |
| 3 | GND | 10 | PWR GOOD |
| 4 | VOUT | 11 | Not Fitted |
| 5 | SENSE (+) | 12 | VIN |
| 6 | TRIM | 13 | GND |
| 7 | GND | 14 | VOUT |



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