

1.5 Watt IN Series



- Regulated Dual Output
- DIP-24 Package
- 1000 VDC Isolation
- Optional Isolation Up To 6000 VDC
- Non-conductive Black Plastic Case
- Continuous Short Circuit Protection
- MTBF >3 Mhrs

Specification

Input

- | | |
|----------------------------------|---|
| Input Voltage Range | • Nominal $\pm 10\%$ |
| Input Filter | • Pi network |
| Input Reverse Voltage Protection | • None |
| Input Reflected Ripple Current | • 35 mA pk-pk through 12 μ H inductor
5 Hz to 20 MHz |

Output

- | | |
|--------------------------|--|
| Output Voltage | • See table |
| Minimum Load | • None |
| Voltage Balance | • $\pm 1\%$ |
| Line Regulation | • $\pm 0.5\%$ max |
| Load Regulation | • $\pm 0.5\%$ max |
| Setpoint Accuracy | • $\pm 2\%$ max |
| Ripple & Noise | • 75 mV pk-pk 20 MHz bandwidth |
| Temperature Coefficient | • $0.02\%/^{\circ}\text{C}$ |
| Short Circuit Protection | • Continuous with auto recovery |
| Maximum Capacitive Load | • $\pm 1000 \mu\text{F}$ for ± 5 V output
$\pm 470 \mu\text{F}$ for ± 9 V to ± 15 V output
$\pm 220 \mu\text{F}$ for ± 24 V output |

General

- | | |
|-----------------------|---------------------------------------|
| Efficiency | • See table |
| Isolation Voltage | • 1000 VDC (5200 VDC max, see note 2) |
| Isolation Resistance | • $10^9 \Omega$ |
| Isolation Capacitance | • 60 pF typical |
| Switching Frequency | • 350 kHz typical |
| MTBF | • >3 Mhrs |

Environmental

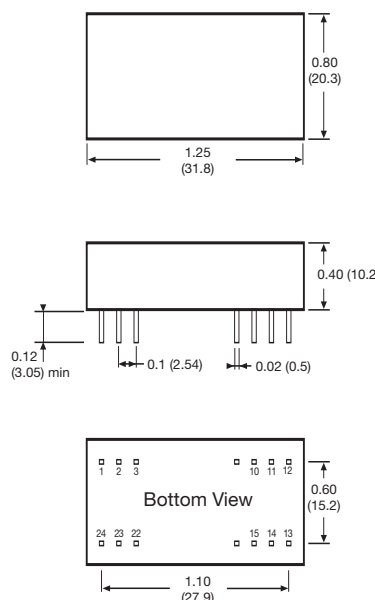
- | | |
|-----------------------|---|
| Operating Temperature | • -40°C to $+85^{\circ}\text{C}$ |
| Storage Temperature | • -40°C to $+125^{\circ}\text{C}$ |
| Case Temperature | • $+100^{\circ}\text{C}$ max |
| Cooling | • Convection-cooled |

Notes

1. All dimensions in inches (mm).
2. Add suffix '-H' to model number for 3 kVDC isolation, '-H4' for 4 kVDC isolation, '-H5' for 5.2 kVDC isolation and '-H6' for 6 kVDC isolation.

Input Voltage	Output Voltage	Output Current	Efficiency	Model Number ⁽²⁾
5 VDC	± 5.0 V	± 150 mA	65%	IN0505D
	± 9.0 V	± 84 mA	67%	IN0509D
	± 12.0 V	± 63 mA	70%	IN0512D
	± 15.0 V	± 50 mA	67%	IN0515D
	± 24.0 V	± 32 mA	66%	IN0524D
12 VDC	± 5.0 V	± 150 mA	68%	IN1205D
	± 9.0 V	± 84 mA	70%	IN1209D
	± 12.0 V	± 63 mA	75%	IN1212D
	± 15.0 V	± 50 mA	72%	IN1215D
	± 24.0 V	± 32 mA	71%	IN1224D
24 VDC	± 5.0 V	± 150 mA	70%	IN2405D
	± 9.0 V	± 84 mA	73%	IN2409D
	± 12.0 V	± 63 mA	78%	IN2412D
	± 15.0 V	± 50 mA	75%	IN2415D
	± 24.0 V	± 32 mA	74%	IN2424D

Mechanical Details



Pin Connections		
Pin	Standard	'-H' Versions
1	+Vin	+Vin
2	-Vout	+Vin
3	Common	No Pin
10	Common	Common
11	+Vout	Common
12	-Vin	No Pin
13	-Vin	-Vout
14	+Vout	No Pin
15	Common	+Vout
22	Common	No Pin
23	-Vout	-Vin
24	+Vin	-Vin