

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%/ $^{\circ}$ C
- Short Circuit Protection • Continuous with auto recovery
- Maximum Capacitive Load • $\pm 1000 \mu$ F for ± 5 V output
 $\pm 470 \mu$ F for ± 9 V to ± 15 V output
 $\pm 220 \mu$ 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

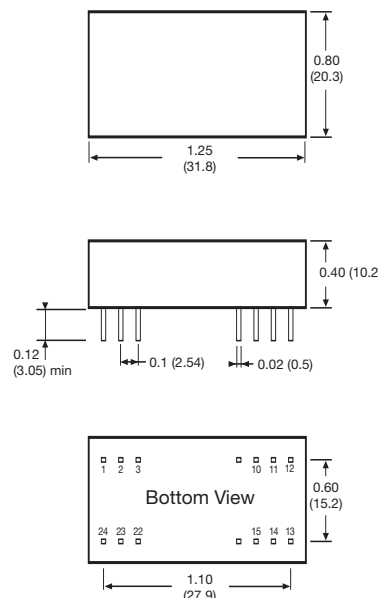
- Operating Temperature • -40° C to $+85^{\circ}$ C
- Storage Temperature • -40° C to $+125^{\circ}$ C
- Case Temperature • $+100^{\circ}$ C max
- Cooling • Convection-cooled

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