

# 1 Watt

## IF Series



- Regulated Single Output
- SIP or DIP Package
- Low Ripple & Noise
- 1000 VDC Isolation
- Optional 3000 VDC Isolation
- MTBF 4.2 Mhrs
- 3 Year Warranty

### Specification

#### Input

- Input Voltage Range • Nominal  $\pm 10\%$
- Input Reflected Ripple Current • 20 mA pk-pk through 12  $\mu\text{H}$  inductor, 5 Hz to 20 MHz
- Input Reverse Voltage Protection • None

#### Output

- Output Voltage • See table
- Minimum Load • None<sup>(3)</sup>
- Line Regulation •  $\pm 0.5\%$  max
- Load Regulation •  $\pm 0.5\%$  max for a 10-100% load change<sup>(3)</sup> ( $\pm 1.0\%$  for 3.3 V output)
- Setpoint Accuracy •  $\pm 2\%$  max
- Ripple & Noise • 50 mV pk-pk max, 20 MHz bandwidth
- Temperature Coefficient • 0.02%/°C
- Maximum Capacitive Load • 220  $\mu\text{F}$

#### General

- Efficiency • See table
- Isolation Voltage • 1000 VDC standard, 3000 VDC option<sup>(2)</sup>
- Isolation Resistance • 1000 M $\Omega$  min
- Isolation Capacitance • 60 pF typical
- Switching Frequency • 36-150 kHz variable
- MTBF • 4.2 Mhrs to MIL-HDBK-217F at 25 °C, GB

#### Environmental

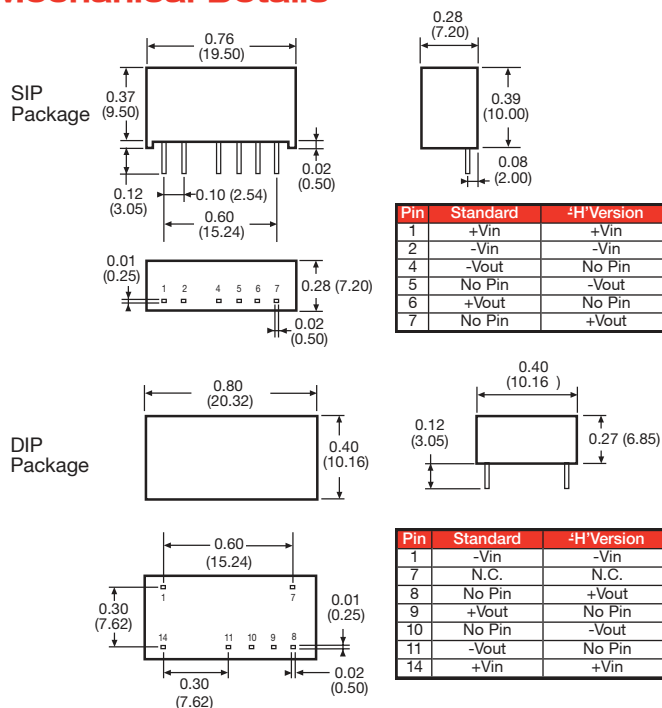
- Operating Temperature • -40 °C to +85 °C (no derating)
- Storage Temperature • -40 °C to +125 °C
- Case Temperature • +100 °C max
- Cooling • Convection-cooled

#### EMC & Safety

- Safety Approvals • CE (Meets all applicable directives), UKCA (Meets all applicable legislation)

Input Voltage	Output Voltage	Output Current	Efficiency	Model Number <sup>(1,2)</sup>
5 V	3.3 V	333 mA	57%	IF0503S
	5.0 V	200 mA	65%	IF0505S
	9.0 V	111 mA	65%	IF0509S
	12.0 V	84 mA	68%	IF0512S
	15.0 V	67 mA	68%	IF0515S
12 V	3.3 V	333 mA	57%	IF1203S
	5.0 V	200 mA	63%	IF1205S
	9.0 V	111 mA	66%	IF1209S
	12.0 V	84 mA	68%	IF1212S
	15.0 V	67 mA	66%	IF1215S
24 V	3.3 V	333 mA	60%	IF2403S
	5.0 V	200 mA	65%	IF2405S
	9.0 V	111 mA	68%	IF2409S
	12.0 V	84 mA	68%	IF2412S
	15.0 V	67 mA	68%	IF2415S

### Mechanical Details



#### Notes

1. For DIP package, replace suffix 'S' with suffix 'D'.
2. For 3000 VDC isolation, add suffix '-H'.
3. Operation at no load will not damage unit but it may not meet all specifications.
4. All dimensions in inches (mm).
5. Pin pitch tolerance:  $\pm 0.014$  ( $\pm 0.35$ )
6. Case tolerance:  $\pm 0.02$  ( $\pm 0.5$ )
7. Weight: 0.005 lbs (2.4 g)