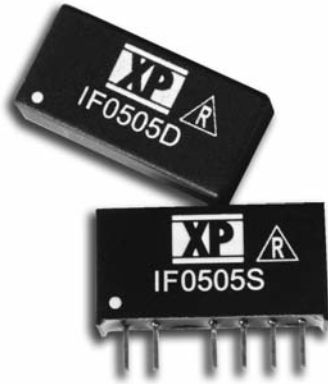


# 1 Watt IF Series



- Regulated Single Output
- SIP or DIP Package
- Low Ripple & Noise
- 1000 VDC Isolation
- Optional 3000 VDC Isolation
- MTBF 3.5 Mhrs
- 3 Year Warranty

## Specification Input

- Input Voltage Range** • Nominal  $\pm 10\%$
- Input Reflected Ripple Current** • 20 mA pk-pk through 12  $\mu$ 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 ( $\pm 1.0\%$  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  $\mu$ F

## General

- Efficiency** • See table
- Isolation Voltage** • 1000 VDC standard, 3000 VDC option - see note 2
- Isolation Resistance** • 1000 M $\Omega$  min
- Isolation Capacitance** • 60 pF typical
- Switching Frequency** • Variable, 50 kHz typical
- MTBF** • 3.5 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

## 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)

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†^

† Available from Farnell. See pages 266-269.  
 ^ Available from Newark. See pages 270-272.

## Mechanical Details

