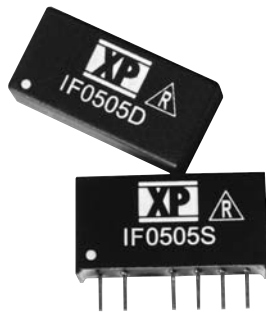


IF SERIES

DC/DC Single Output: 1 Watt



Features

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

Specification

Input

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

Output

- Output Voltage • See table
- Minimum Load • None⁽³⁾
- Line Regulation • $\pm 0.5\%$ max
- Load Regulation • $\pm 0.5\%$ max for a 10-100% load change⁽³⁾ ($\pm 1.0\%$ 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 μF

General

- Efficiency • See table
- Isolation Voltage • 1000 VDC standard, 3000 VDC option⁽²⁾
- Isolation Resistance • 1000 M Ω 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

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: ± 0.014 (± 0.35)
6. Case tolerance: ± 0.02 (± 0.5)
7. Weight: 0.005 lbs (2.4 g)

Input Voltage	Output Voltage	Output Current	Efficiency	Model Number ^(1,2)
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

