

IL Series · 2 Watts

FEATURES

2 Watts
Single Output
SIP Package
1000 VDC Isolation
Optional 3000 VDC Isolation
MTBF >1.2 Mhrs
-40 °C to +85 °C Operation
3 Year Warranty



SPECIFICATIONS

INPUT

Parameter	Value
Input Voltage Range	Nominal $\pm 10\%$
Input Reflected Ripple Current	20 mA pk-pk through 12 μ H inductor, 5 Hz to 20 MHz
Input Reverse Voltage Protection	None
Input Filter	Capacitor

OUTPUT

Parameter	Value
Output Voltage Range	See table
Minimum Load	None(2)
Line Regulation	1.2%/1% ΔV_{in}
Load Regulation	$\pm 10\%$, 20-100% load change (3.3 V models: $\pm 20\%$)
Setpoint Accuracy	$\pm 3\%$
Ripple & Noise	150 mV pk-pk max, 20 MHz bandwidth
Temperature Coefficient	0.02%/°C
Maximum Capacitive Load	470 μ F

GENERAL

Parameter	Value
Efficiency	See table
Isolation Voltage	1000 VDC minimum (3000 VDC -H option)
Isolation Resistance	109 Ω
Isolation Capacitance	60 pF typical
Switching Frequency	Variable, 70 KHz typical
MTBF	>1.21 Mhrs to MIL-HDBK-217F at 25 °C, GB

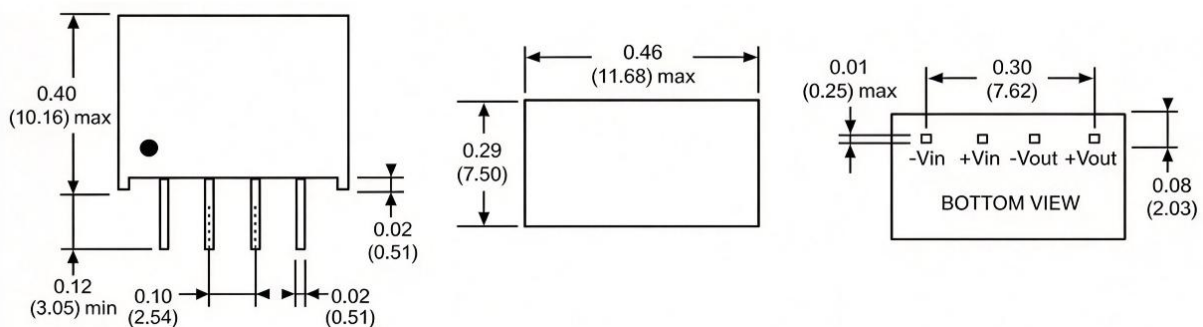
ENVIRONMENTAL

Parameter	Value
Operating Temperature	-40 °C to +85 °C
Storage Temperature	-40 °C to +125 °C
Case Temperature	100 °C max
Cooling	Convection-cooled

SELECTION GUIDE

Model Number(1)	Input Voltage (VDC)	No Load Input Current	Output Voltage (VDC)	Output Current	Efficiency
IL0503S	5	35 mA	3.3	400 mA	71%
IL0505S	5	35 mA	5.0	400 mA	77%
IL0509S	5	35 mA	9.0	222 mA	80%
IL0512S	5	35 mA	12.0	168 mA	82%
IL0515S	5	35 mA	15.0	132 mA	82%
IL0524S	5	35 mA	24.0	84 mA	82%
IL1203S	12	20 mA	3.3	400 mA	72%
IL1205S	12	20 mA	5.0	400 mA	78%
IL1209S	12	20 mA	9.0	222 mA	82%
IL1212S	12	20 mA	12.0	168 mA	84%
IL1215S	12	20 mA	15.0	132 mA	84%
IL1224S	12	25 mA	24.0	84 mA	82%
IL2403S	24	10 mA	3.3	400 mA	74%
IL2405S	24	10 mA	5.0	400 mA	80%
IL2409S	24	10 mA	9.0	222 mA	84%
IL2412S	24	10 mA	12.0	168 mA	84%
IL2415S	24	10 mA	15.0	132 mA	84%
IL2424S	24	10 mA	24.0	84 mA	84%
IL4803S	48	7 mA	3.3	400 mA	72%
IL4805S	48	7 mA	5.0	400 mA	78%
IL4809S	48	7 mA	9.0	222 mA	82%
IL4812S	48	7 mA	12.0	168 mA	80%
IL4815S	48	7 mA	15.0	132 mA	82%
IL4824S	48	7 mA	24.0	84 mA	82%

MECHANICAL DETAILS



NOTES

1. Add suffix 'H' to model for 3000 VDC isolation.
2. Operation at no load will not damage unit but it may not meet all specifications.
3. All dimensions in inches (mm).
4. Pin pitch tolerance: ± 0.014 (± 0.35), Case tolerance: ± 0.02 (± 0.5)
5. Weight: 0.004 lbs (1.8 g)