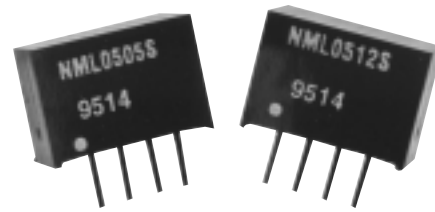


International Power Sources, Inc.

260 Hopping Brook Road
 Holliston, Massachusetts 01746
 Tel. (508) 429-4440 Fax (800) 226-2100
<http://www.intlpower.com>

DC/DC Converters



NML SERIES 2 WATT

FEATURES

- 0.17 in² board space
- 85% Efficiency
- 30 Watts per in³
- 5 VDC, 12 VDC Inputs
- SIP Packaging
- 1000 VDC Isolation

MODELS CHART

| OUTPUT VOLTAGE | OUTPUT CURRENT | PART NUMBERS | |
|----------------|----------------|--------------|-------------|
| | | 5VDC INPUT | 12VDC INPUT |
| 5VDC | 400mA | NML0505S | NML1205S |
| 9VDC | 222mA | NML0509S | NML1209S |
| 12VDC | 167mA | NML0512S | NML1212S |
| 15VDC | 133mA | NML0515S | NML1215S |

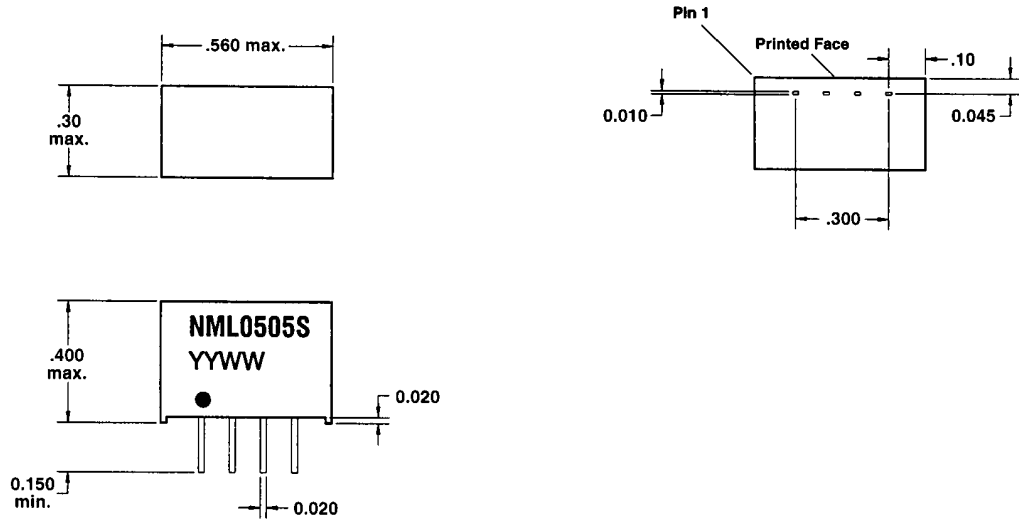
ELECTRICAL SPECIFICATIONS

All specifications typical at nominal line, full load and 25°C

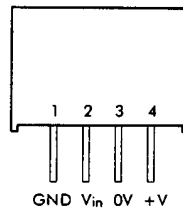
| | |
|--|---------------------------|
| Input voltage range | ±10% |
| Input reflected noise (20MHz BW) 5VDC input | 150mV p-p |
| (20MHz BW) 12VDC input | 300mV p-p |
| Output voltage accuracy | ±5% |
| Line regulation (10% to 100% Load) | 1.2%/1% of Vin |
| Load regulation (10% to 100% Load) | ±10% |
| Output ripple and noise (20 MHz BW) | 200mV p-p max. |
| Efficiency at full load, 9V, 12V and 15V outputs | 85% typical, 75% min. |
| Efficiency at full load, 5V outputs | 80% typical, 70% min. |
| Short circuit protection | 1 second max. |
| Switching frequency at full load (typical) | 75 KHz |
| Input output isolation | 1000VDC |
| Temperature coefficient | 0.03% per °C max. |
| Operating temperature range | -50°C to 125°C |
| | 0°C to 70°C (no derating) |
| Storage temperature range | -55°C to 125°C |

Specifications subject to change. Unit requires 10mm of air space.

MECHANICAL SPECIFICATIONS

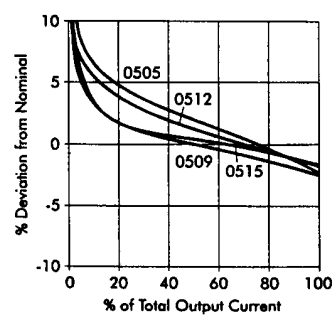
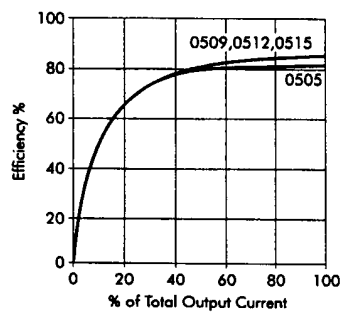


PIN CONNECTIONS



OUTPUT CHARACTERISTICS

NML05 series



NML12 series

