

PCB Mounting DC to DC Converter - continued

NML Series 2W DC/DC Converters



Nominal Input Voltage (V)	Output Voltage (V)	Output Current (mA)	Mfrs. List No.	Order Code
5	5	400	NML0505SC	102-1519
5	9	222	NML0509SC	102-1520
5	12	167	NML0512SC	102-1521
5	15	133	NML0515SC	102-1522
12	5	400	NML1205SC	102-1523
12	9	222	NML1209SC	102-1524
12	12	167	NML1212SC	102-1525
12	15	133	NML1215SC	102-1526

Pin out specification
Pin 1 GND, Pin 2 Vin, Pin 3 0V, Pin4 +V

- Full 2 watt output power
- Single isolated output
- 1KVDC isolation
- Efficiency to 85%
- 5V & 12V input
- 5V, 9V, 12V and 15V output
- Pin compatible with LME and NME Series
- Toroidal magnetics
- Internal SMD construction
- No heatsink required
- **UL 94V-0** package material
- **SIP** package style
- No external components required
- RoHS Compliant

205873

Order Code	1+	10+	25+	50+	+
NML Series All Order Codes	802.00	761.00	716.00	626.00	--

2W Isolated DC/DC Converters

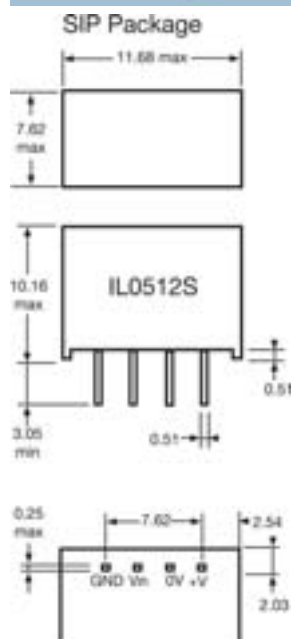
Single Output - IL Series



A new low cost range of 2W isolated dc/dc converters. The IL series comes in one of the smallest packages available today and has single outputs ranging from 5 Vdc to 15 Vdc with inputs of 5 or 12 Vdc. The units are available in a SIP package style and feature short circuit protection.

- Low cost
- Industry standard pin-out
- 1 kVdc isolation
- -40°C to +85°C @ full load
- UL94V-0 material

Input Range	Nominal	±10%
Line Regulation	1.2%/1%	ΔVin
Load Regulation	±8%	20-100% load
Ripple & Noise	150 mV	pk-pk max
Short Circuit Protection	1 s	max
Operating Temperature	-40°C to +85°C	
Storage Temperature	-40°C to +125°C	
Isolation Voltage	1000 Vdc	min
Efficiency	Up to 75%	

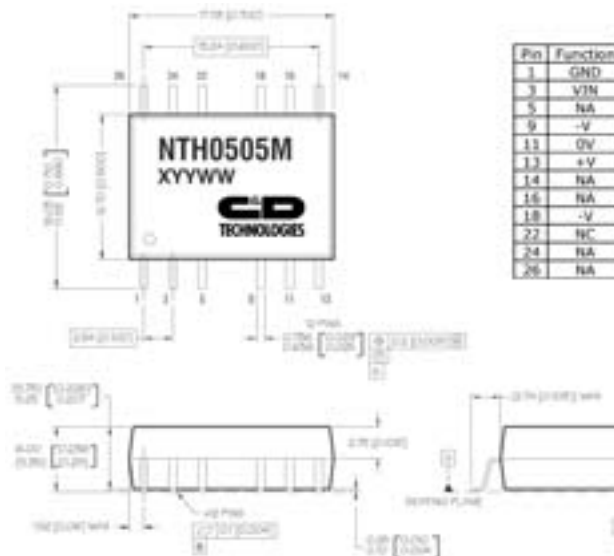


Input Voltage	Output Voltage	Output Current	Mfrs. List No.	Order Code
5 Vdc	5 Vdc	400 mA	IL0505S	872-8097
5 Vdc	9 Vdc	222 mA	IL0509S	872-8100
5 Vdc	12 Vdc	168 mA	IL0512S	872-8119
5 Vdc	15 Vdc	132 mA	IL0515S	872-8127
12 Vdc	5 Vdc	400 mA	IL1205S	872-8135
12 Vdc	9 Vdc	222 mA	IL1209S	872-8143
12 Vdc	12 Vdc	168 mA	IL1212S	872-8151
12 Vdc	15 Vdc	132 mA	IL1215S	872-8160

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Mfrs. List No.	Order Code	1+	10+	25+	50+	+
IL0505S	872-8097	496.00	466.00	456.00	441.00	--
IL0509S	872-8100	496.00	466.00	456.00	441.00	--
IL0512S	872-8119	496.00	466.00	456.00	441.00	--
IL0515S	872-8127	496.00	466.00	456.00	441.00	--
IL1205S	872-8135	496.00	466.00	456.00	441.00	--
IL1209S	872-8143	496.00	466.00	456.00	441.00	--
IL1212S	872-8151	496.00	466.00	456.00	441.00	--
IL1215S	872-8160	496.00	466.00	456.00	441.00	--

Isolated 2W Dual Output SM DC/DC Converters
NTH Series



- Wide temperature performance at full 2 Watt load, -40°C to 85°C
- Lead frame technology
- Dual isolated output
- 1kVDC isolation
- Efficiency to 84%
- Power density 1.54W/cm³
- 5V & 12V input
- 5V, 9V, 12V and 15V output
- Footprint over pins 3.16cm²
- UL 94V-0 package material
- No heatsink required
- Internal SMD construction
- MTTF up to 2.1 million hours
- Multi layer ceramic capacitors
- Lead free compatible

Nominal Input Voltage	Output Voltage	Output Current	Dimensions (WxHxD)	Mfrs. List No.	Order Code
5V dc	±	±200mA	17.78x6.00x12.70	NTH0505M	328-8031
5V dc	±9V dc	±111mA	17.78x6.00x12.70	NTH0509M	874-0240
5V dc	±	±83mA	17.78x6.00x12.70	NTH0512M	328-8043
5V dc	±	±67mA	17.78x6.00x12.70	NTH0515M	328-8055
12V dc	±	±200mA	17.78x6.00x12.70	NTH1205M	328-8067
12V dc	±	±111mA	17.78x6.00x12.70	NTH1209M	755-0996
12V dc	±	±83mA	17.78x6.00x12.70	NTH1212M	328-8079
12V dc	±	±67mA	17.78x6.00x12.70	NTH1215M	328-8080

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Mfrs. List No.	Order Code	1+	10+	25+	50+
NTH0505M	328-8031	877.00	855.00	830.00	799.00
NTH0509M	874-0240	877.00	855.00	830.00	799.00
NTH0512M	328-8043	877.00	855.00	830.00	799.00
NTH0515M	328-8055	877.00	855.00	830.00	799.00
NTH1205M	328-8067	877.00	855.00	830.00	799.00
NTH1209M	755-0996	877.00	855.00	830.00	799.00
NTH1212M	328-8079	877.00	855.00	830.00	799.00
NTH1215M	328-8080	877.00	855.00	830.00	799.00

2W - Dual Output NMH Series
1kV Isolation



- Miniature 2W dual output
- Efficiency to 86%
- 1kV dc isolation
- Power density 1.42W/cm³
- SIL and DIL packages styles
- **UL94V-0** package material
- No heatsink or external components required
- RoHS Compliant

Single-In-Line Package



Dual-In-Line Package