

FEATURES

- RoHs compliant
- 24-Pin DIP package
- Internal filtering
- Low output noise
- Temperature Range: -25°C to +70°C
- Surface mount construction

APPLICATIONS

- Ethernet adapter cards
- Cheapernet Local area networks (LANs)

DESCRIPTION

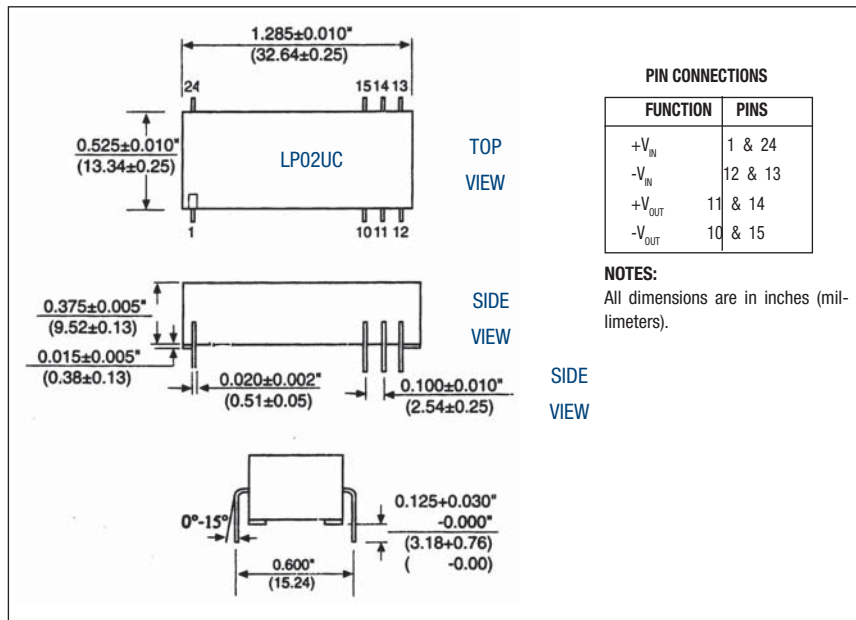
The LP02UC Series is designed specifically for low-cost Local Area Network applications. It provides isolated power for LAN transceiver devices. The product operates from either 5 or 12 volts input voltage and supplies an isolated -9 volts output.

The LP02UC Series is housed in an industry standard 24-pin dual-in-line (DIP) package to permit upgrading of existing systems.

A 100kHz push-pull oscillator is used in the input stage, complementing the unit's high efficiency and low noise characteristics.

The LP02UC Series offers the user a cost effective solution without sacrificing reliability. A highly automated manufacturing process is employed in which all components are surface mounted and reflow-soldered, eliminating any hand-soldering during construction. This dramatically reduces unit variation and improves reliability.

MECHANICAL: PACKAGE/PINOUT "K"



THROUGH-HOLE SOLDERING INFORMATION

These devices are intended for wave soldering or manual soldering. They are not intended to be subject to surface mount processes under any circumstances.

The normal wave soldering process can be used with these devices where the device is subjected to a maximum wave temperature of 260°C for a period of no more than 10 seconds. Within this time and temperature range, the integrity of the device's plastic body will not be compromised and internal temperatures within the converter will not exceed 175°C. Care should be taken to control manual soldering limits identical to that of wave soldering.

ELECTRICAL SPECIFICATIONS

Specifications typical at T_A = +25°C, nominal input voltage, rated output current unless otherwise specified.

Model	Nominal Input Voltage (Vdc)	Rated Output Voltage (Vdc)	Rated Output Current (mA)	Input Current		Efficiency (%)
				No Load (mA)	Rated Load (mA)	
LP02U05S09C	5	9	250	50	568	80
LP02U12S09C	12	9	250	30	240	77

NOTE: Other input to output voltage options may be available. Please consult factory.



COMMON SPECIFICATIONS

Specifications typical at $T_A = +25^\circ\text{C}$, nominal input voltage, rated output current unless otherwise specified.

PARAMETER	CONDITIONS	MIN	TYP	MAX	UNITS
INPUT Voltage Range Voltage Rise Time	LP02U05S09C LP02U12S09C	4.75 11.4	5 12	5.25 12.6	V_{oc} V_{oc}
ISOLATION Rated Voltage Test Voltage Resistance Capacitance	60Hz, 10 Seconds	500 500	1 30		V_{rms} V_{pk} GΩ pF
OUTPUT Rated Power Voltage Setpoint Accuracy Ripple & Noise Line Regulation Load Regulation	$I_{LOAD} = 200\text{mA}$ BW = DC to 10MHz BW = DC to 2MHz High Line to Low Line $25\text{mA} \leq I_{LOAD} \leq 200\text{mA}$		2.25 ± 3 30 3 1.15 ± 10		W % mVp-p mVrms %/% %
GENERAL Switching Frequency Package Weight MTTF per MIL-HDBK-217E* Ground Benign	Circuit Stress Method $T_A = +25^\circ\text{C}$ $T_A = +70^\circ\text{C}$		100 6 3.0 700		kHz g M Hr k Hr
TEMPERATURE Specification Operation Storage		-25 -55 -55	+25	+70 +85 +100	$^\circ\text{C}$ $^\circ\text{C}$ $^\circ\text{C}$

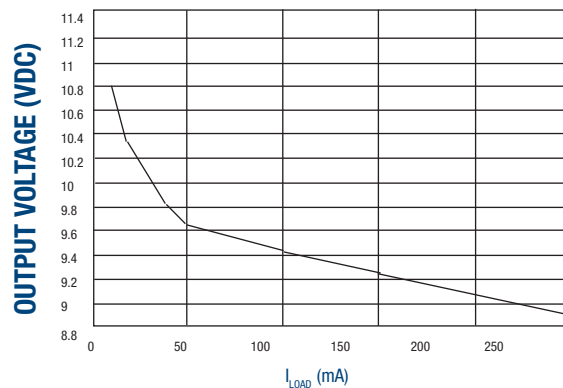
ABSOLUTE MAXIMUM RATINGS

Output Short-Circuit Duration.....	1 second
Internal Power Dissipation	1W

ORDERING INFORMATION

Device Family LP02U xyzz K C
 Indicates Lan Enabled 2 Watt Regulated Unit
 Model Number _____
 Selected from Table of Electrical Specifications
 Where:
 xx = Input Voltage
 y = Number of Outputs (Single "S")
 zz = Output Voltage
 Package _____
 RoHS Compliant _____

LOAD PERFORMANCE CURVE



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 ISO 9001 and 14001 REGISTERED



This product is subject to the following **operating requirements** and the **Life and Safety Critical Application Sales Policy**:
 Refer to: <http://www.murata-ps.com/requirements/>

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