

FEATURES

OBSOLETE PRODUCT

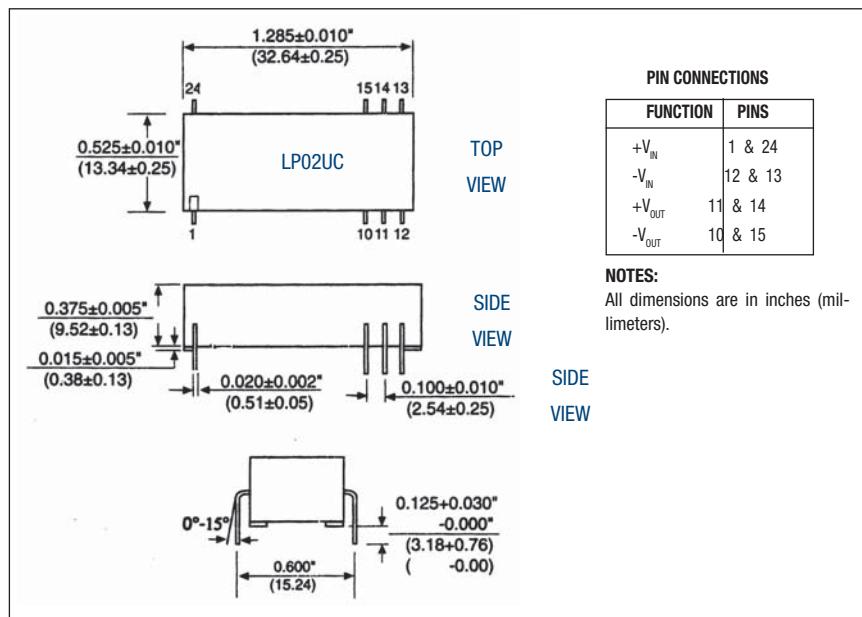
Last time buy: August 31, 2014.

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- Surface mount construction

APPLICATIONS

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

MECHANICAL: PACKAGE/PINOUT "K"

ELECTRICAL SPECIFICATIONS

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

Model	Nominal Input Voltage (V _{dc})	Rated Output Voltage (V _{dc})	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.



For full details go to
www.murata-ps.com/rohs



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

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

A 1.5MHz 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.

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.

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

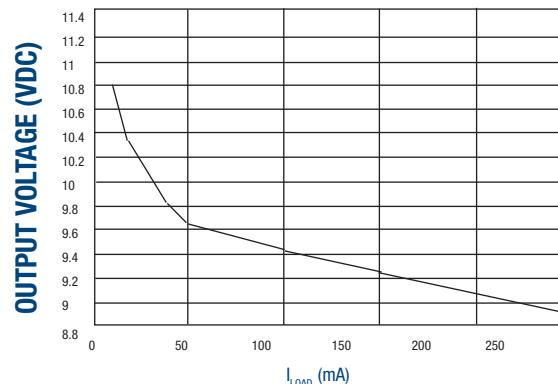
ABSOLUTE MAXIMUM RATINGS

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

ORDERING INFORMATION

Device Family	LP02U	xx	yy	zz	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



Murata Power Solutions, Inc.
11 Cabot Boulevard, Mansfield, MA 02048-1151 U.S.A.
ISO 9001 and 14001 REGISTERED

www.murata-ps.com/support



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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