

2 W LAN DC-DC CONVERTER

Type	V_i	V_o	I_o
GS2TX-9A	4,5 to 15,75 V	- 9 V	- 250 mA

DESCRIPTION

The GS2TX-9A is a 2.25W unregulated DC-DC converter designed to provide power, voltage regulation and isolation for Local Area Network (CHEAPERNET and ETHERNET) transceivers from a wide range of input voltage, according to IEEE 802.3 Standard.

An internal network is added to guarantee soft start at switch-on.

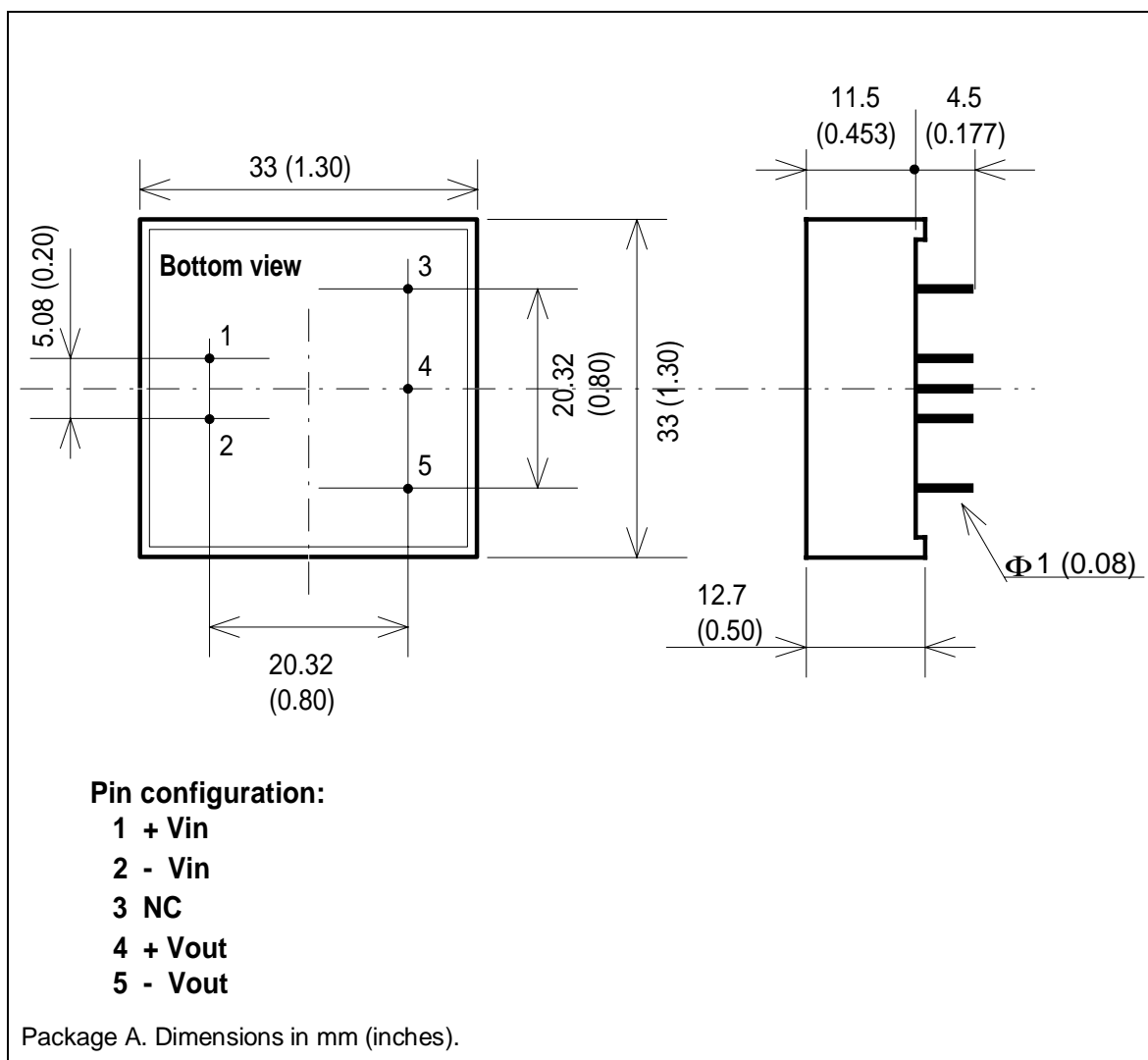


ELECTRICAL CHARACTERISTICS ($T_{amb.} = 25^{\circ} \text{C}$ unless otherwise specified)

Symbol	Parameter	Test Conditions	Min	Typ	Max	Unit
V_i	Input Voltage	$V_o = 9\text{V}$ $I_o = 0 \text{ to } -250\text{mA}$	4.5		15.75	V
I_{ir}	Input Reflected Current	$V_i = 5\text{V}$ $V_o = -9\text{V}$ $I_o = -250\text{mA}$		25	30	mApp
I_{ir}	Input Reflected Current	$V_i = 12\text{V}$ $V_o = -9\text{V}$ $I_o = -250\text{mA}$		2	5	mApp
V_o	Output Voltage	$V_i = 4.5 \text{ to } 15.75\text{V}$ $I_o = 0 \text{ to } -250\text{mA}$	- 8.55	- 9.00	- 9.45	V
V_{or}	Output Ripple Voltage	$V_i = 5\text{V}$ $I_o = -250\text{mA}$		7	10	mVRMS
V_{or}	Output Ripple Voltage	$V_i = 12\text{V}$ $I_o = -250\text{mA}$		2	5	mVRMS
δV_{OL}	Line Regulation	$V_i = 4.5 \text{ to } 5.5\text{V}$ $I_o = -250\text{mA}$			5	mV
δV_{OO}	Load Regulation	$V_i = 4.5 \text{ to } 15.75\text{V}$ $I_o = -20 \text{ to } -250\text{mA}$			5	mV
I_o	Output Current*	$V_i = 4.5 \text{ to } 15.75\text{V}$ $V_o = -9\text{V}$	0		- 250	mA
V_{is}	Isolation Voltage		2500			V _{DC}
η	Efficiency	$V_i = 5\text{V}$ $I_o = -250\text{mA}$	70	73		%
η	Efficiency	$V_i = 12\text{V}$ $I_o = -250\text{mA}$	75	80		%
T_{op}	Operating Ambient Temperature Range		0		+70	$^{\circ}\text{C}$
T_{stg}	Storage Temperature Range		- 40		+85	$^{\circ}\text{C}$

* When the input voltage is <5V and the output current is less than 20mA, the output ripple voltage increases due to discontinuous operation.

CONNECTION DIAGRAM AND MECHANICAL DATA



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