SGS-THOMSON MICROELECTRONICS

GS2TX-9

2 W LAN DC-DC CONVERTER

Type	V_{in}	V_{out}	I_{out}
GS2TX-9	4,5 to 15,75 V	9 V	250 mA

DESCRIPTION

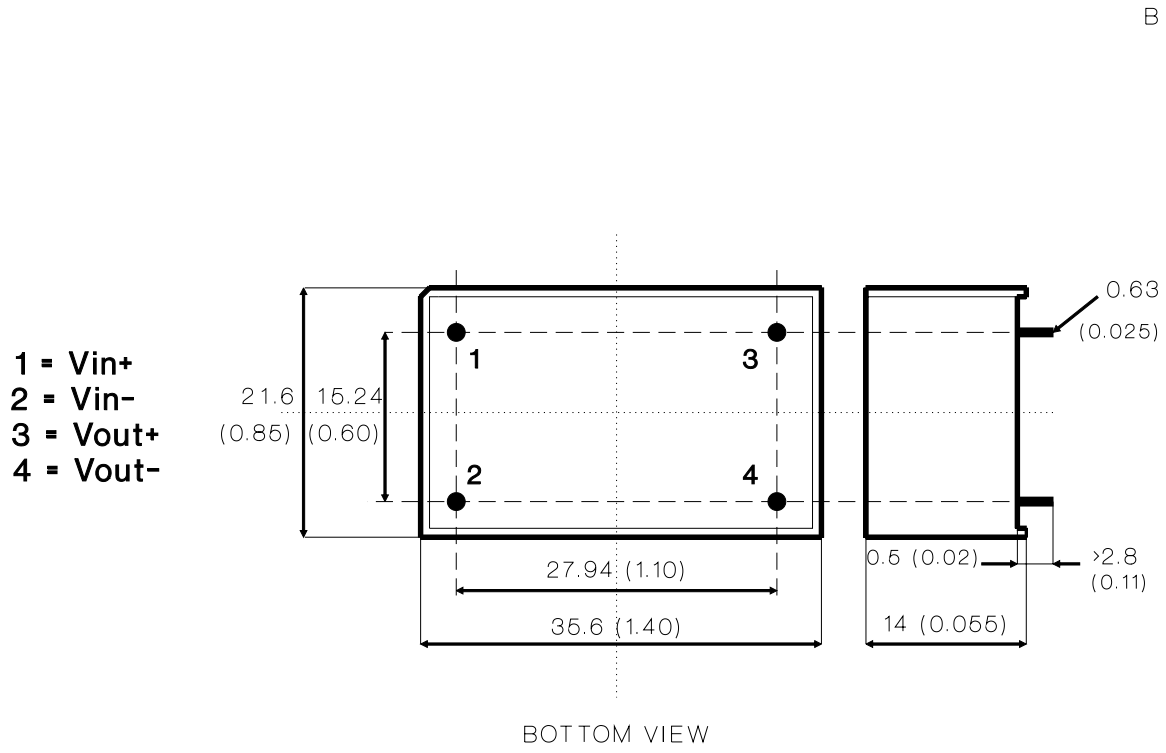
The GS2TX-9 is a 2.25W unregulated DC-DC converter designed to provide power, voltage regulation and isolation for Local Area Network (CHEAPERNET and ETHERNET) transceivers from a wide range of input voltage, according to IEEE 802.3 Standard.

ELECTRICAL CHARACTERISTICS ($T_{amb.}$= 25° C unless otherwise specified)

Symbol	Parameter	Test Conditions	Min	Typ	Max	Unit
V_i	Input Voltage	V_O= 9V I_O= 0 to 250mA	4.5		15.75	V
I_{ir}	Input Reflected Current	V_i= 5V V_O= -9V I_O = 250mA		25	30	mApp
I_{ir}	Input Reflected Current	V_i = 12V V_O = -9V I_O = 250mA		2	5	mApp
V_O	Output Voltage	V_i= 4.5 to 15.75V I_O= 0 to 250mA	-8.55	-9.00	-9.45	V
V_{or}	Output Ripple Voltage	V_i= 5V I_O= 250mA		7	10	mVrms
V_{or}	Output Ripple Voltage	V_i= 12V I_O= 250mA		2	5	mVrms
δV_O	Line Regulation	V_i= 4.75 to 5.5V I_O= 250mA			5	mV
δV_O	Load Regulation	V_i= 4.5 to 15.75V I_O= 20 to 250mA			5	mV
I_O	Output Current*	V_i= 4.5 to 15.75V V_O = -9V	0		250	mA
V_{is}	Isolation Voltage		2500			Vdc
η	Efficiency	V_i= 5V I_O= 250mA	70	73		%
η	Efficiency	V_i= 12V I_O= 250mA	75	80		%
T_{op}	Operating Ambient Temperature Range		0		+70	°C
T_{stg}	Storage Temperature Range		-40		+85	°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



Package B. Dimensions in mm.