

# **GS2T5-9**

# 2 W LAN DC-DC CONVERTER

| Туре    | V <sub>in</sub> | V <sub>out</sub> | l <sub>out</sub> |  |
|---------|-----------------|------------------|------------------|--|
| GS2T5-9 | 5 V             | 9 V              | 250 mA           |  |

#### **DESCRIPTION**

The GS2T5-9 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 standard 5V input voltage, according to IEEE 802.3 Standard.



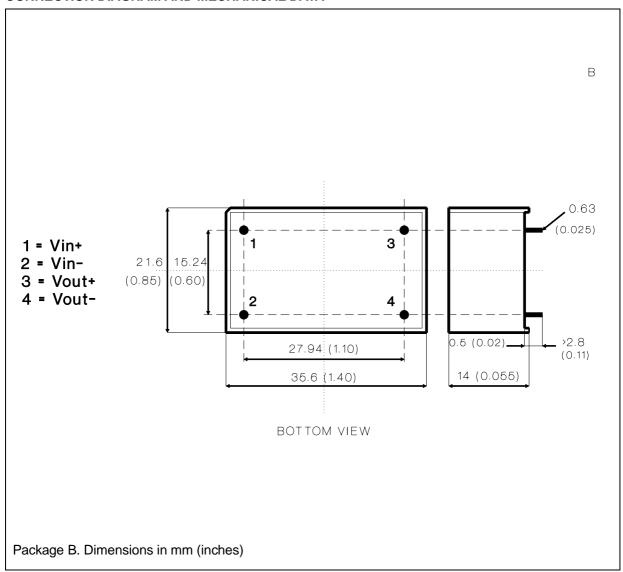
### ELECTRICAL CHARACTERISTICS (Tamb. = 25° C unless otherwise specified)

| Symbol          | Parameter                      | Test Conditions                |                              |       | Тур    | Max   | Unit  |
|-----------------|--------------------------------|--------------------------------|------------------------------|-------|--------|-------|-------|
| Vi              | Input Voltage                  | V <sub>0</sub> = -9V           | I <sub>0</sub> = 0 to 250mA  | 4.5   | 5      | 5.5   | V     |
| lir             | Input Reflected<br>Current     | Vi= 5V<br>V <sub>O</sub> = -9V | I <sub>O</sub> = 250mA       | = 8   | 25     | 30    | mApp  |
| Vo              | Output Voltage                 | V <sub>i</sub> = 4.5 to 5.5V   | I <sub>0</sub> = 0 to 250mA  | -8.55 | -9.00  | -9.45 | V     |
| Vor             | Output Ripple Voltage          | Vi= 5V                         | I <sub>O</sub> = 250mA       |       | 7      | 10    | mVrms |
| δVo             | Line Regulation                | Vi = 4.5 to 5.5                | l <sub>0</sub> = 250mA       |       |        | 5     | mV    |
| δVo             | Load Regulation                | Vi = 5V                        | I <sub>0</sub> = 20 to 250mA |       |        | 5     | mV    |
| lo              | Output Current*                | Vi = 4.5 to 5.5V               | V <sub>0</sub> = -9V         | 0     |        | 250   | mA    |
| Vis             | Isolation Voltage              |                                |                              | 2500  |        |       | Vdc   |
| η               | Efficiency                     | Vi= 5V                         | I <sub>O</sub> = 250mA       | 70    | 73     |       | %     |
| T <sub>op</sub> | Operating<br>Temperature Range |                                |                              | 0     | 37     | +70   | °C    |
| Tstg            | Storage Temperature<br>Range   |                                | THE !                        | -40   | All as | +85   | °C    |

<sup>\*</sup> Note: when output current is less than 20mA, the output ripple voltage increases due to discontinuous operation.

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#### **CONNECTION DIAGRAM AND MECHANICAL DATA**



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