

Sherman, Alana

From: AppsTechSupport [AppsTechSupport@maximhq.com]
Sent: Wednesday, October 17, 2007 4:06 PM
To: Sherman, Alana
Subject: Re: Attn:Shane

Alana,

The minimum of common mode requirement is 4.5V which means you need at least a 4.5V at RS+ or RS- for the device to operate correctly. The common-mode voltage is specified on page 2.

For your question #1, the answer is yes you can power the device from 5V and apply a voltage greater than 5V to RS+ and RS-. The first paragraph under detailed description says common-mode range is independent of supply voltage.

You probably need to adjust the circuit around U17. I don't see where the current can possibly go. Is RS- connected to anything else besides the two diodes?

Regards,
Customer Applications

----- Original Message -----

From: [Sherman, Alana](#)
To: appstechsupport@maximhq.com
Sent: Wednesday, October 17, 2007 10:49 AM
Subject: FW: Attn:Shane

Here is the schematic, the part we are having problems with is U17, the circuit conducts current when pin 3 of J3 is connected to either pin 1 or pin 2.

<<LC_Prototype2.pdf>>

Here are a couple questions:

1. Can you power the Max4081FASA from +5v if the voltage on RS+ or RS- is greater than +5v?
2. Here are our observations from testing this circuit:
The Rs+ input we determined needs to be at least 2.7V (@Vcc =12V) above ground for this part to function properly. Otherwise the 4081 will not output a voltage. When the Vcc is 7.0v, Rs+ must be greater than 4.4v.

Alana

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