Category: Current Source | **CIRCUIT IDEAS FOR DESIGNERS** | Schematic no. cs_11005.0

Current Source with Gate Control

Description

This current source can be turned on and turned off with a logic control input.
The source current is controlled by the I_{SET}, which is in turn set by the R_{SET} resistor.
I_{SET} value could be determined by using the following equation:

$$I_{SET} = (V+ - V_{GS(TH)P} - V_{DSN}) / R_{SET}$$

I_{SOURCE} would be equal to I_{SET} when I_{SOURCE} output voltage is equal to V_{DSP}. At other values of output voltage, channel modulation effects would modify the value of I_{SOURCE}.

For full schematic diagram and notes, please register and login at aldinc.com