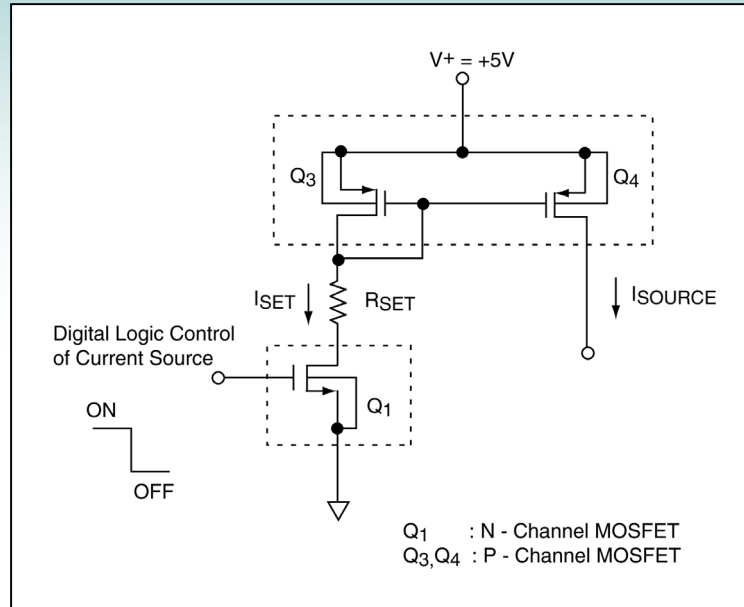




Current Source with Gate Control



Description

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

$$ISET = (V+ - VGS(TH)P - VDSN) / RSET$$

ISOURCE would be equal to ISET when ISOURCE output voltage is equal to VDSP. At other values of output voltage, channel modulation effects would modify the value of ISOURCE.

Recommended Components

1/2 ALD1103 + 1/4 ALD1103, 1/4 ALD1106 + 1/2 ALD1107, 1/2 ALD1116 + ALD1117
1/2 ALD1101 + ALD1102, 1/2 ALD1105 + 1/4 ALD1105

Other Related Circuit Ideas

Schematic no. cs_11002.0 Cascode Current Source