



## PRODUCT OUTLINE

**CM1015gf – 17nA Current Bias with Enable**  
 Low Voltage (1.0V), Ultra Low Power (90nW @ 1.8V)

### Part Number

■ CM1015gf

### Features

- Low power current bias
- Low TC
- $I_{bias}=17nA \pm 12\%$  (without trimming)
- Current consumption lower than 61nA in active mode
- Flexible voltage operation: 1.0V–2.0V
- Enable control
- Indicative area: 0.0037mm<sup>2</sup>

### Applications

- Passive/active RFID tag ICs
- Portable devices
- Energy Harvesting ICs
- Hearing Aids

### Technology

- TowerJazz TS18SL 0.18µm CMOS

### Deliverables

- Datasheet/Integration Guide
- HDL Model
- Flat GDSII database/LVS netlist
- Customer Support

### Status

- Silicon Proven

### Overview

This macro-cell is a low power general purpose current bias generator core designed for TowerJazz 0.18µm TS18SL CMOS technology.

The circuit generates  $2 \times$  NMOS 17nA current branches. The current bias is temperature compensated.

Output currents come from NMOS drain terminals, thus being sink-type sources.

### Functional Diagram

