

1.03V positive LDO regulator IC with on/off control  
On/offコントロール付1.03V低飽和レギュレータIC

TK70203CS2G0

DESCRIPTION

The TK70203CS2G0 is a low dropout linear regulators with on/off control, which can supply 8mA load current.

TK70203CS2G0シリーズは、出力電流8mAを安定に供給できるon/offコントロール付低飽和レギュレータICです。

FEATURES

- Output Current: 8mA
- Very Low Dropout Voltage:  $V_{DRO} = 30\text{mV}$  at  $I_{OUT} = 2\text{mA}$
- Active High On/off Control
- 出力電流: 8mA
- 少ない入出力間電圧降下:  $V_{DRO} = 30\text{mV}$  at  $I_{OUT} = 2\text{mA}$
- 出力on/offコントロール: High-On

APPLICATIONS

- Battery Powered Systems
- バッテリー駆動機器

PACKAGE OUTLINE

ORDERING INFORMATION

| Part name    | Package                                                                                   | Marking | Pin configuration | Ordering information                                                                                                                                                                                                                                                                                                                                     |
|--------------|-------------------------------------------------------------------------------------------|---------|-------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| TK70203CS2G0 |  SOT23-5 | L04     | See next page     | <div> <div>T K 7 0 2 0 3 C S 2 G 0 L - C</div> <div> <div>Package code</div> <div>S2: SOT23</div> </div> <div> <div>Environment code</div> <div>G0: Lead free</div> </div> <div> <div>Temperature range</div> <div>C: <math>T_A = 25^\circ\text{C}</math>, I: Full</div> </div> <div> <div>Storage direction</div> <div>L: Left type</div> </div> </div> |

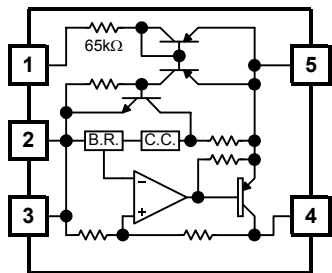
ABSOLUTE MAXIMUM RATINGS

| Parameter                   | 項目     | Symbol   | 記号 | Rating     | 定格 | Unit             | 単位 | Remarks     | 備考    |
|-----------------------------|--------|----------|----|------------|----|------------------|----|-------------|-------|
| Operating Voltage Range     | 動作電圧範囲 | $V_{OP}$ |    | 0.9 to 5.0 |    | V                |    |             |       |
| Operating Temperature Range | 動作温度範囲 | $T_{OP}$ |    | -10 to +60 |    | $^\circ\text{C}$ |    |             |       |
| Power Dissipation           | 許容消費電力 | $P_D$    |    | 350        |    | mW               |    | Board mount | 基板実装時 |

ELECTRICAL CHARACTERISTICS

| Parameter<br>項目   |          | Symbol<br>記号 | Value          |     |                | Units<br>単位   | Conditions<br>条件                                                  |
|-------------------|----------|--------------|----------------|-----|----------------|---------------|-------------------------------------------------------------------|
|                   |          |              | MIN            | TYP | MAX            |               |                                                                   |
| Dropout Voltage   | 入出力間電圧降下 | $V_{DRO}$    |                | 30  | 60             | mV            | $I_{OUT} = 2\text{mA}$                                            |
| Output Current    | 出力電流     | $I_{OUT}$    | 8              | 16  |                | mA            | When $V_{OUT} = V_{OUT.TYP} - 0.2\text{V}$                        |
| Quiescent Current | 電源電流     | $I_Q$        |                | 180 | 280            | $\mu\text{A}$ | $I_{OUT} = 0\text{mA}$                                            |
| Standby Current   | スタンバイ電流  | $I_{STB}$    |                | 8   | 13             | $\mu\text{A}$ | $V_{IN} = 1.4\text{V}$ , $V_{OUT}$ : off, $R = 820\text{k}\Omega$ |
| Control Current   | コントロール電流 | $I_{CONT}$   |                | 2   |                | $\mu\text{A}$ | $R = 820\text{k}\Omega$ series connected                          |
| Control Voltage   | コントロール電圧 | $V_{CONT}$   | $V_{CC} - 0.2$ |     | $V_{CC}$       | V             | $V_{OUT}$ on state                                                |
|                   |          |              | 0              |     | $V_{CC} - 0.8$ |               | $V_{OUT}$ off state                                               |

BLOCK DIAGRAM



\* C.C.....Control Circuit, B.G....Band gap Reference

