

# Product Information

## LDO Regulator IC with On/Off Control TK111xxCS

### DESCRIPTION

The TK111xxCS is a low dropout linear regulator with ON/OFF control, which can supply 200mA load current. The output voltage, trimmed with high accuracy, is available from 1.5 to 10.0V in 0.1V steps.

### FEATURES

- High Voltage Accuracy  $\pm 1.5\%$  or  $\pm 50\text{mV}$
- Superior Phase Compensation to Previous Model
- Very Good Stability: Ceramic capacitor can be used.
- Very Low Dropout Voltage:  $V_{\text{drop}}=80\text{mV}$  at  $I_{\text{OUT}}=50\text{mA}$
- Active High On/Off Control
- Excellent Ripple Rejection Ratio:  $-80\text{dB}$  at  $1\text{kHz}$
- Very Low Noise with Noise Bypass pin
- Short Circuit Protection (Over Current Protection)
- Thermal Shutdown (Over Heat Protection)
- Reverse Bias Protection

### APPLICATIONS

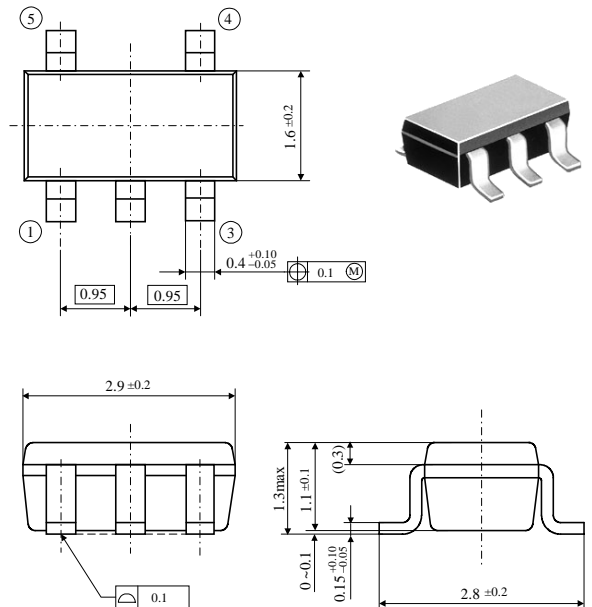
- Battery Powered Systems
- Mobile Communication Systems:  
Cordless Phone, GSM, PHS, PDC, CDMA,  
Base Station of Mobile Phones etc.
- Industrial Equipment:  
Personal Computer, Barcode Reader etc.
- Measurement System etc.

### ELECTRICAL CHARACTERISTICS

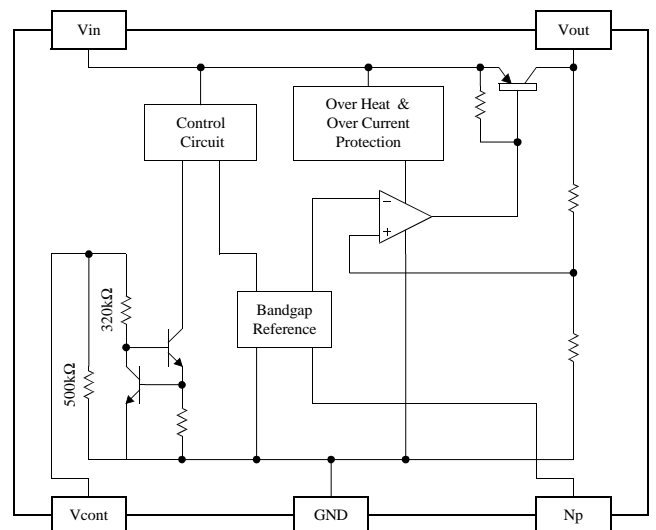
Parameter	Symbol	Value (TYP)	Unit
Operating Voltage Range	$V_{\text{OP}}$	1.8~14.0	V
Operating Temp. Range	$T_{\text{OP}}$	-30~+80	$^{\circ}\text{C}$
Dropout Voltage	$V_{\text{drop}}$	80@ $I_{\text{out}}=50\text{mA}$	mV
Output Current	$I_{\text{out}}$	200	mA
Maximum Output Current	$I_{\text{outMAX}}$	320	mA
Supply Current	$I_{\text{CC}}$	63.0	$\mu\text{A}$
Standby Current	$I_{\text{standby}}$	0.0	$\mu\text{A}$
Control Current	$I_{\text{cont}}$	5.0	$\mu\text{A}$
Control Voltage	$V_{\text{cont}}$	1.6~: $V_{\text{out}}$ on ~0.6: $V_{\text{out}}$ off	V

### PACKAGE OUTLINE

#### ■ SOT23-5



### BLOCK DIAGRAM



### OUTPUT VOLTAGE

2.0	2.8	2.9	3.0	3.2	3.3	3.8	4.0	4.7	5.0
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\*If other voltages are required, please contact the TOKO Sales Offices/Distributors for availability.

⚠ Note that the contents are subject to change or discontinuation without notice. When placing orders, please confirm specifications and delivery condition in writing.