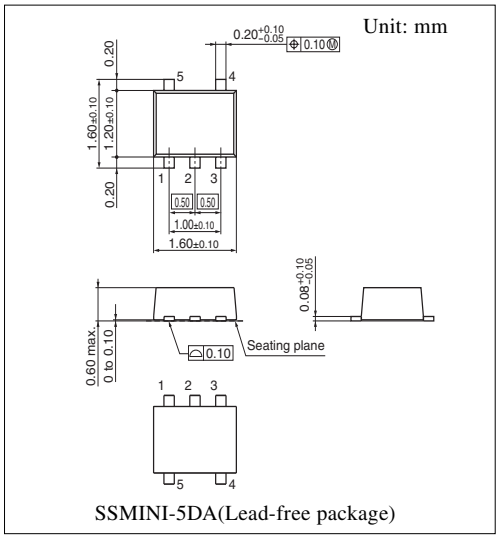
New

Ripple Filter IC AN1281SSM

■ Overview

The AN1281SSM is a ripple filter IC that rejects the ripple component superimposed on the regulator output. Use for the VCO bias of cellular phones improves C/N and S/N.



SSMINI-5DA(Lead-free package)

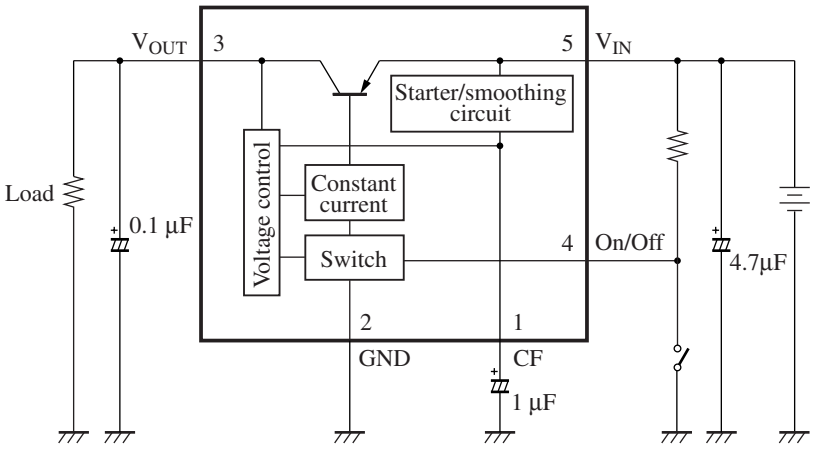
■ Features

- Small I/O voltage difference
- The mounting area is reduced by adopting the SSmini-type package

■ Applications

- Cellular phones and others

■ Block Diagram



¶ The products and specifications are subject to change without any notice. Please ask for the latest product standards to guarantee the satisfaction of your product requirements.

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■ Absolute Maximum Ratings

Parameter	Symbol	Rating	Unit
Supply voltage	V_{IN}	4.5	V
Supply current	I_{CC}	20	mA
Power dissipation *2	P_D	60	mW
Operating ambient temperature *1	T_{opr}	-25 to +75	°C
Storage temperature *1	T_{stg}	-40 to +125	°C
Output current	I_O	-15	mA
Allowable application voltage for on/off pin *3	$V_{ON/OFF}$	V_{IN}	V
Allowable maximum capacitance for CF pin	CF	10	µF

Note) 1. Do not apply external currents or voltages to any pins not specifically mentioned.
For circuit currents, '+' denotes current flowing into the IC, and '-' denotes current flowing out of the IC.

2. ∗1: Except for the power dissipation, the operating ambient temperature and storage temperature, all ratings are for T_a = 25°C.
∗2: The power dissipation shown is the value for T_a = 75°C.
∗3: Do not over the supply voltage.

■ Recommended Operating Range

Parameter	Symbol	Range	Unit
Supply voltage	V_{CC}	2.5 to 4.3	V

■ Electrical Characteristics at T_a = 25°C

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Output voltage 1	V_{O1}	V_{IN} = 3.0 V, I_{OUT} = -1 µA	2.62	2.82	—	V
Output voltage 2	V_{O2}	V_{IN} = 3.0 V, I_{OUT} = -15 mA	2.55	2.70	—	V
Consumption current 1	I_{CC1}	V_{IN} = 3.0 V, I_{OUT} = -1 µA	-735	-565	—	µA
Consumption current 2	I_{CC2}	V_{IN} = 3.0 V, I_{OUT} = -15 mA	-670	-515	—	µA
Load regulation	REG_L	V_{IN} = 3.0 V, I_{OUT} = -1 µA to -15 mA	0	120	220	mV
Consumption current against load change	I_{REG}	V_{IN} = 3.0 V, I_{OUT} = -1 µA to -15 mA	0	51	110	µA
Ripple rejection ratio 1	RR_1	V_{IN} = 3 V± 0.1 V, I_{OUT} = -15 mA f = 1 kHz	26.5	29.5	—	dB
Ripple rejection ratio 2	RR_2	V_{IN} = 3 V± 0.1 V, I_{OUT} = -15 mA f = 25 kHz	30.5	33.5	—	dB
Ripple rejection ratio 3	RR_3	V_{IN} = 3 V± 0.1 V, I_{OUT} = -15 mA f = 100 kHz	26.5	29.1	—	dB
Consumption current at off	I_{OFF}	V_{IN} = 4.3 V, On/Off = 0 V	—	—	1	µA