



SANYO Semiconductors

DATA SHEET

An ON Semiconductor Company

LV57331TT — Monolithic Linear IC 1ch Step-up Switching Regulator (Variable Type)

Overview

The LV57331TT is a one-channel step-up switching regulator.

Features

- Switch current limit : 1.8A
- Internal switch ON resistance : 0.16Ω
- The frequency can be switched.
- Overheat protection
- UVP
- Shutdown circuit incorporated
- Soft start circuit incorporated

Specifications

Maximum Ratings at Ta = 25°C

Parameter	Symbol	Conditions	Ratings	Unit
Power-supply voltage	V _{IN} max		6.5	V
SW pin voltage *1	SW		18	V
Input pin	V _{IN}	FB, VC, SHDNB, FSLCT, SS	6.5	V
Allowable power dissipation	Pd max	Mounted on a specified board *2	0.7	W
The maximum junction temperature	Tjmax		125	°C
Operating temperature	Topr		-40 to +85	°C
Storage temperature	Tstg		-55 to +150	°C

*1: Please the coil is not connected and do not exceed the terminal SW even the overshoot inclusion when the switching is done and momentarily.

*2: Specified board: 60.0mm × 60.0mm × 1.6mm, glass epoxy board of 2-layer.

Recommended Operating Conditions at Ta = 25°C, GND=0V

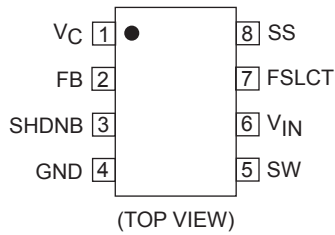
Parameter	Symbol	Conditions	Ratings	Unit
Power-supply voltage	V _{IN}		2.6 to 5.5	V
Maximum output voltage	V _{OUT} max		15	V

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LV57331TT

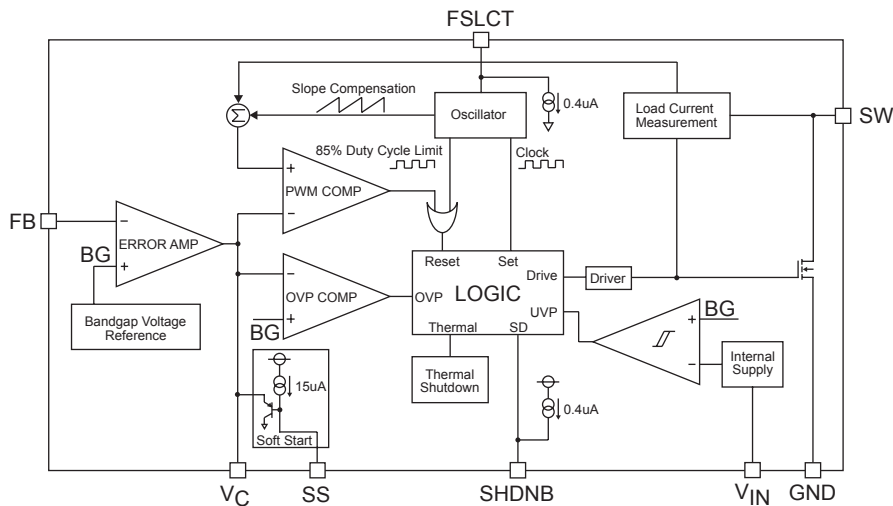
Package Dimensions



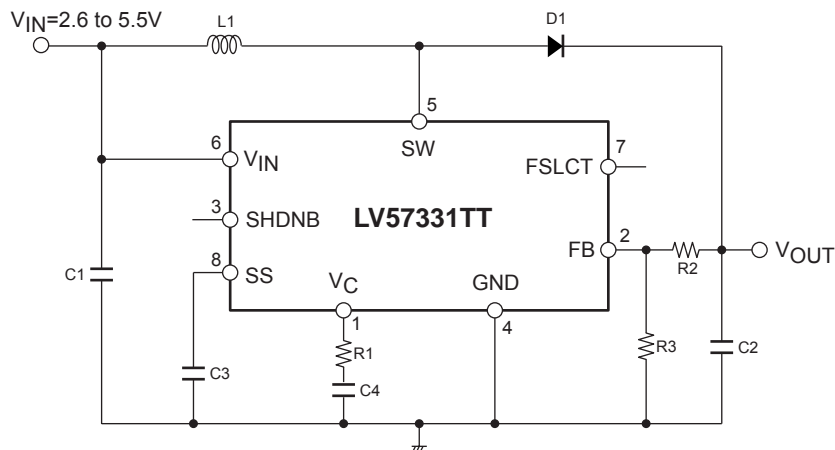
Pin function explanation

Symbol	function
V _C	Error amplifier output pin
FB	Error amplifier reversing input pin
SHDNB	Shutdown input pin (shutdown when [L] is input)
GND	GND pin
SW	Nch power FET open drain output
V _{IN}	Power input pin
FSLCT	Switching frequency switch pin (V _{IN} = 1.2MHz, GND or open =560kHz)
SS	Soft start control pin. Connect capacity on the outside. The constant current of 15μA flows from the pin. Open when unused.

Block Diagram



Application Circuit Example



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