

XC6385 Series

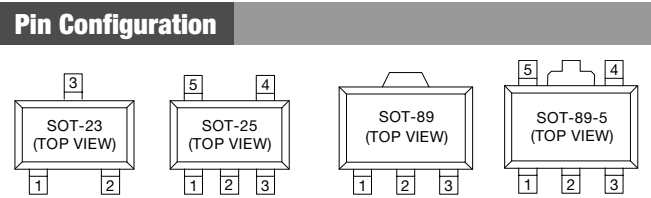
PFM (Frequency) Controlled, Step-up DC/DC Converter IC

General Description

The XC6385 series is a group of PFM (frequency) controlled step-up DC/DC converters. The XC6385 series employs CMOS process and laser trimming technologies to attain low power and high accuracy. A common problem among pagers is one of noise, but with the XC6385, high frequency noise that occurs during switching is reduced. Output voltage is programmable in 0.1V steps between 2.0V - 7.0V and maximum frequency is 100 kHz (typ.) With a built-in switching transistor, a step-up circuit can be configured using a coil, diode and capacitor connected externally. Also available is a CE (chip enable) function that reduces power consumption during shut-down mode, and an independent VDD pin function (separated power supply and voltage detect pins) for fly-back circuits. SOT-89-5 and SOT-23/25 small packages.

Features

Low noise
Operating voltage range: 0.9V - 10V
Output voltage range: 2.0V - 7.0V
(programmable in 0.1V steps)
Output Voltage Accuracy: $\pm 2.5\%$
Maximum oscillator frequency: 100kHz ($\pm 15\%$)
Built-in switching transistor
CE function and/or separated VDD/VOUT types selectable with 5 pin packages
Small package: SOT-23/25 mini-mold (3 pin, 5 pin)
SOT-89/89-5 mini-power mold (3 pin, 5 pin)



Pin Assignment

(1) XC6385A

PIN NUMBER		PIN NAME	FUNCTION
SOT-23	SOT-89		
1	1	VSS	Ground
3	2	VOUT	Output voltage monitor/ IC internal power supply
2	3	LX	Switch

Pin Assignment

(2) XC6385C

PIN NUMBER		PIN NAME	FUNCTION
SOT-25	SOT-89-5		
4	5	VSS	Ground
2	2	VOUT	Output voltage monitor/ IC internal power supply
5	4	LX	Switch
1	3	CE	Chip enable
3	1	NC	No connection

(3) XC6385E

PIN NUMBER		PIN NAME	FUNCTION
SOT-25	SOT-89-5		
4	5	VSS	Ground
2	2	VDD	IC internal power supply
5	4	LX	Switch
1	3	VOUT	Output voltage monitor
3	1	NC	No connection

