

White LED Step-Up Converter (Preliminary)

CYT2506

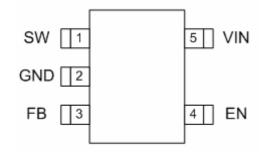
Description

The CYT2506 is a step-up DC/DC converter specifically designed to drive white LEDs with a constant current. The device can drive two, three or four LEDs in series from a Li-lon cell. Series connection of the LEDs provides identical LED current resulting in uniform brightness and eliminating the need for ballast resistors. The CYT2506 switches at 1.2MHz, allowing the use of any tiny external components. The output capacitor can be as small as 0.22µF, saving space and cost versus alternative solutions. A low 95mV feedback voltage minimizes power loss in the current setting resistor for better efficiency.

CYT2506 is available in low profile SC70 and SOT packages.

Pin Configuration

5 Lead TSOT-23



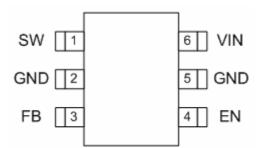
Features

- Inherently Matched LED Current.
- > High Efficiency: 84% Typical.
- Drives Up to Four LEDs from a 3.2V Supply.
- Drives Up to Six LEDs from a 5V Supply.
- Fast 1.2MHz Switching Frequency.
- Uses Tiny 1mm Tall Inductors.
- Requires Only 0.22μF Output Capacitor.
- Low Profile SC70 and SOT Packaging.

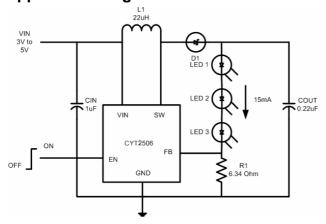
Application

- Cellular Phones
- PDAs, Handheld Computuers
- Digital Camera
- MP3 Players
- GPS Receivers

6 Lead SC70



Application Diagram

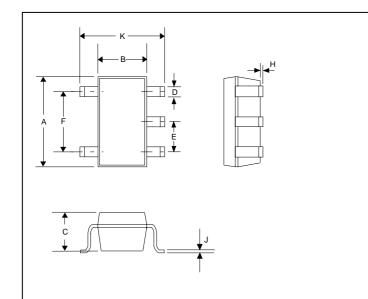




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OUTLINE DRAWING SOT-23-5L



DIMENSIONS				
DIM	INCHES		MM	
	MN	MAX	MN	MAX
Α	0.110	0.120	2.80	3.05
В	0.059	0.070	1.50	1.75
С	0.036	0.051	0.90	1.30
D	0.014	0.020	0.35	0.50
Е	-	0.037	-	0.95
F	1	0.075	1	1.90
Н	-	0.006	-	0.15
J	0.0035	0.008	0.090	0.20
K	0.102	0.118	2.60	3.00