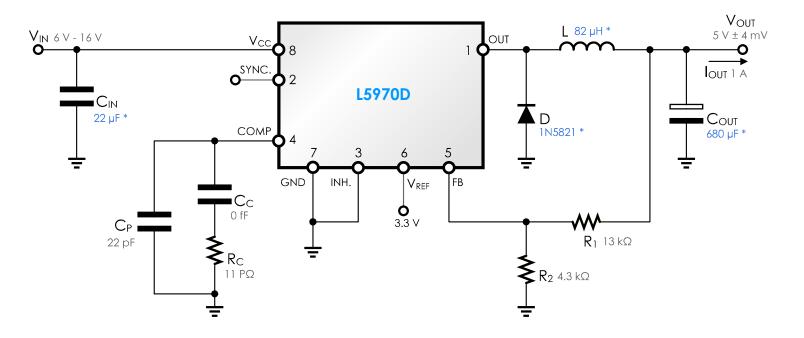


Vin: 6 V - 16 V Vout:  $5 V \pm 4 mV$  lout: 1 A

**Switch Frequency:** 250 kHz **IC:** L5970D - SO 8

System Operating Condition: Vin: 14.39 V - lout: 509.44 mA



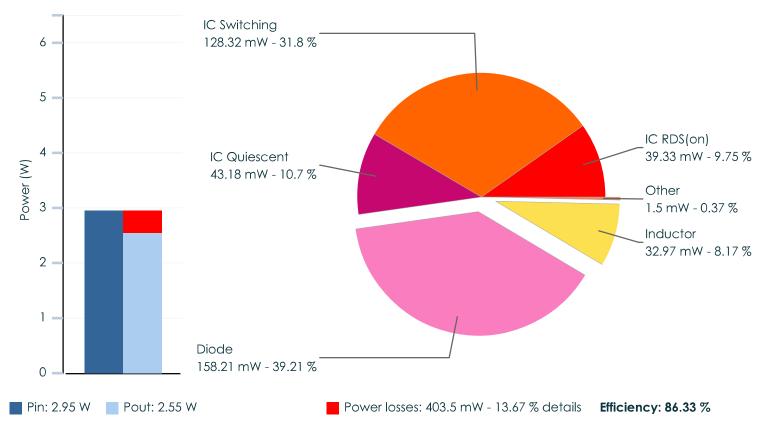
## **Bill of Materials**

Туре	Reference	Value	Description
IC	IC	L5970D	L5970D - SO 8
Capacitor	Cin	22 µF	25 V - 20% - TDK - C4532X7R1E226M
Capacitor	Cout	680 μF	6.3 V - 20% - AVX - TPME687M006R0023
Inductor	L	82 µH	3.8 A - Coilcraft - MSS1278-823
Diode	D	1N5821	3 A, 30 V - STMicroelectronics
Resistor	R1	13 kΩ	13 kΩ
Resistor	R2	4.3 kΩ	4.3 kΩ
Capacitor	Сс	0 fF	O fF
Resistor	Rc	11 ΡΩ	11 ΡΩ
Capacitor	Ср	22 pF	22 pF

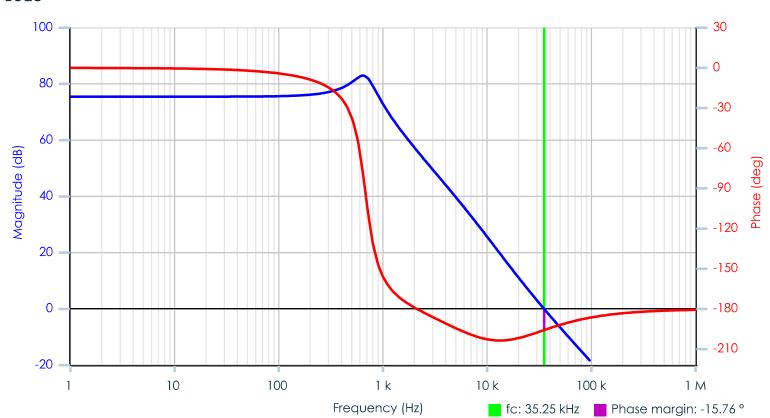
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## **Power Losses**



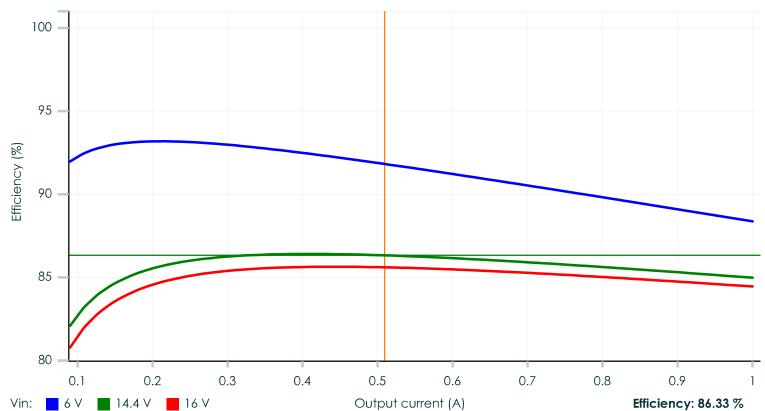
## **Bode**



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## **Simulation**



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