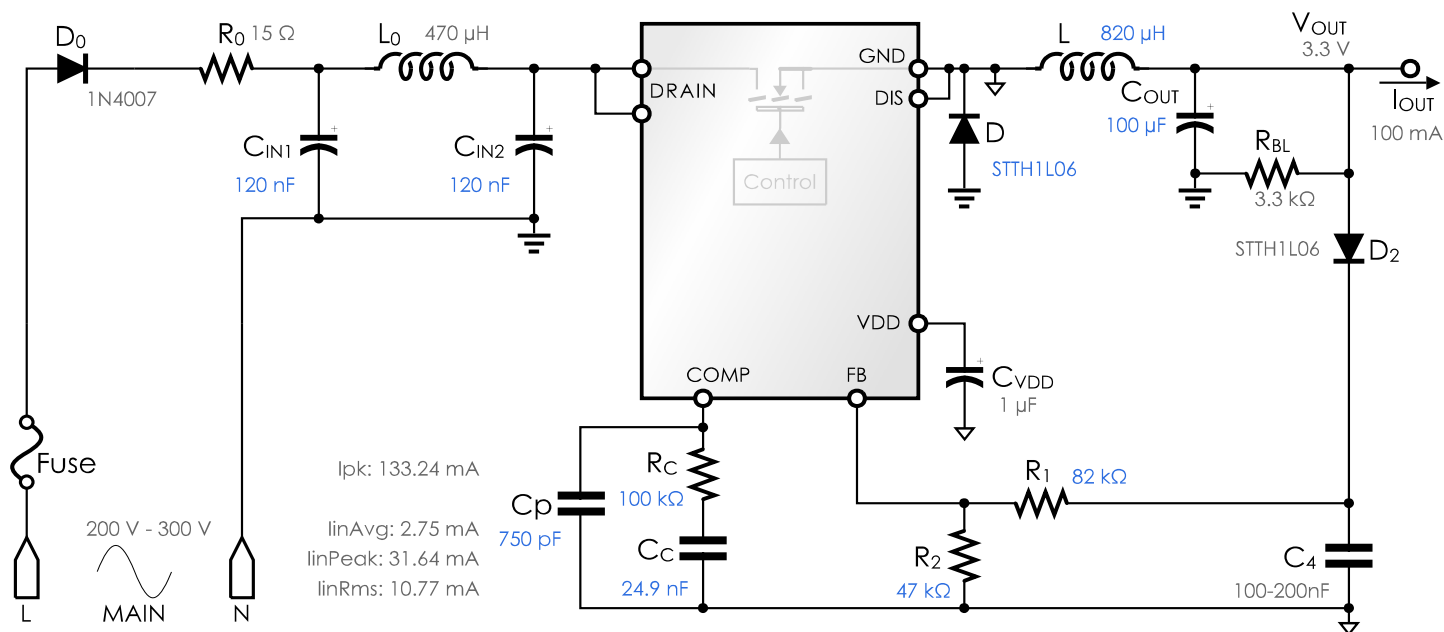


**Vin:** 200 V - 300 V **Vout:** 3.3 V **Iout:** 100 mA

**Switch Frequency:** 60 kHz

**IC:** VIPER012LS - SSO10 - STMicroelectronics

**System Operating Condition:** **Vin:** 300 V - **Iout:** 100 mA - **Ta:** 25 °C



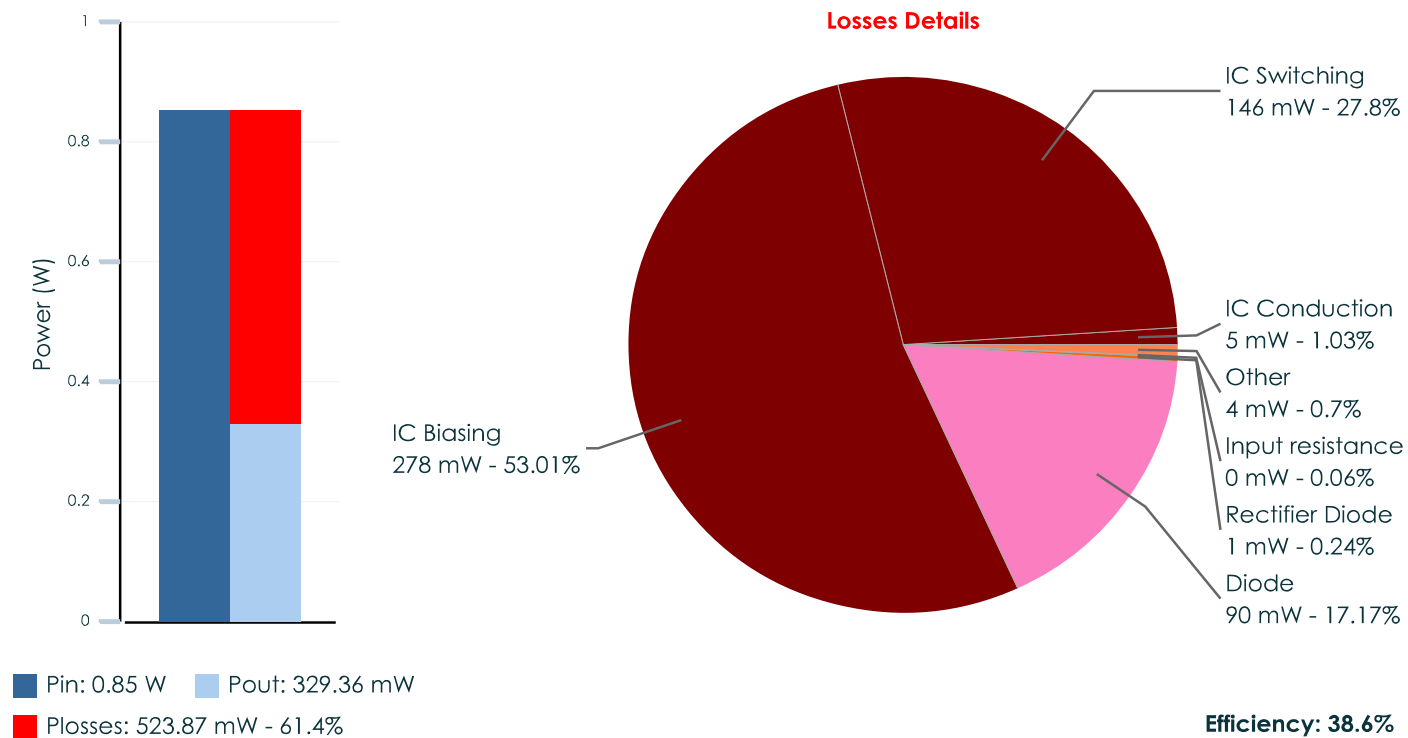
## Bill of Materials

Type	Reference	Value	Description
IC	IC	VIPER012LS	VIPER012LS - SSO10 - STMicroelectronics
Capacitor	Cout	100 $\mu$ F	10 V - 20% - Würth Elektronik - 860020272005
Inductor	L	820 $\mu$ H	1.6 A - Coilcraft - MSS1583-824KEB
Diode	D	STTH1L06	1 A, 600 V - STMicroelectronics
Resistor	R1	82 k $\Omega$	82 k $\Omega$
Resistor	R2	47 k $\Omega$	47 k $\Omega$
Capacitor	Cc	24.9 nF	24.9 nF
Capacitor	Cp	750 pF	750 pF
Resistor	Rc	100 k $\Omega$	100 k $\Omega$
Diode	Din	1N4007	1 A, 1 kV - Fairchild
Resistor	Rin	15 $\Omega$	15 $\Omega$
Inductor	Lin	470 $\mu$ H	170 mA
Capacitor	Cin1	120 nF	400 V - 20%
Capacitor	Cin2	120 nF	400 V - 20%
Capacitor	C4	100-200nF	

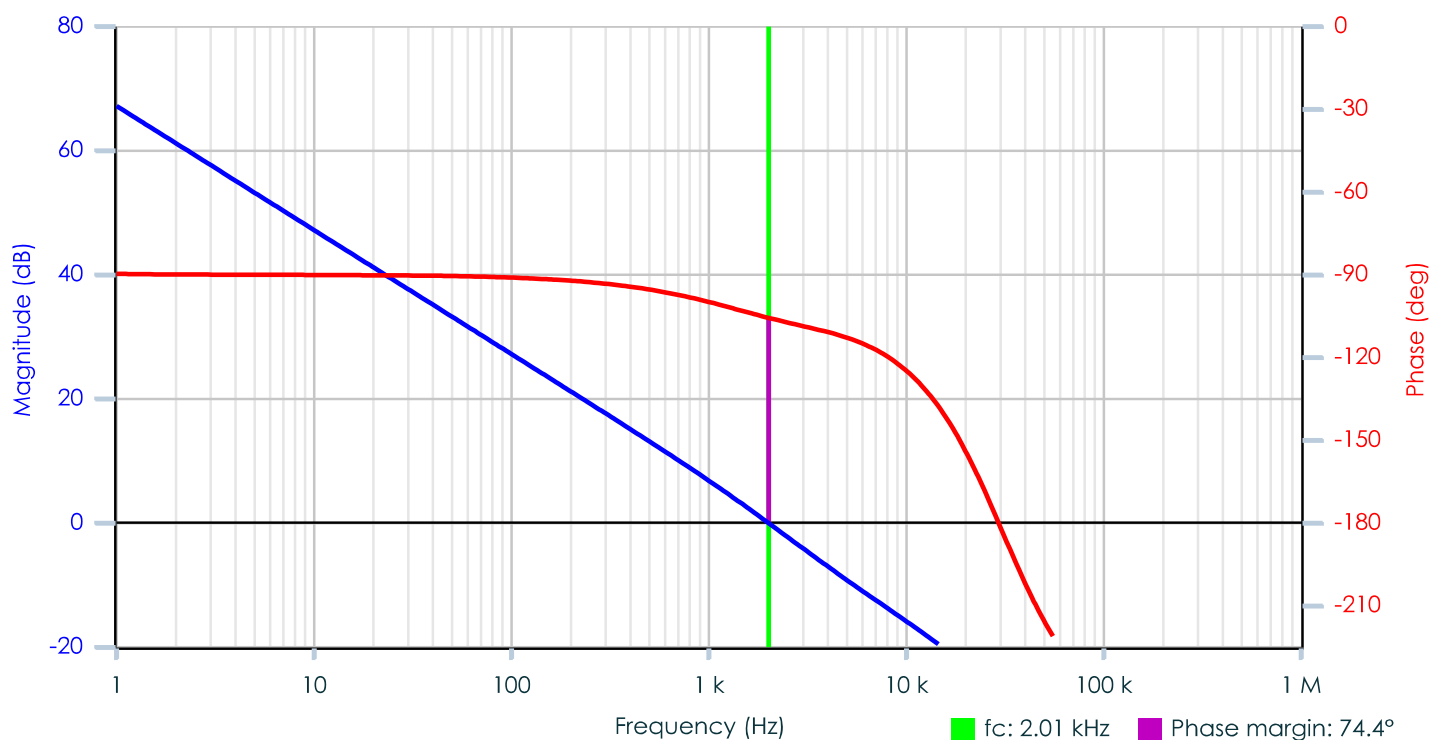
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Type	Reference	Value	Description
Diode	D2	STTH1L06	1 A, 600 V - STMicroelectronics
Capacitor	Cvdd	1 $\mu$ F	1 $\mu$ F
Resistor	Rbl	3.3 k $\Omega$	3.3 k $\Omega$

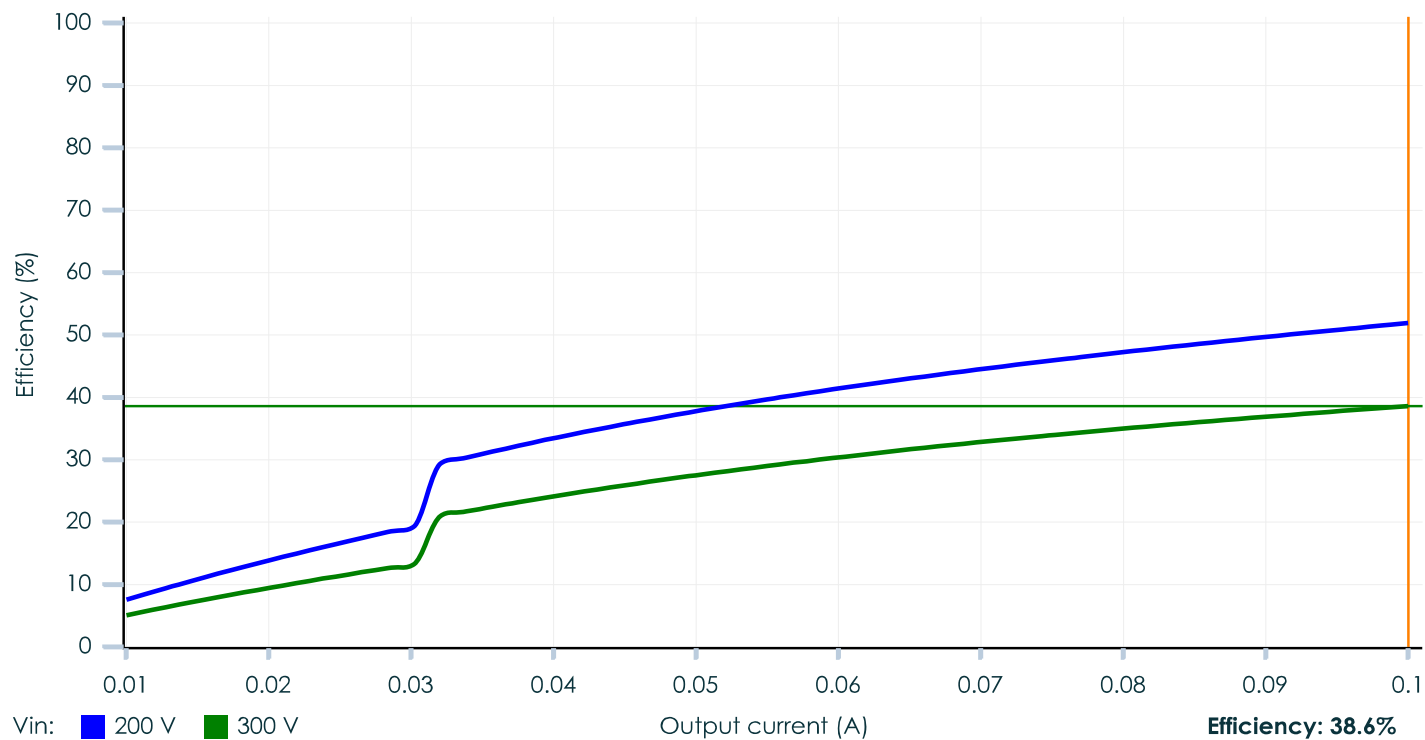
## Power Losses



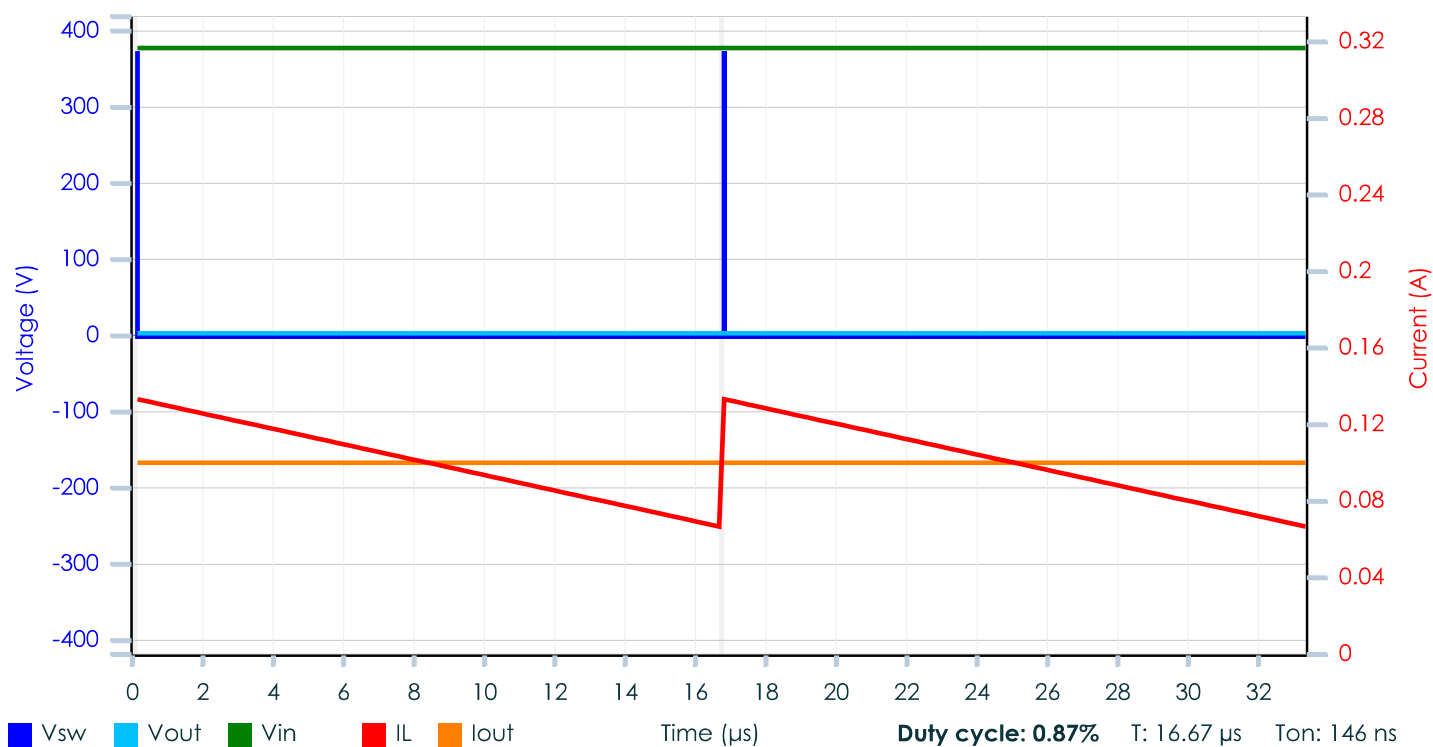
## Bode



## Efficiency



## Simulation



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