

PFC CCM Diode-Bridge-Less Synchro Vin=200V Iin=50A

Input :
 Vin=200Vac Iin=50Aac
 fps=50HZ

Output : Vo=500Vdc

Gate Drive : Vd=18V
 R source=2Ω
 R sink=1Ω

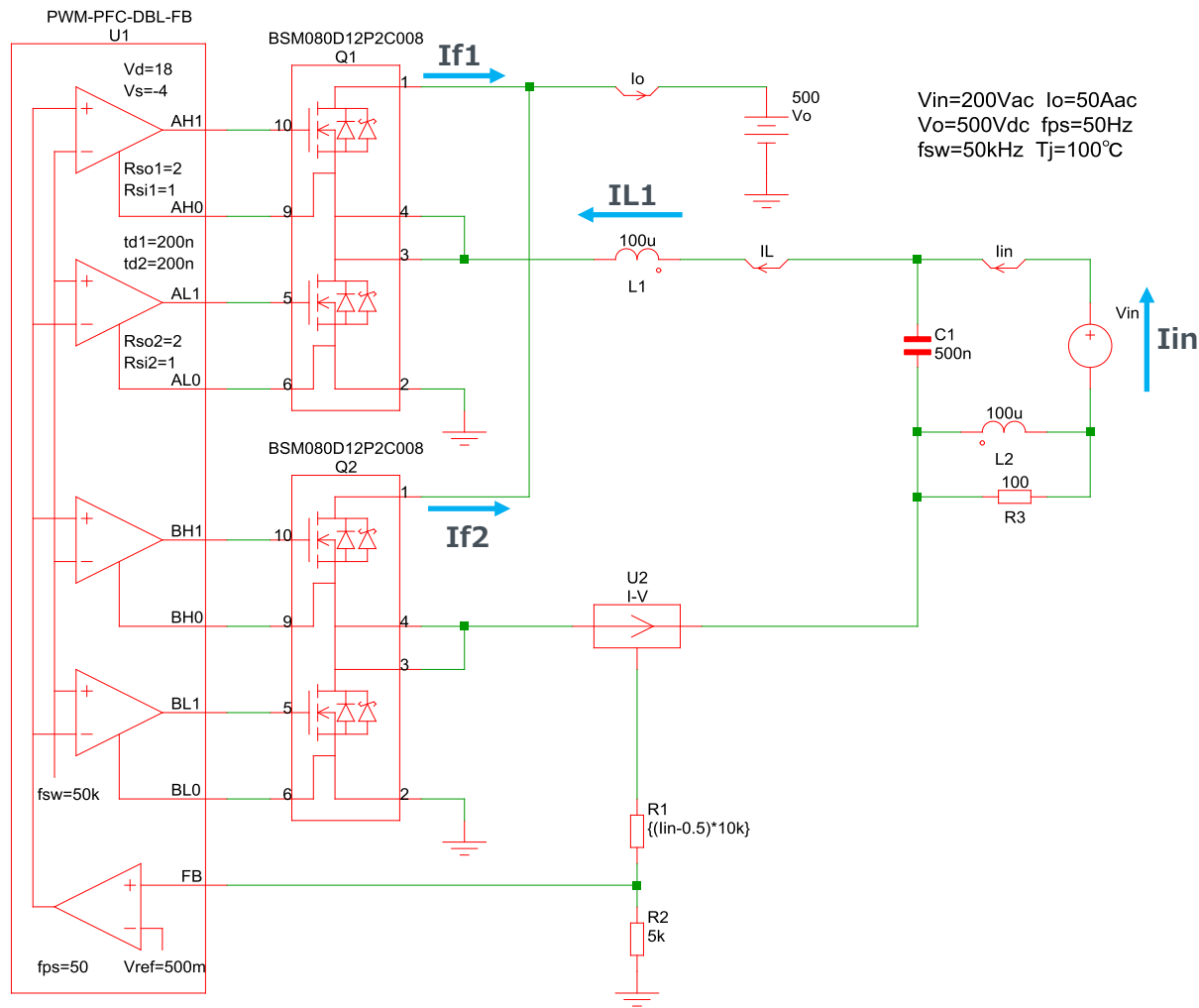
Q1,Q2 : BSM080D12P2C008
 SiC Power Module
 (1200V 80A)

L1,L2 : 100uH

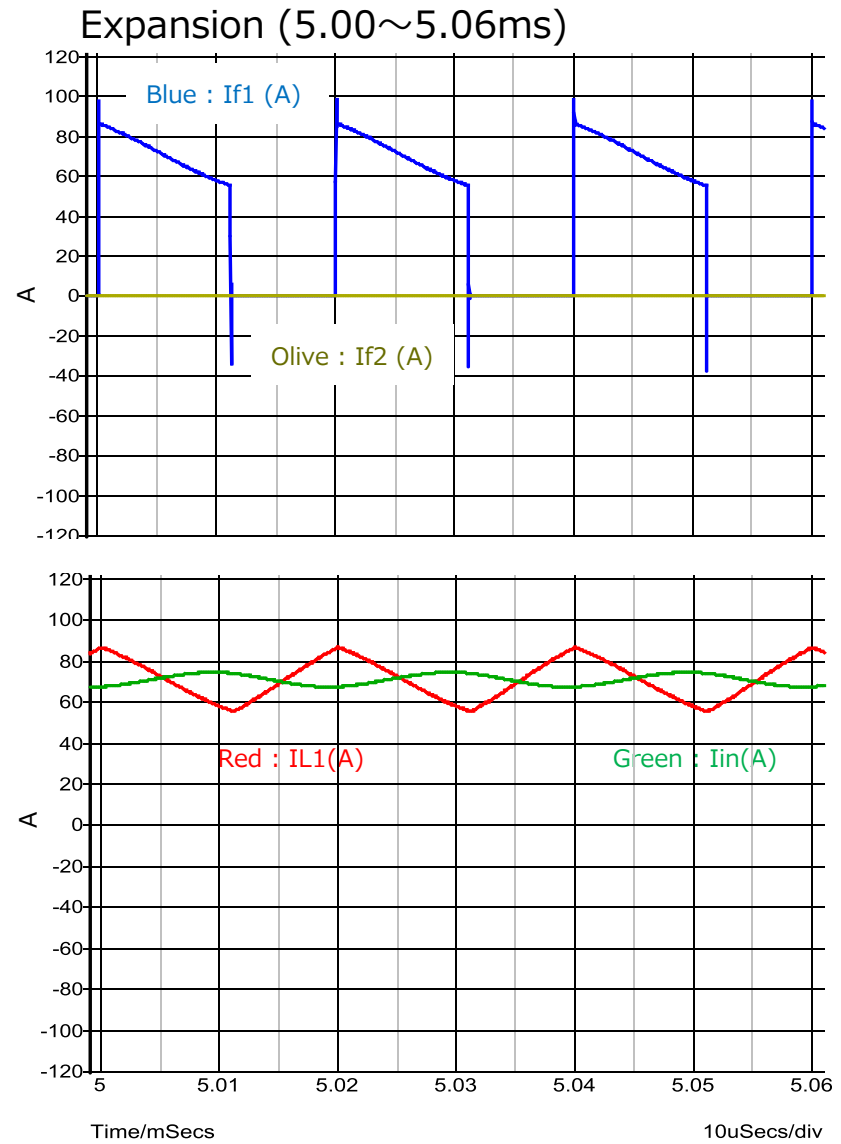
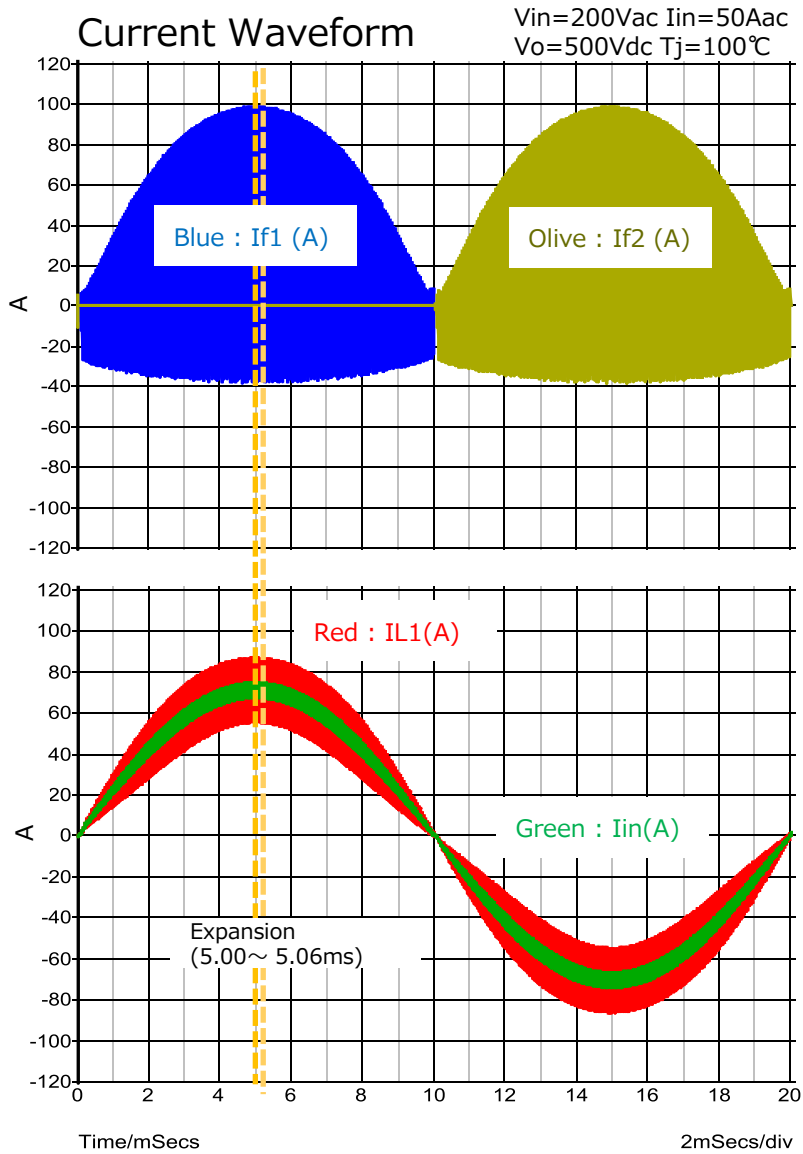
C1 : 500nF

Tj : 100°C

PFC Continuous Current Mode Diode-Bridge-Less Synchro Vin=200V Iin=50A Simulation Circuit

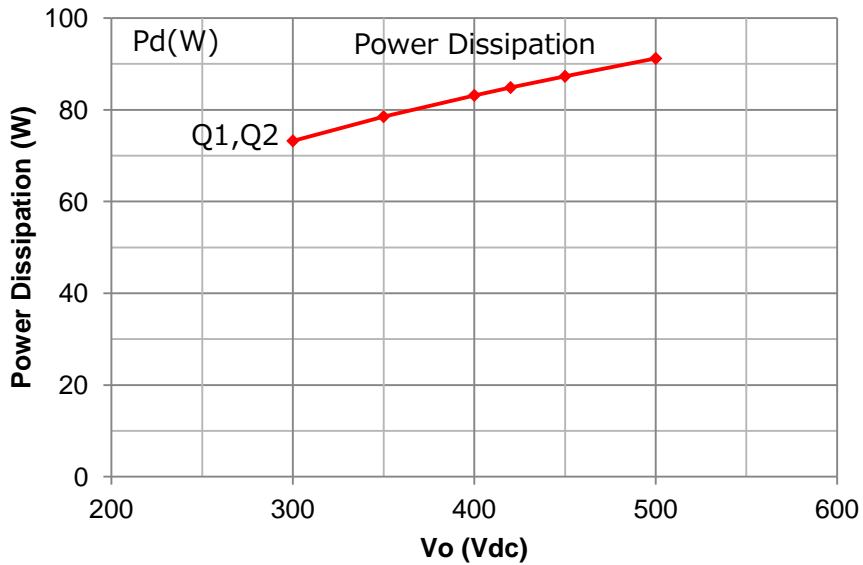
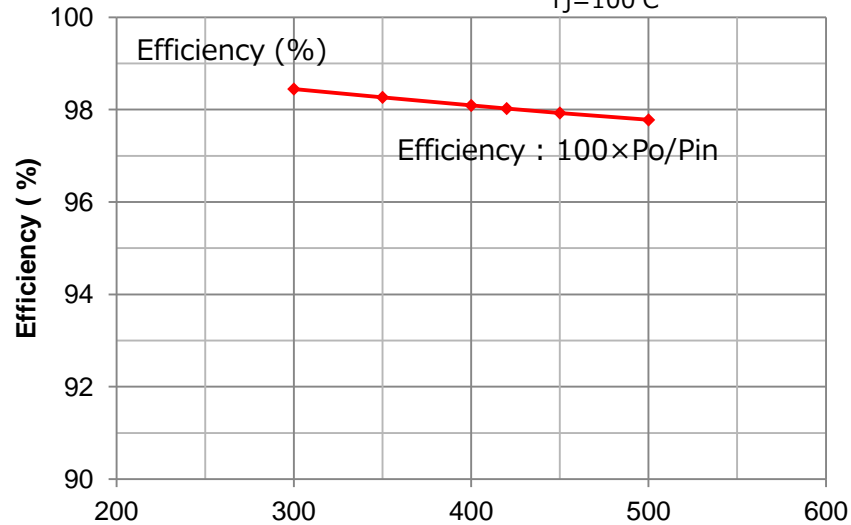


Simulation Waveform



Efficiency, Power Dissipation

Vo : 300Vdc~500Vdc Vin=200Vac Iin=50Aac Tj=100°C



Tj : -25°C~125°C Vin=200Vac Iin=50Aac Vo=500Vdc

