DC-DC Buck Synchro Converter Vo=250V Io=100A

Input : Vin=800V

Output : Vo=250V
Io=100A

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

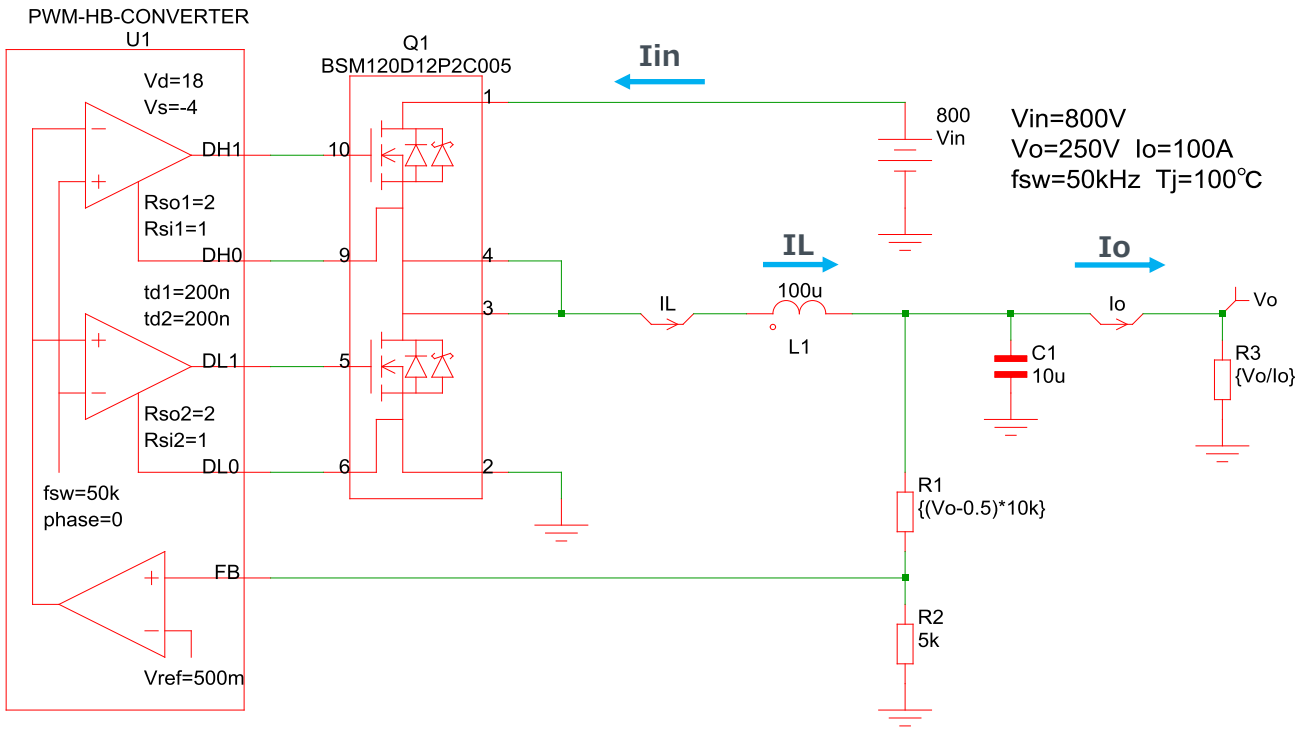
Q1 : BSM120D12P2C005
SiC Power Module
(1200V 120A)

L1 : 100uH

C1 : 10uF

Tj=100℃

DC-DC Buck Synchro Converter Vo=250V Io=100A Simulation Circuit



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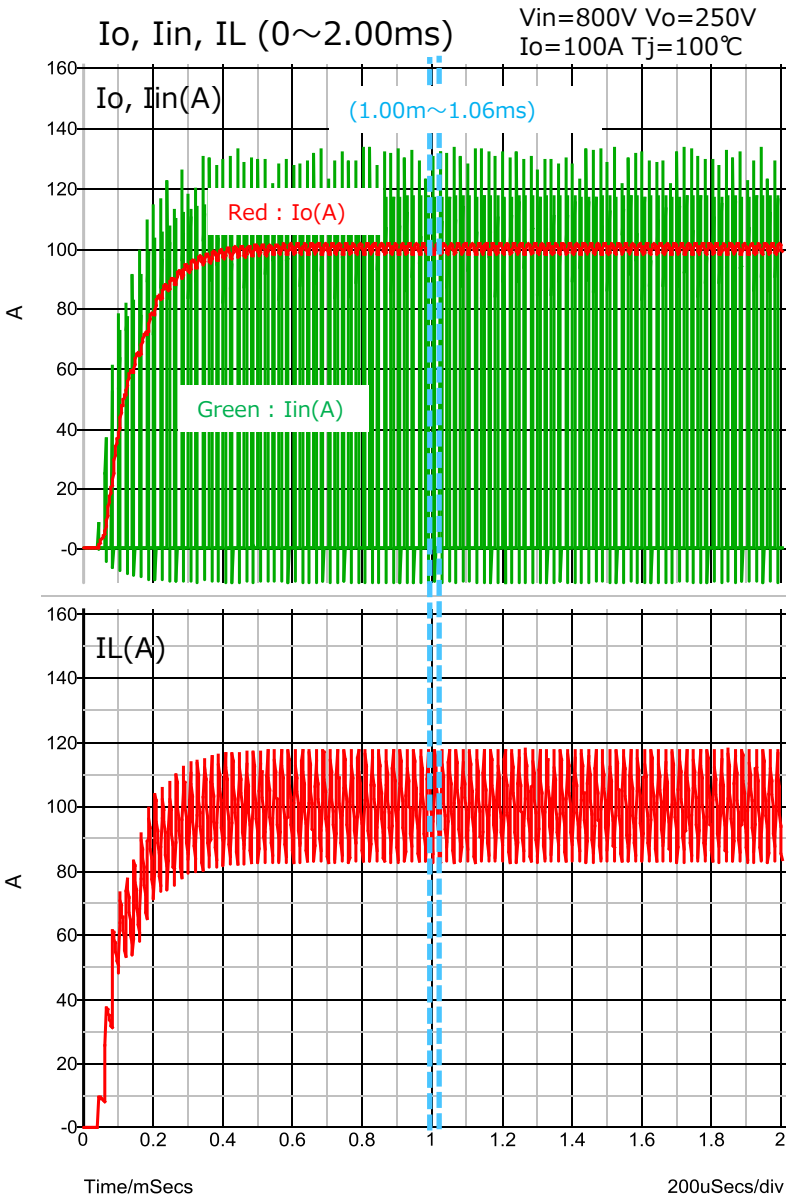
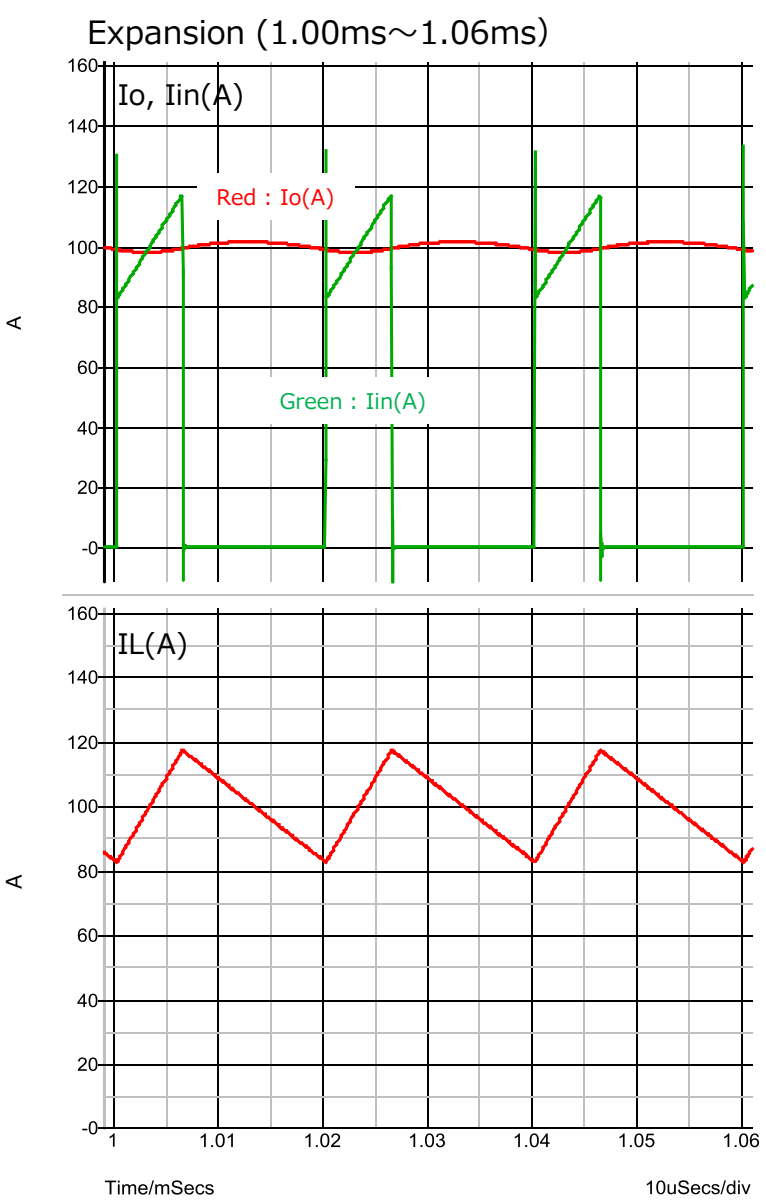
Simulation Waveform





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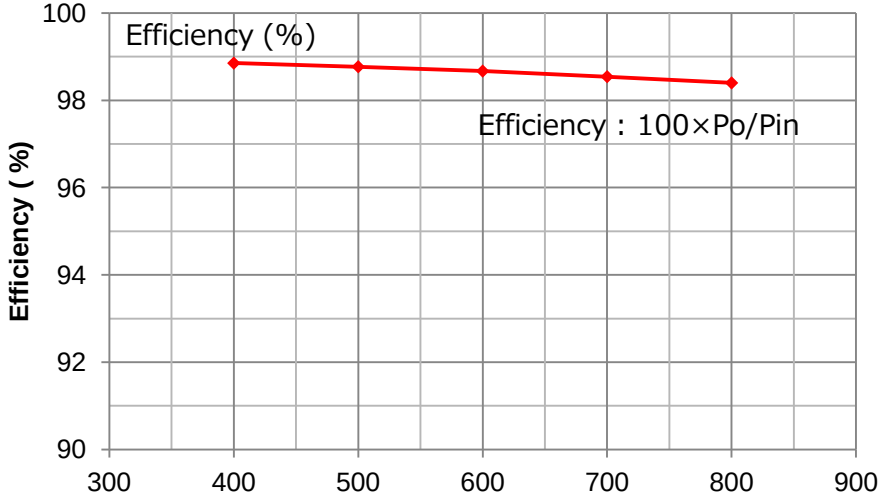
Efficiency, Power Dissipation 1

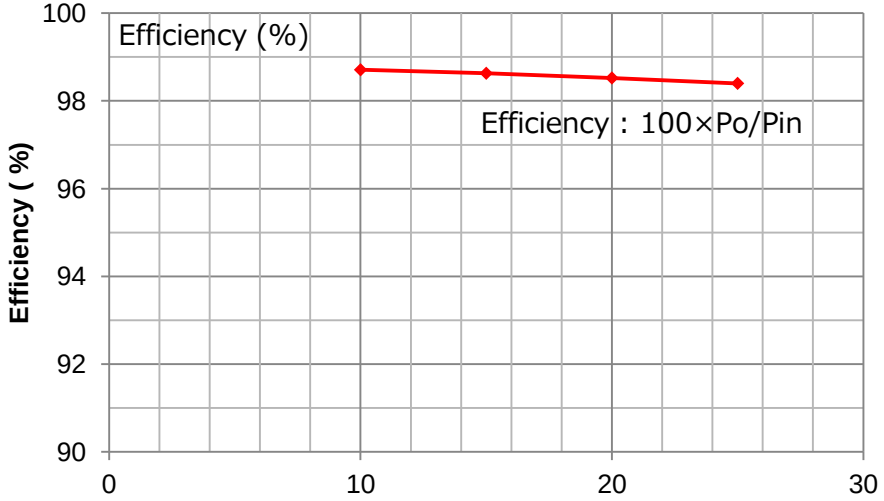
Vin : 400V～800V

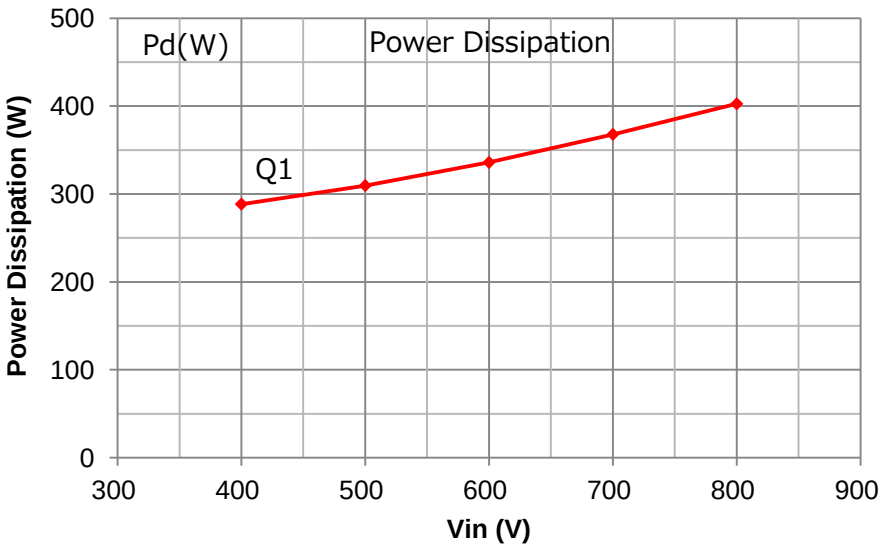
Vo=250V Io=100A
Tj=100℃

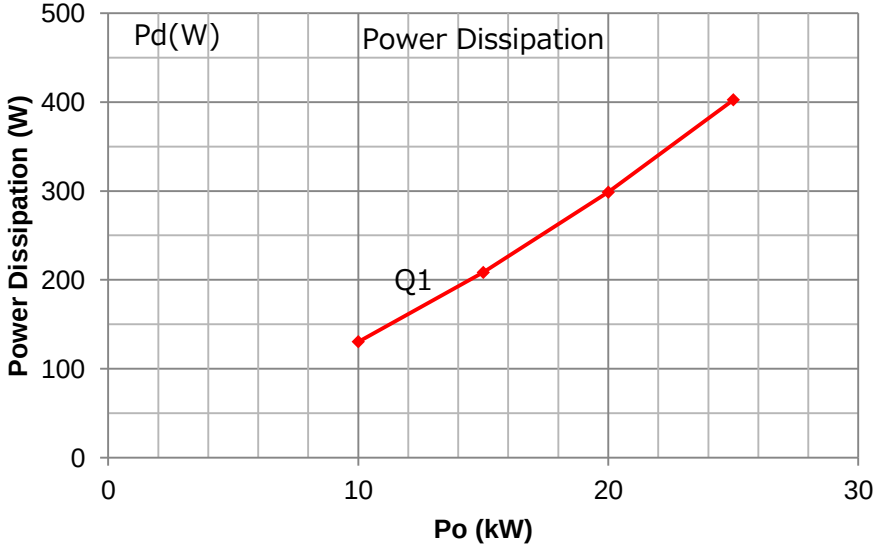


Po : 10kW～25kW

Vin=800V Vo=250V
Tj=100℃







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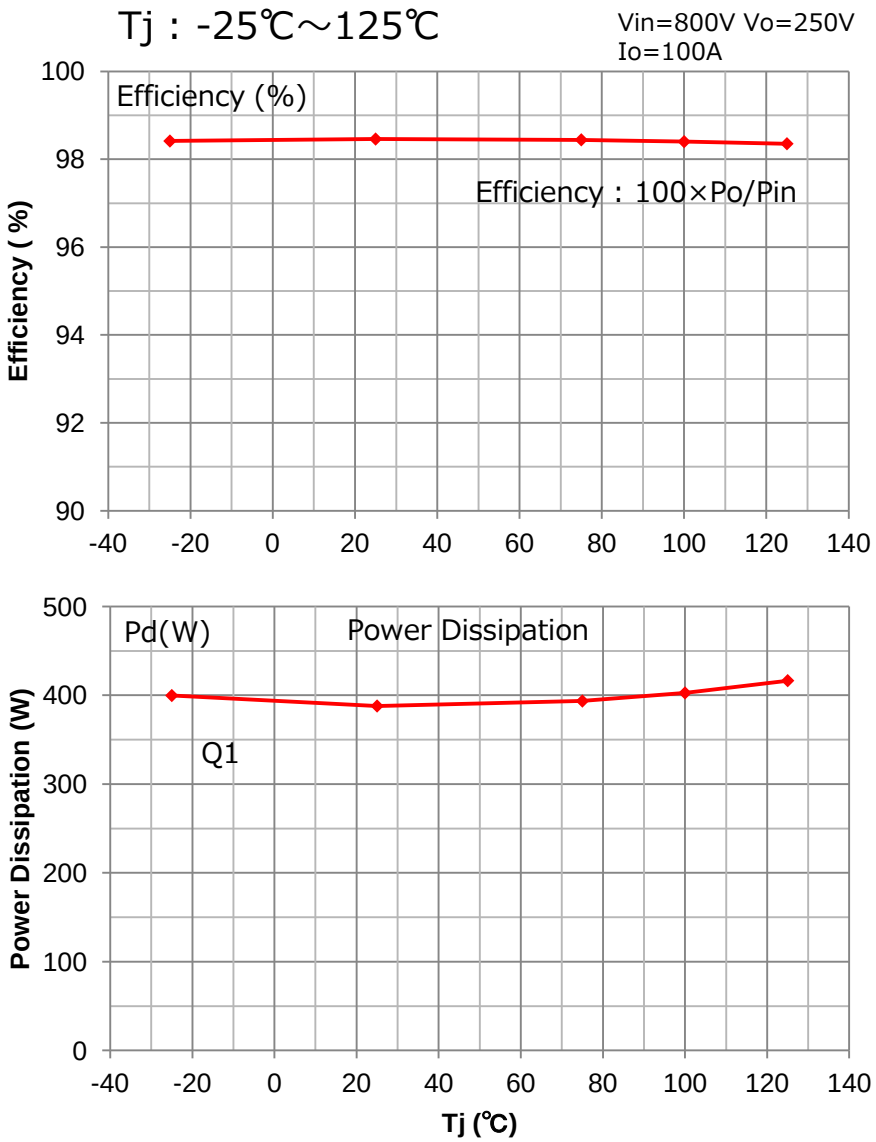
Efficiency, Power Dissipation 2



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