

DC-AC 1-Phase 3-Wire Inverter $V_o=100V$ $P_o=20kW$

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Input : $V_{in}=200V_{dc}+200V_{dc}$

Output : $V_o=100V_{ac}$

$I_o=100A_{ac}$

Gate Drive : $V_d=18V$

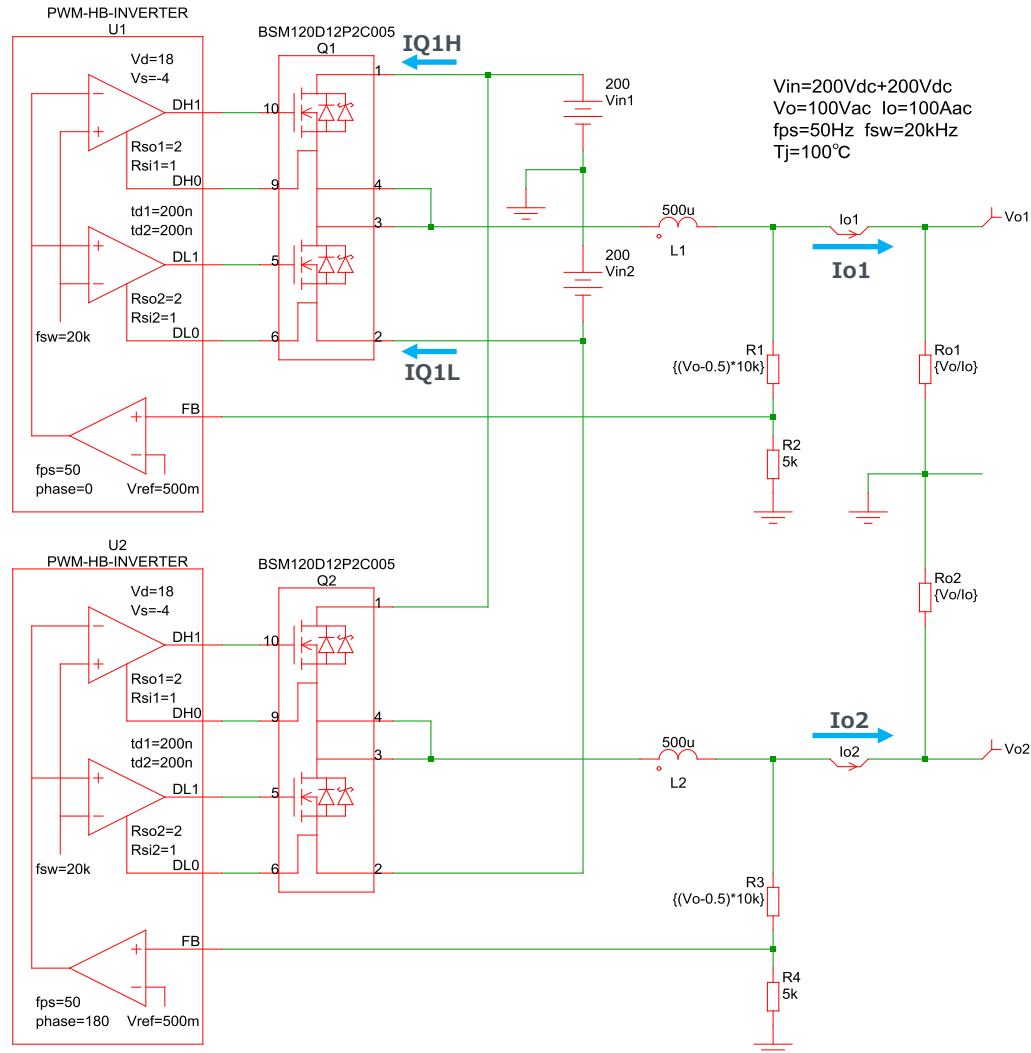
$R_{source}=2\Omega$

$R_{sink}=1\Omega$

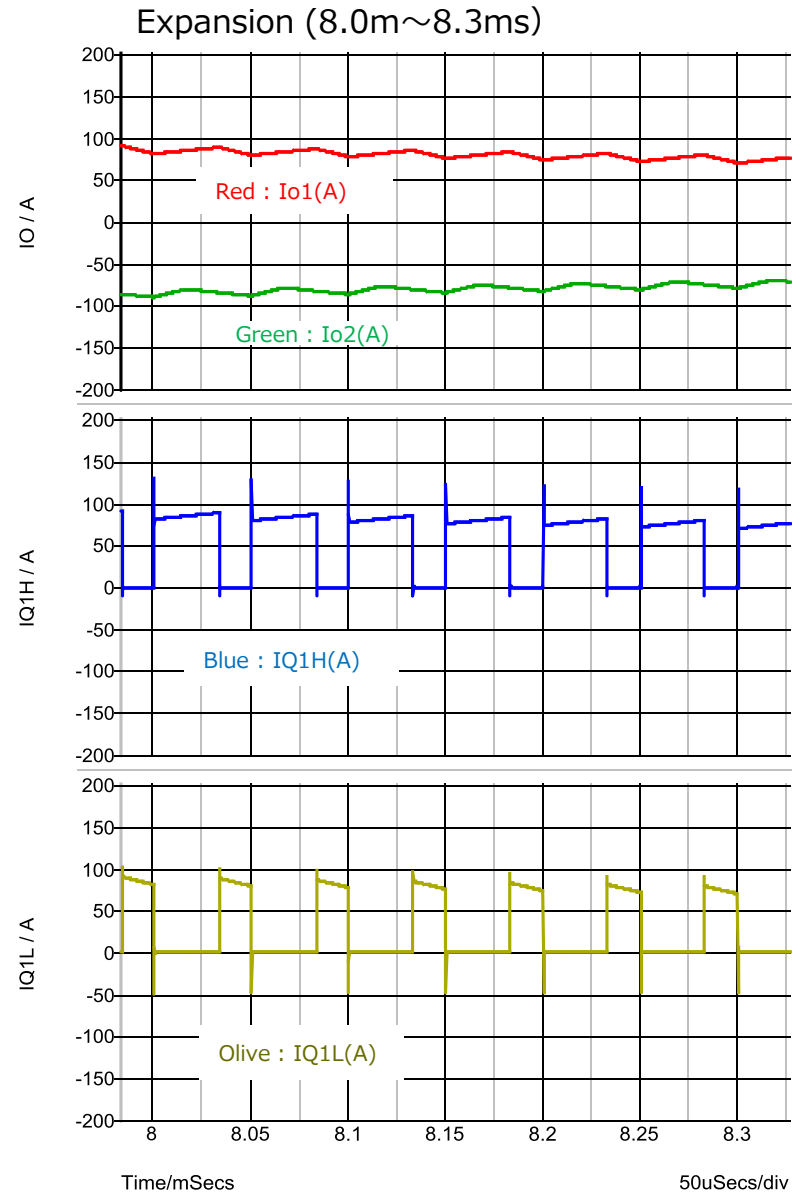
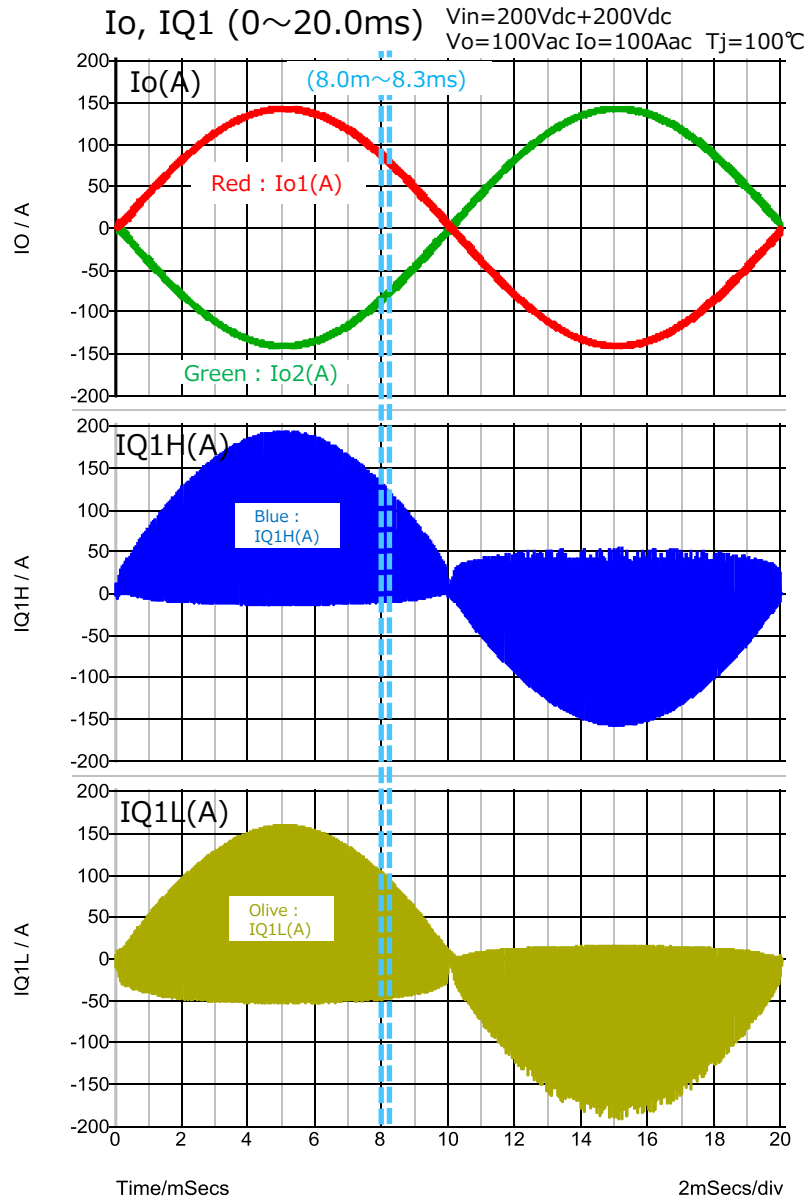
Q1,Q2 : BSM120D12P2C005
SiC Power Module
(1200V 120A)

L1,L2 : 500uH

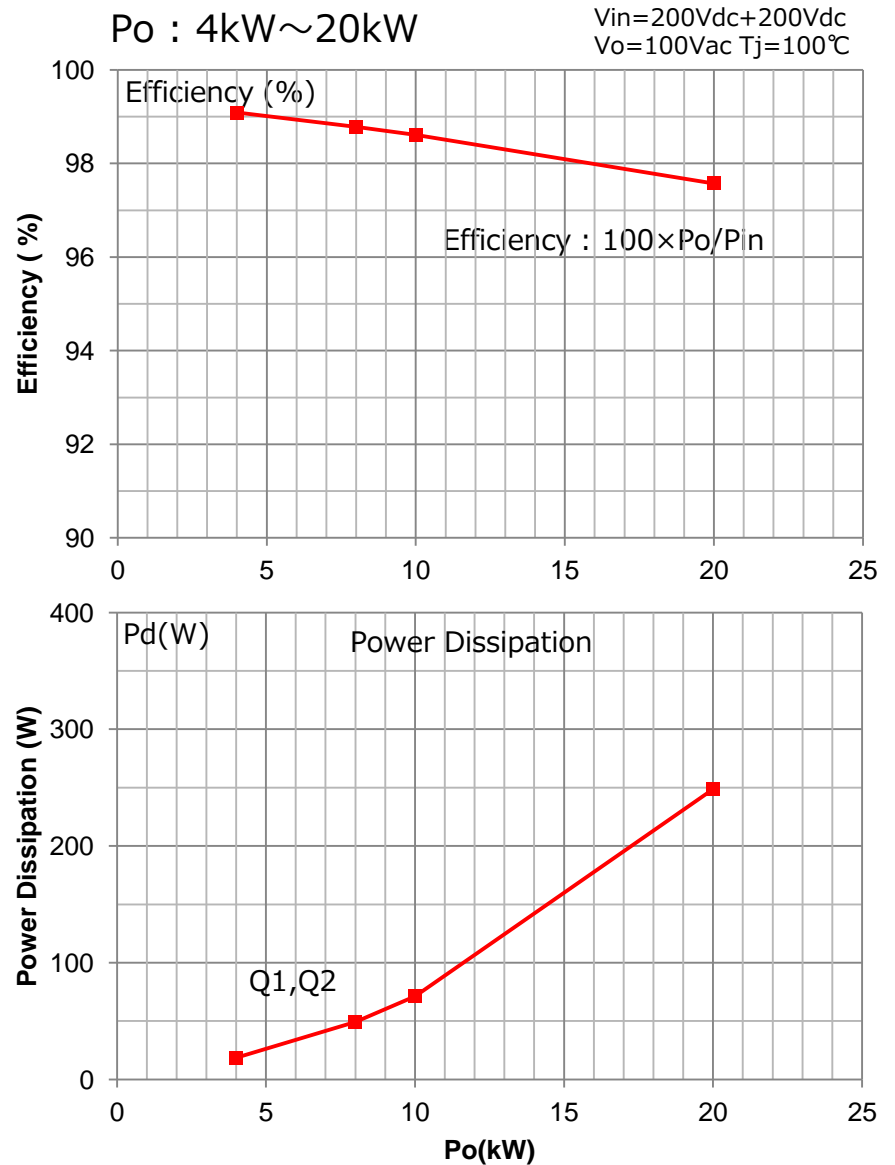
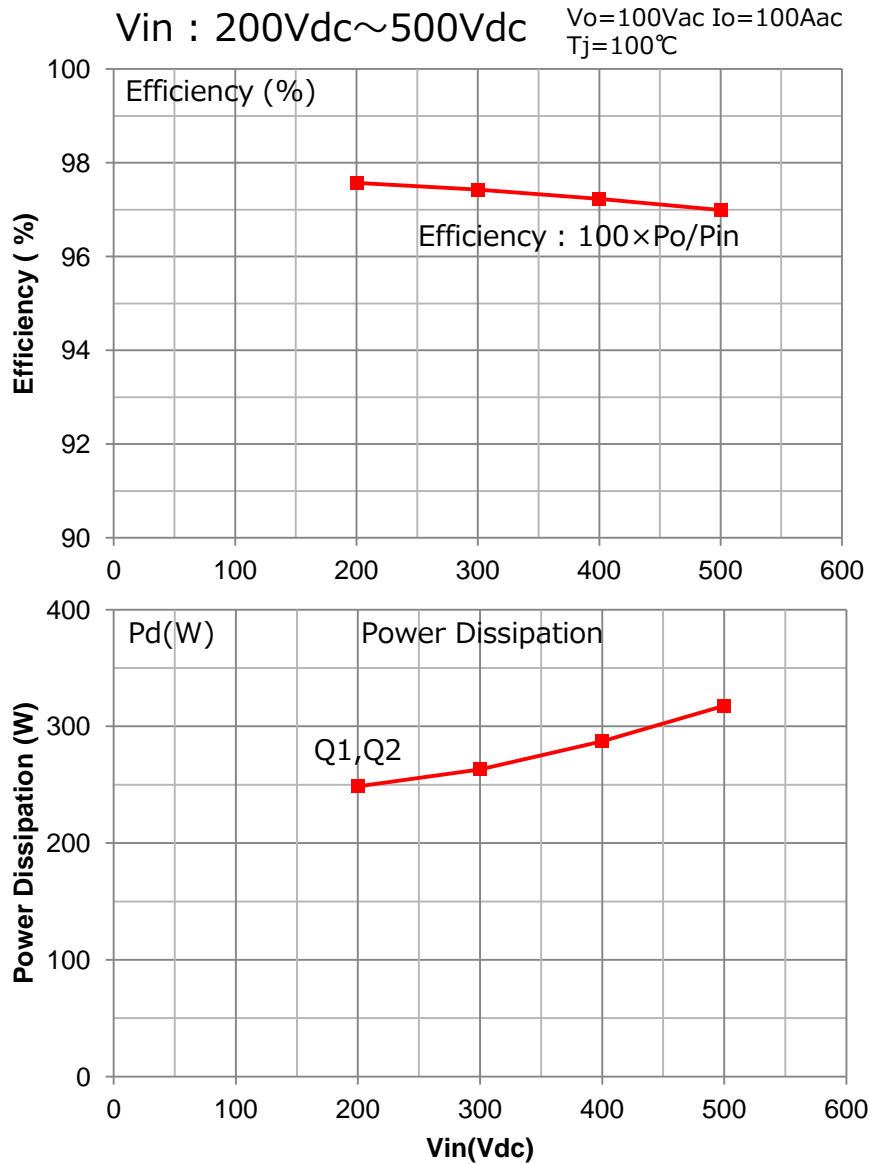
$T_j=100^\circ C$



Simulation Waveform



Efficiency, Power Dissipation 1



Efficiency, Power Dissipation 2

