

# PFC DCM Synchro $V_{in}=200V$ $I_{in}=2.5A$

**Input :**  
 $V_{in}=200V_{ac}$   $I_{in}=2.5A_{ac}$   
 $f_{ps}=50Hz$

**Output :  $V_o=500V_{dc}$**

**Gate Drive :  $V_d=18V$**   
 $R_{source}=5\Omega$   
 $R_{sink}=2\Omega$

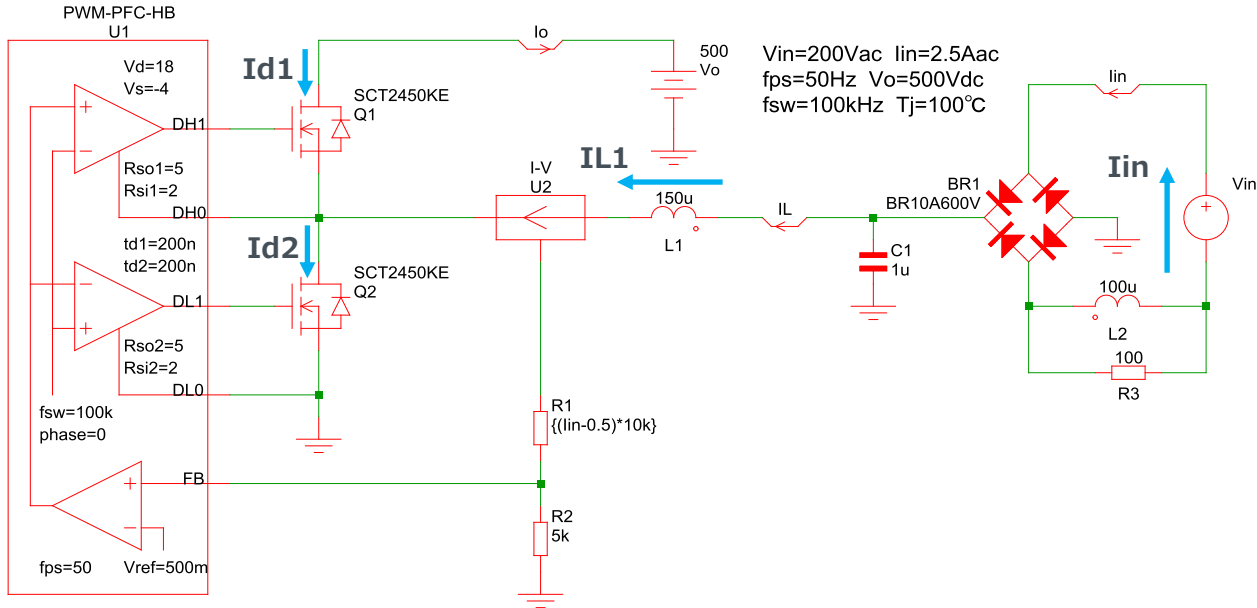
**Q1,Q2 : SCT2450KE**  
**SiC MOSFET (1200V 10A)**

**L1 : 150uH , L2 : 100uH**

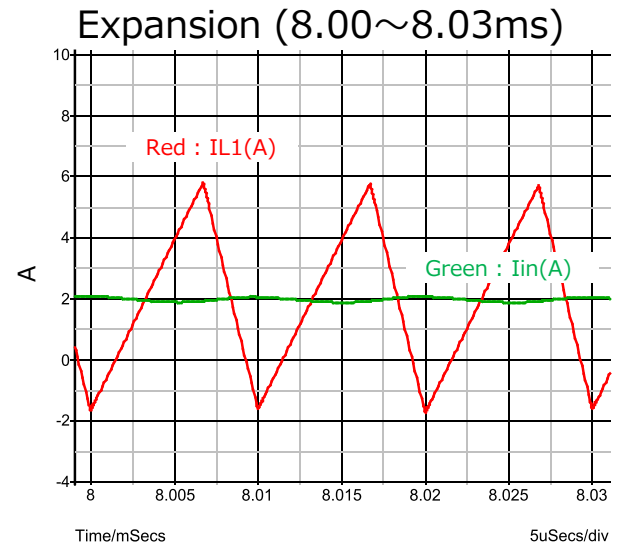
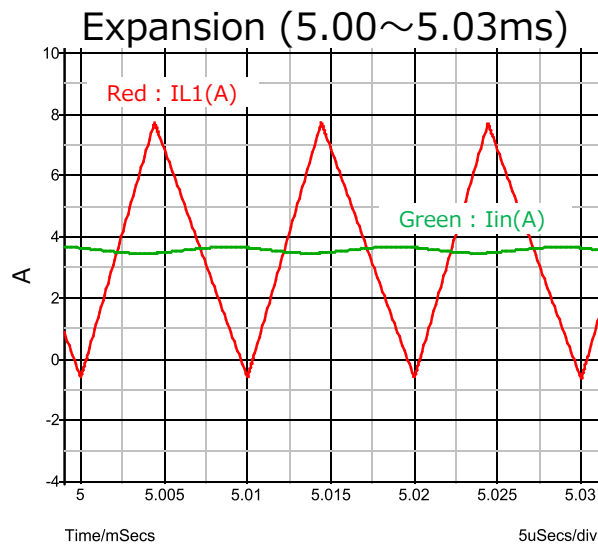
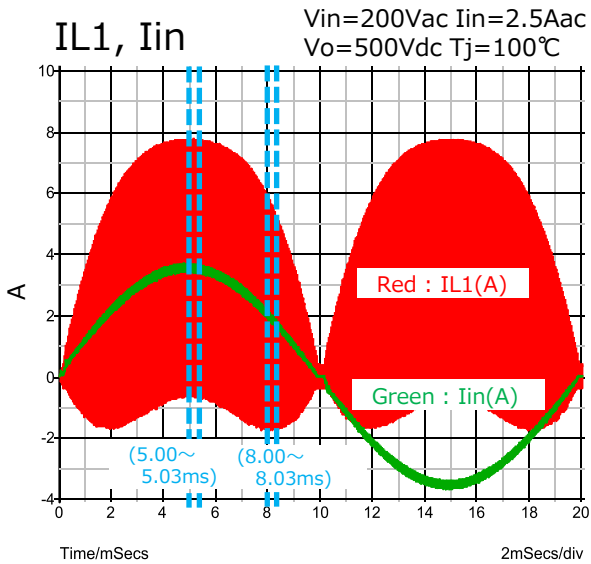
**C1 : 1uF**

**Tj : 100°C**

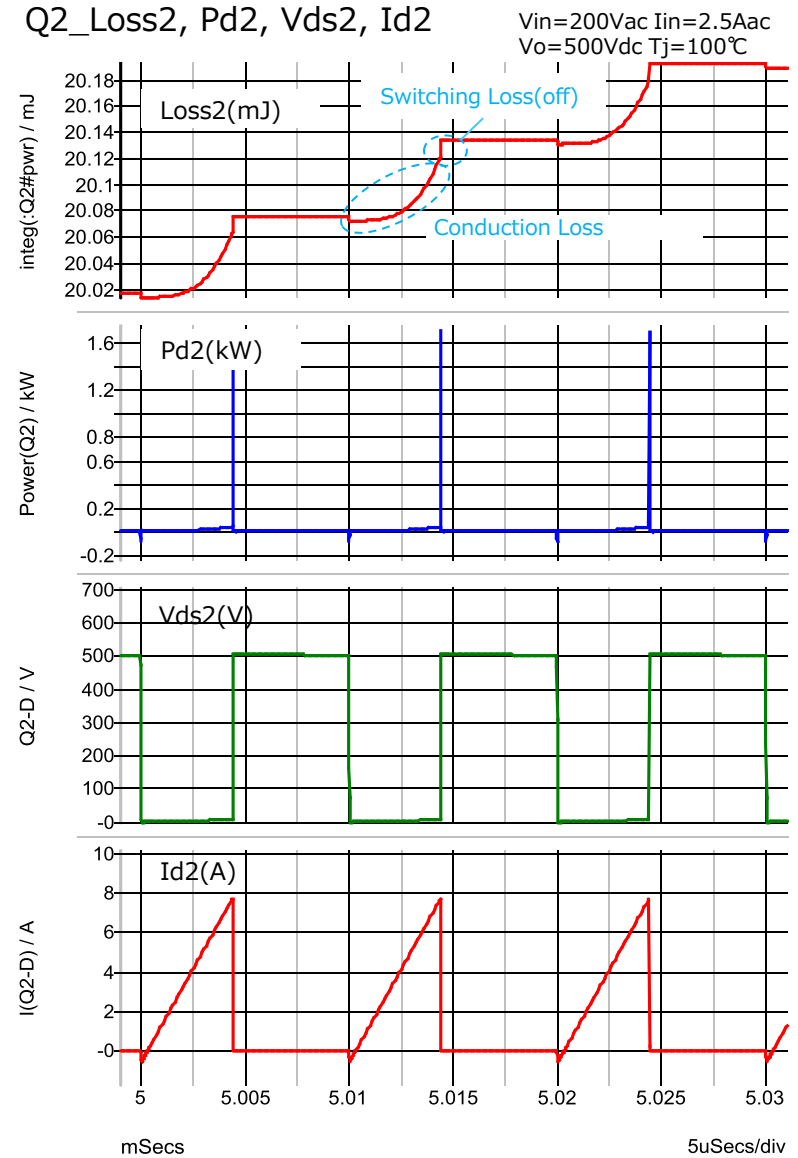
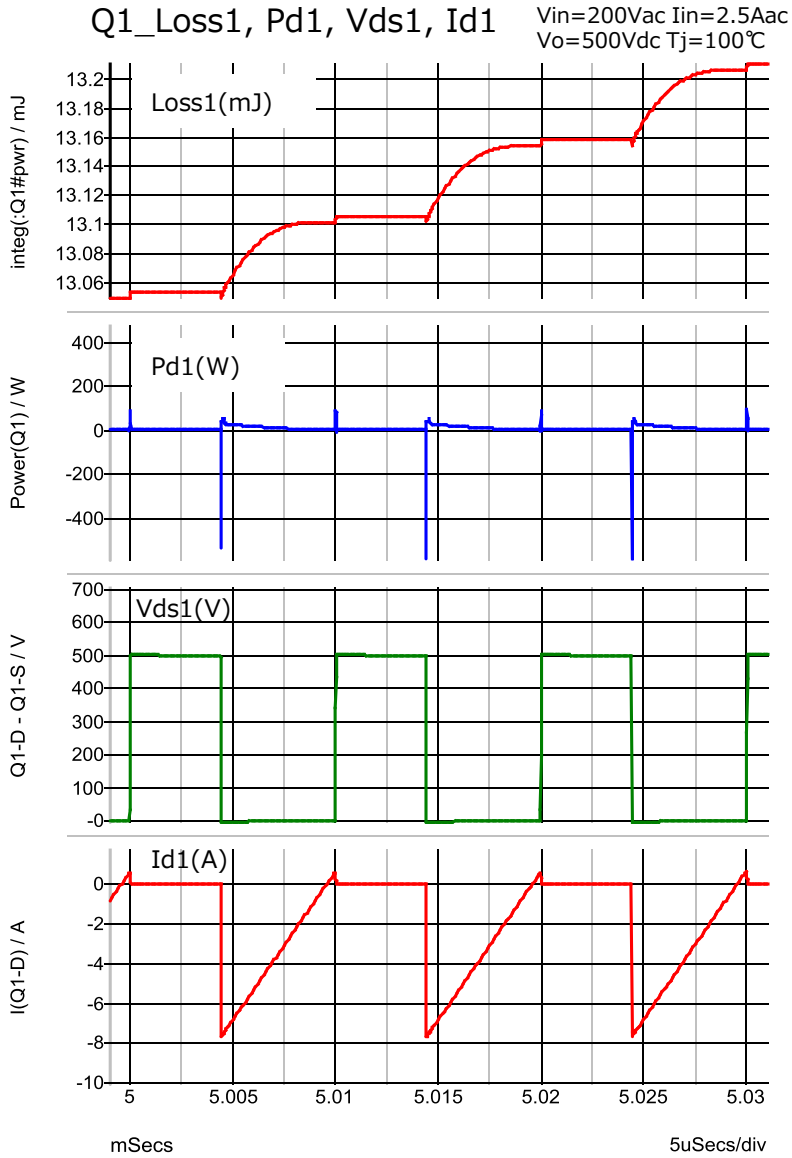
## PFC Discontinuous Current Mode Synchro $V_{in}=200V$ $I_{in}=2.5A$ Simulation Circuit



# Simulation Waveform 1



# Simulation Waveform 2



# Efficiency, Power Dissipation

