

Two-Switch Forward Transformer Specification

09/08/15

Program: PMP10215 REV_A

Electrical:

Circuit Topology: Two-Switch Forward, controller LM5021-2

Input DC Voltage: 350Vdc to 450Vdc

Output Power: 200W continuous, 400W for 5 minutes, 800W peak

Frequency: 200 KHz

Primary Inductance: 2 mH \pm 20%

Leakage Inductance: minimize \rightarrow winding interleaving allowed

Shielded: yes, referred on primary side (internal copper foil)

Turns Ratio:

(2-1 : 3-4)	1:1
(8-10 : 9-11)	1:1
(1-3 : 8-10)	4:1

Output Voltage:

8-10, 9-11: 36V @ 5.6A_{CONT}, 11.1A_(5 min.) 22.2A_{PEAK}

Currents (400Vdc_{in}, duty cycle 36%)

1-3:	1.96A _{RMS} (5min.), 1A _{RMS} (cont.)
8-10, 9-11:	7.39A _{RMS} (5min.), 3.7A _{RMS} (cont.)

Isolation Voltage: 4KVrms, Reinforced insulation (EN60950)

Mechanical: no specific request

Dimensions: maximum height 35mm, minimum footprint

Environment:

Operating Temperature Range: -20C to +70C ambient

Temperature Rise: 40C max during 400W load for 5 minutes

Cooling: Natural Convection

Schematic: (no need to assign specific pins)

