



C28 is optional; it may be required when the power source has high impedance (long lead wires) or a LISN is in use.

Analog ground (AGND), PGND are tied internally in the SiC461

Notes in small black text near components refer to Vishay SiC46X spreadsheet calculator references.

Thick, colored nets indicate PCB planes. Very thick are large planes, moderately thick are small planes

C2 must be placed as close as possible to U1. Typically mounted on the PCB from VCin, Pin1, to the analog ground pad, Pin 28

R16, R16A and C21 comprise an optional snubber network

Layout allows the use of 4 different size Vishay inductors 8787, 6767, 5050 or 4040.L3, 5050 is standard. Alternate inductor size options are available.

MODE SELECT

MODE1: Jumper 1-2 : Power save, VDRV Enabled

MODE2: Jumper 1-2 : Force PWM mode, VDRV Enabled, no Ultrasonic Mode

MODE3: Jumper 1-2 : Force PWM mode, VDRV Disabled, External 5Vdrv required

MODE4: Jumper 1-2 : Power Save mode, VDRV Disabled, External 5Vdrv required

If two jumpers are inserted lowest number dominates

Mode 1

J1 2 1 JUMPER

Mode 2

J2 2 1 JUMPER

Mode 3

J3 2 1 JUMPER

Mode 4

J4 2 1 JUMPER

C23 is on the backside of the PCB.

SiC461 7 to 60Vin; 5V out at 10A max 300kHz

Title		
SiC461 Demo High Power Unified Board 7 to 60Vin 5Vout 10A 300kHz		
Size B	Document Number <Doc>	Rev A
Date:	Friday, October 06, 2017	Sheet 1 of 1