DEMO MANUAL DC368B

LT1763 500mA Low Noise Micropower LDO Regulator

DESCRIPTION

Demonstration circuit DC368B is a low noise micropower voltage regulator using the LT®1763 in the 8-lead SO package. These circuits are used primarily in voltage controlled oscillators, RF power supplies and, in larger systems, as local regulators. The ability to tolerate a wide variety of output capacitors makes them ideal in space- and costsensitive systems.

ADDENDUM

DC368 Summary and Background

Starting around January 2021, the LT1763 demonstration circuit was changed from DC368A which used an obsolete 1mm jumper to set the output voltage to DC368B which used a non-obsolete 2mm jumper for the same purpose. The change was necessary to complete a rebuild and the rebuild was normal other than the change to the jumper so there weren't any additional changes to the hardware except to shift component placements so the new jumper would fit. It is possible to do a DC368A versus DC368B comparison because the DC368A version demo manual includes a schematic, layer drawings, fabrication drawing and a parts list that can be compared to the design files for DC368B. Specifically, the changes between DC368A and DC368B are:

- 1. **Schematic:** The jumper to set the output voltage was redrawn. No reference designators changed. The title block was updated.
- 2. **Layer Drawings:** The silkscreen for the top layer was updated for the latest company logo and some component placements shifted to fit the larger jumper that sets the output voltage.
- Fabrication Drawing: The fabrication drawing for DC368B was updated to the latest drafting standards. The DC368A fabrication drawing note that said "FILL UP ALL VIAS WITH SOLDER" was omitted on the fabrication drawing for DC368B.
- Parts List: No change was made to the parts list between DC368A and DC368B except the jumper to set the output voltage was changed and part numbers were updated according to the normal procedure for rebuilds.

Design files for this circuit board are available.

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ESD Caution

ESD (electrostatic discharge) sensitive device. Charged devices and circuit boards can discharge without detection. Although this product features patented or proprietary protection circuitry, damage may occur on devices subjected to high energy ESD. Therefore, proper ESD precautions should be taken to avoid performance degradation or loss of functionality.

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