TI Designs: TIDA-00243 Dual Mode Wireless Receiver

TEXAS INSTRUMENTS

Operating the TIDA-00243 in CC mode while driving a charger IC (The wireless RX circuit was in parallel with a USB circuit)

Using the TIDA-00243 SFF board
Output voltage 5.3 Vdc
Diode drop 0.3 Vdc
Current Limit 500 mAmps
Modifications
Dual Mode R4 - removed
ILIM R3 - 220 resistor to set to 1000mA
(ILIM R3 - 1K resistor to set to 500mA)
VIREG R7 - 110k Ohm resistor
VO_REG R11 - 110k Ohm resistor
Parts
A diode was added in series with the output to protect the
wireless RX from the USB input circuit - MBR0520L
Before charge
Measured voltage out of the RX before charge 5.302 Vdc
Max charge Current
Measured current at max charge 520 mAdc
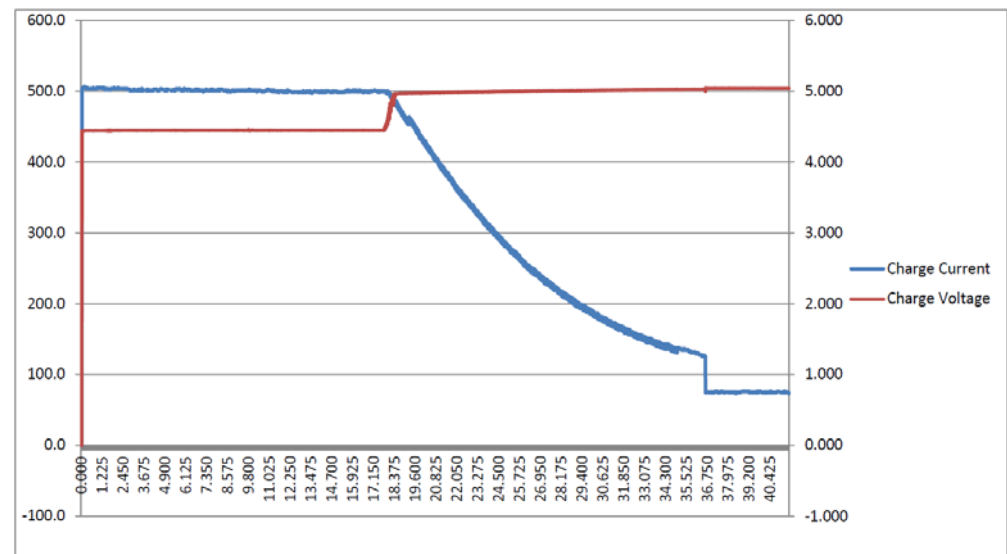Measured voltage out of the RX during charge 4.764 Vdc
Measured voltage after the diode before charge 4.443 Vdc
In regulation Charge
Measured current while in taper phase 400 mAdc
Measured voltage out of the RX during charge 4.281 Vdc
Measured voltage after the diode before charge 4.987 Vdc

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