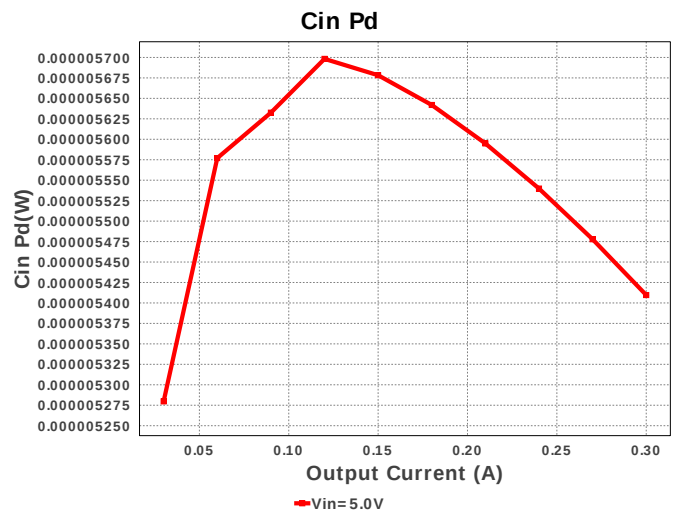
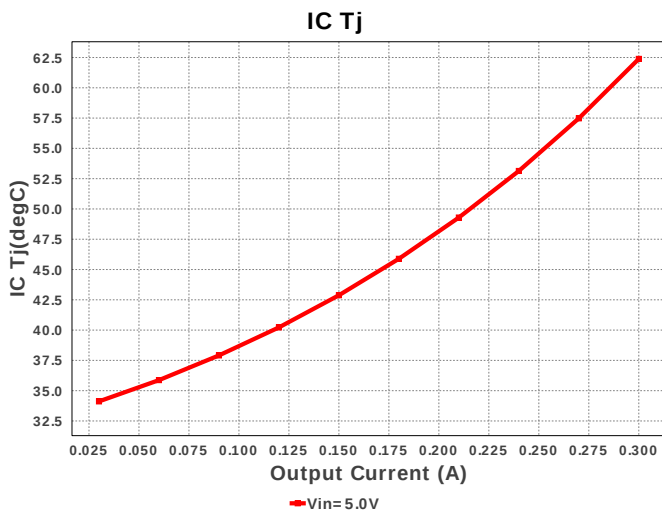
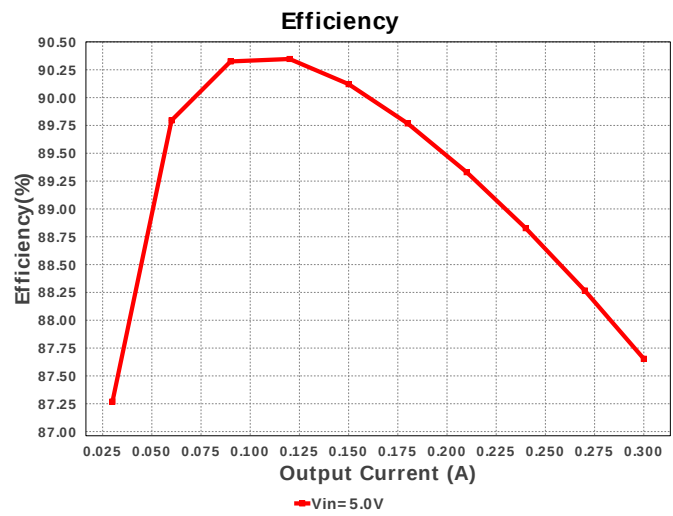
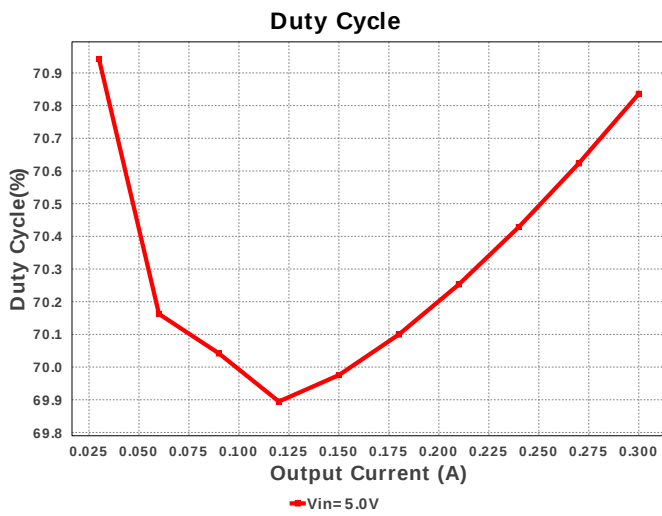
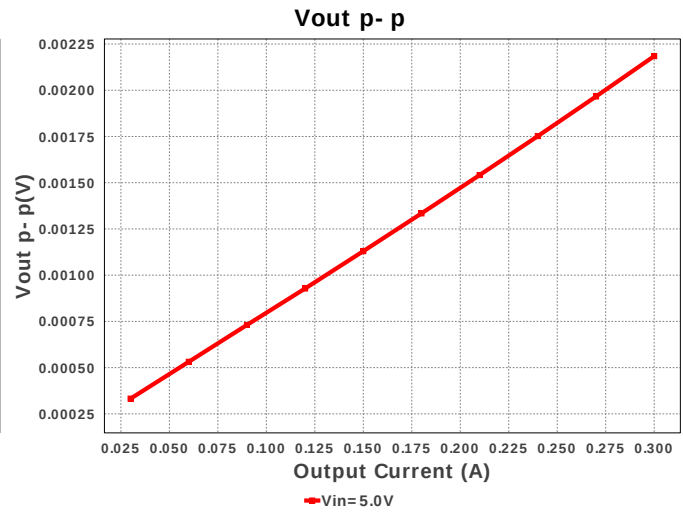
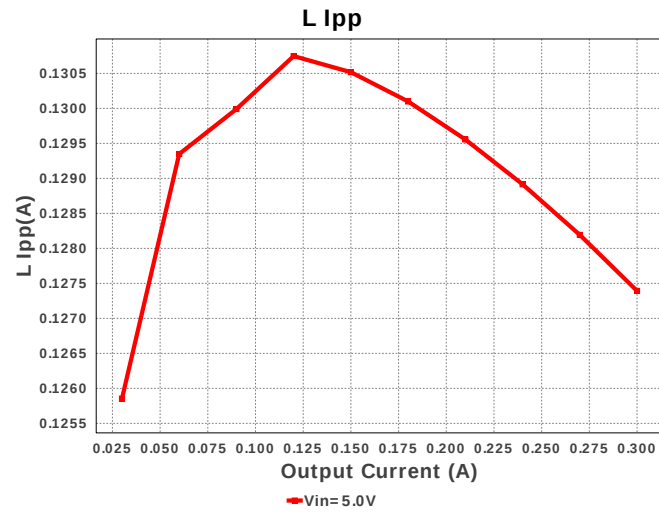
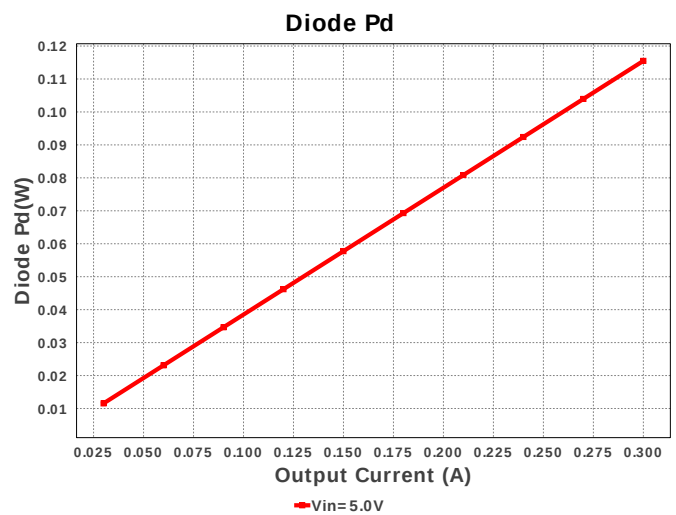
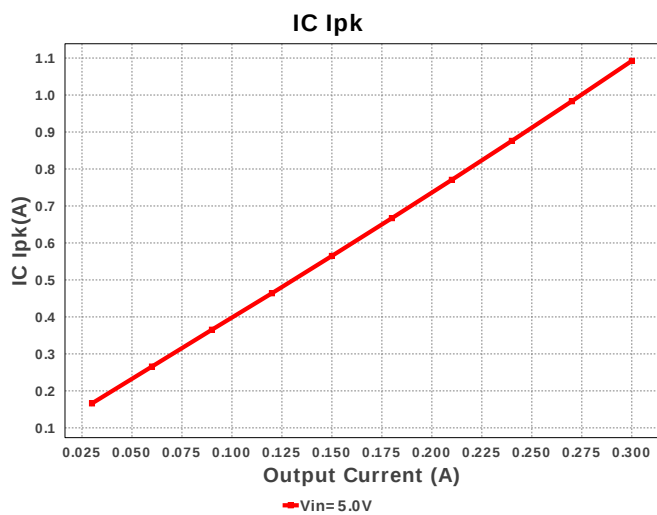
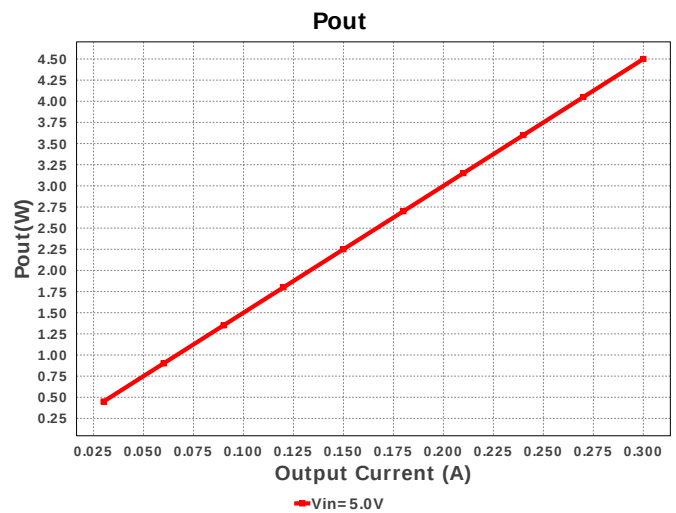
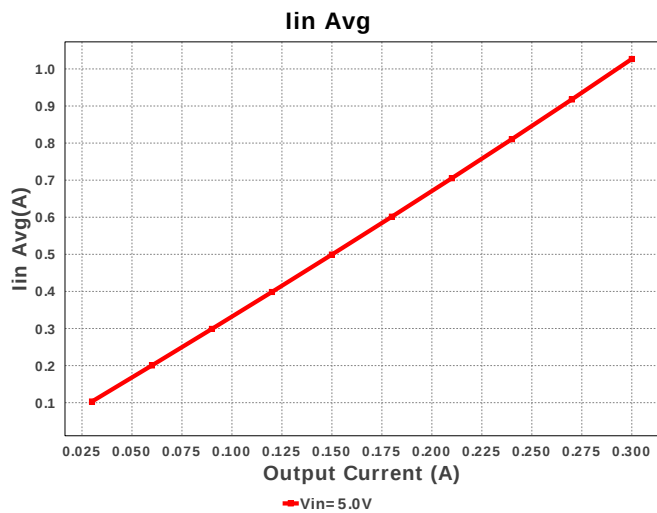
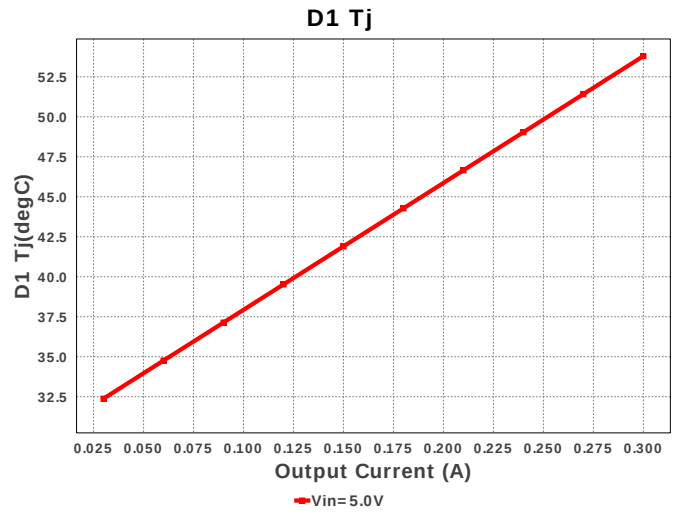
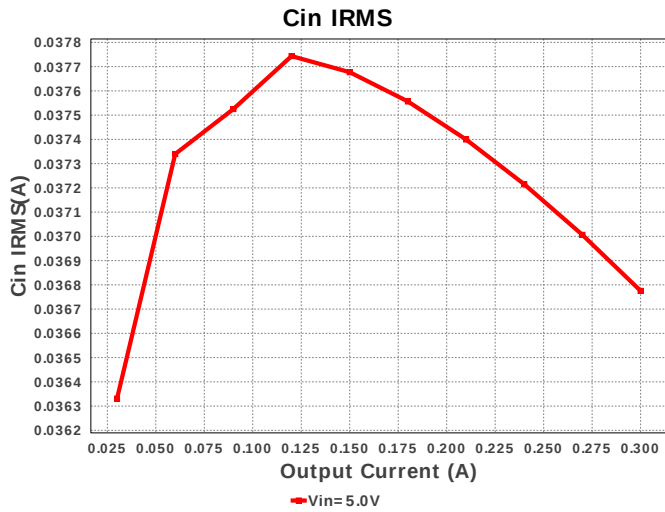
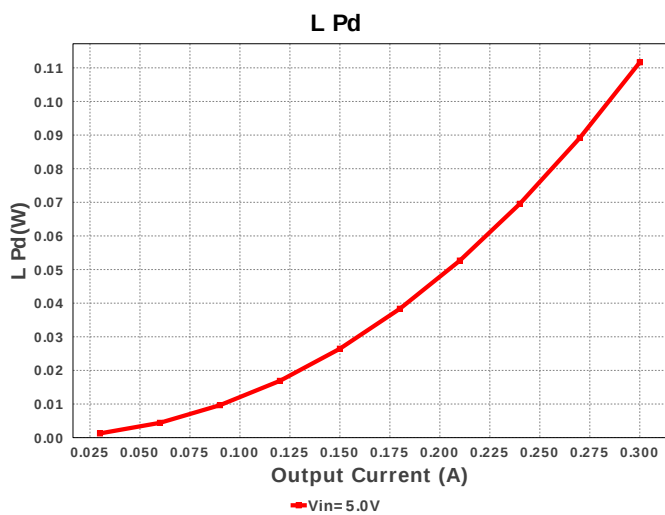
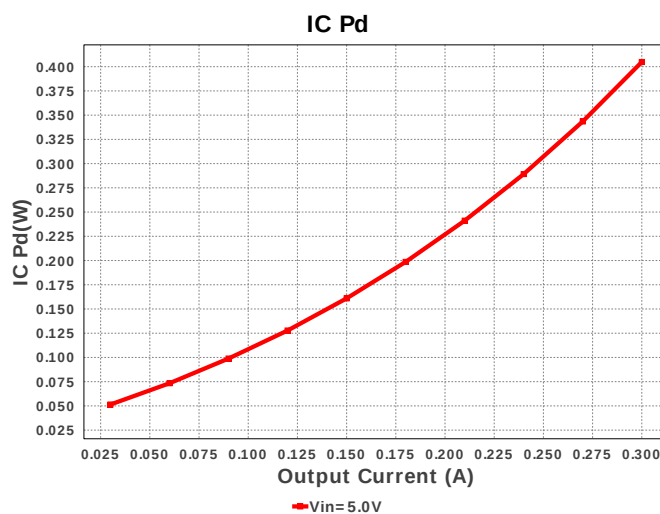
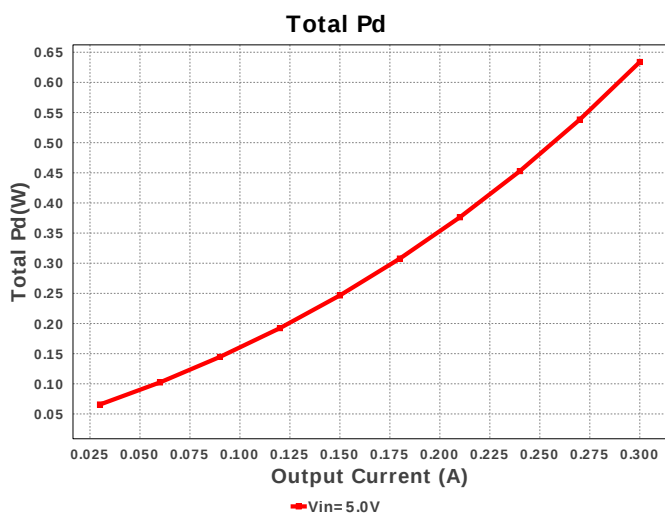
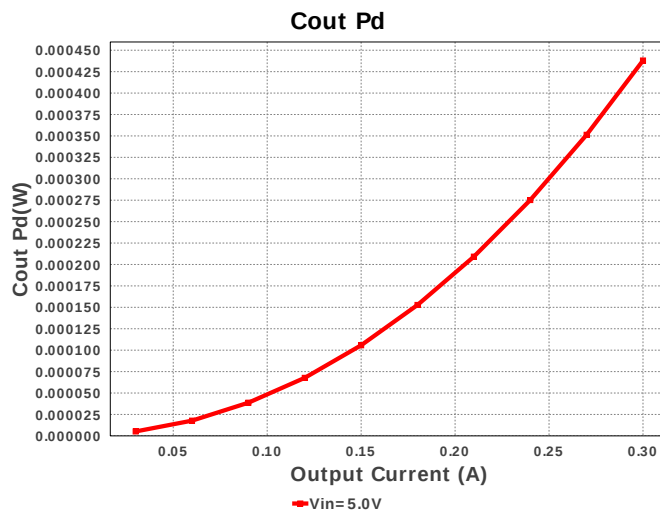
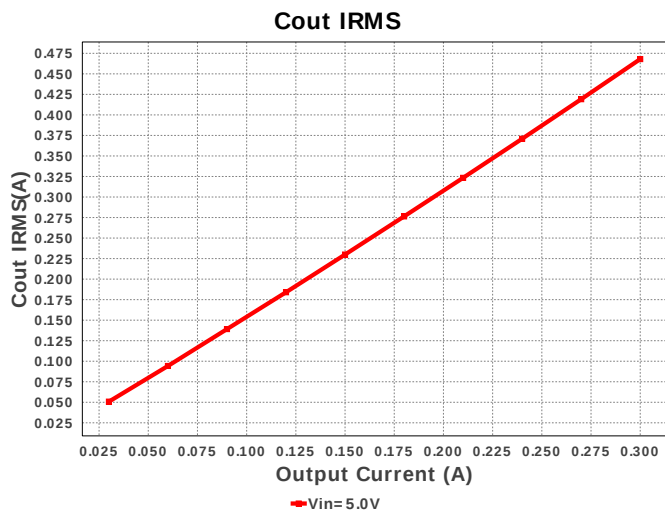










## Operating Values

| #   | Name      | Value                 | Category | Description                             |
|-----|-----------|-----------------------|----------|-----------------------------------------|
| 1.  | Cin IRMS  | 36.775 mA             | Current  | Input capacitor RMS ripple current      |
| 2.  | Cout IRMS | 467.967 mA            | Current  | Output capacitor RMS ripple current     |
| 3.  | IC IpK    | 1.092 A               | Current  | Peak switch current in IC               |
| 4.  | Iin Avg   | 1.027 A               | Current  | Average input current                   |
| 5.  | L Ipp     | 127.393 mA            | Current  | Peak-to-peak inductor ripple current    |
| 6.  | BOM Count | 9                     | General  | Total Design BOM count                  |
| 7.  | FootPrint | 121.0 mm <sup>2</sup> | General  | Total Foot Print Area of BOM components |
| 8.  | Frequency | 1.6 MHz               | General  | Switching frequency                     |
| 9.  | Pout      | 4.5 W                 | General  | Total output power                      |
| 10. | Total BOM | \$0.9                 | General  | Total BOM Cost                          |
| 11. | D1 Tj     | 53.793 degC           | Op_Point | D1 junction temperature                 |

| #   | Name       | Value           | Category | Description                        |
|-----|------------|-----------------|----------|------------------------------------|
| 12. | Duty Cycle | 70.836 %        | Op_point | Duty cycle                         |
| 13. | Efficiency | 87.654 %        | Op_point | Steady state efficiency            |
| 14. | IC Tj      | 62.388 degC     | Op_point | IC junction temperature            |
| 15. | IOUT_OP    | 300.0 mA        | Op_point | Iout operating point               |
| 16. | VIN_OP     | 5.0 V           | Op_point | Vin operating point                |
| 17. | Vout p-p   | 2.185 mV        | Op_point | Peak-to-peak output ripple voltage |
| 18. | Cin Pd     | 5.41 $\mu$ W    | Power    | Input capacitor power dissipation  |
| 19. | Cout Pd    | 437.986 $\mu$ W | Power    | Output capacitor power dissipation |
| 20. | Diode Pd   | 115.5 mW        | Power    | Diode power dissipation            |
| 21. | IC Pd      | 404.847 mW      | Power    | IC power dissipation               |
| 22. | L Pd       | 111.65 mW       | Power    | Inductor power dissipation         |
| 23. | Total Pd   | 633.844 mW      | Power    | Total Power Dissipation            |

## Design Inputs

| #  | Name    | Value       | Description            |
|----|---------|-------------|------------------------|
| 1. | Iout    | 300.0 mA    | Maximum Output Current |
| 2. | Iout1   | 300.0 mAmps | Output Current #1      |
| 3. | VinMax  | 5.0 V       | Maximum input voltage  |
| 4. | VinMin  | 5.0 V       | Minimum input voltage  |
| 5. | Vout    | 15.0 V      | Output Voltage         |
| 6. | Vout1   | 15.0 Volt   | Output Voltage #1      |
| 7. | base_pn | LMR62014X   | Base Product Number    |
| 8. | source  | DC          | Input Source Type      |
| 9. | Ta      | 30.0 degC   | Ambient temperature    |

## Design Assistance

1. **LMR62014X** Product Folder : <http://www.ti.com/product/lmr62014> : contains the data sheet and other resources.

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