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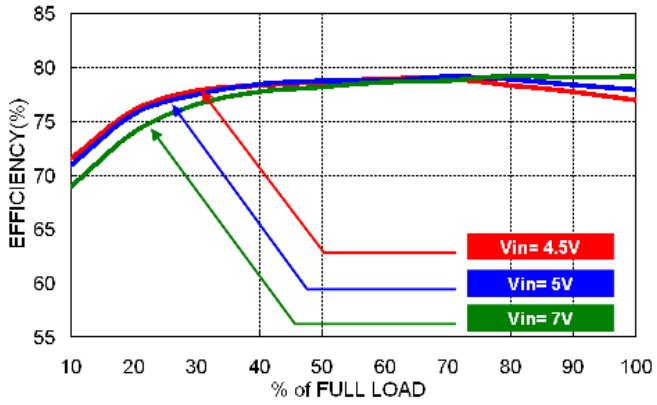
MPU02

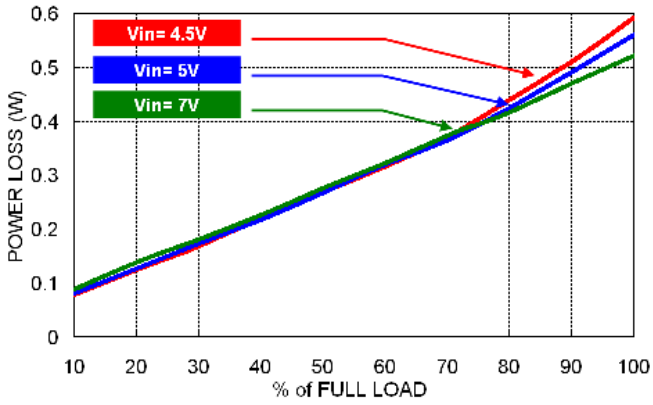
Application Note: Characteristic Curves
03/21/2022

Characteristic Curves

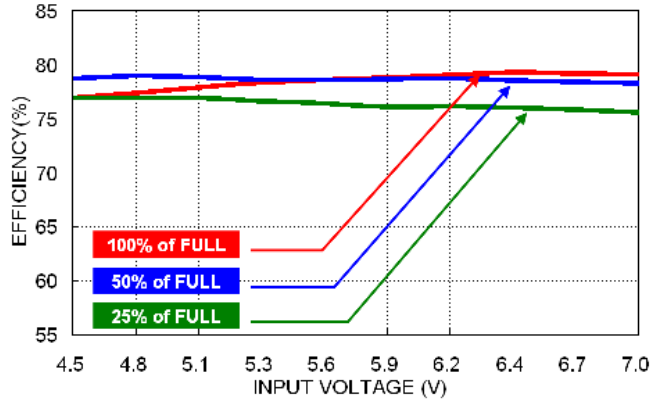
All test conditions are at 25℃.The figures are identical for MPU02-05S3P3



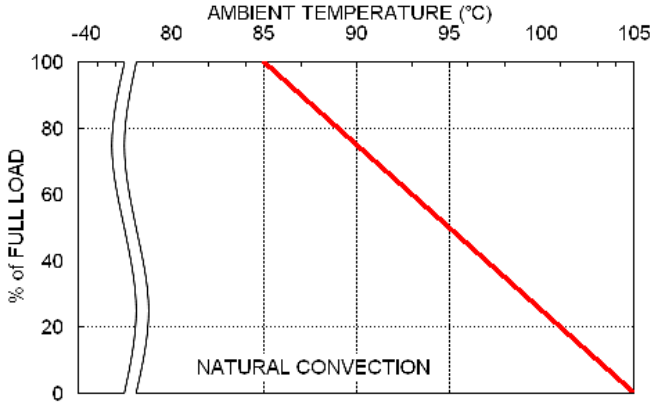
Efficiency Versus Output Load



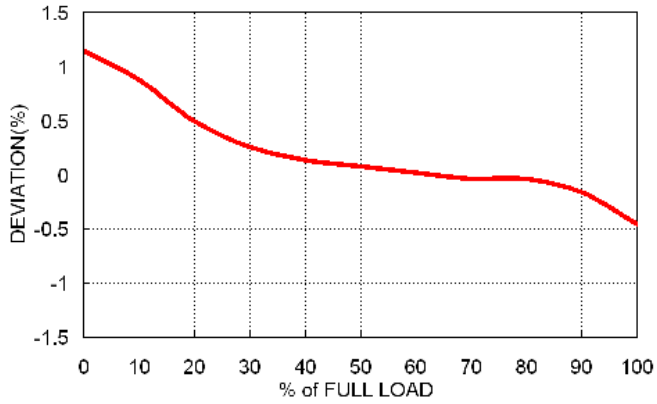
Power Dissipation Versus Output Load



Efficiency Versus Input Voltage.



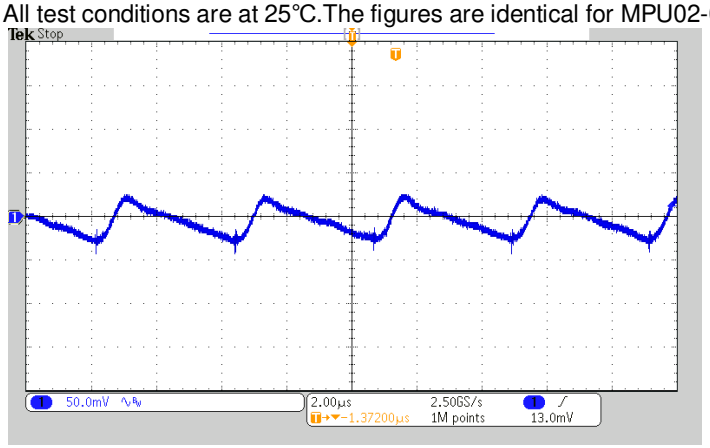
Derating Output Load Versus Ambient Temperature and Airflow
Vin(nom)



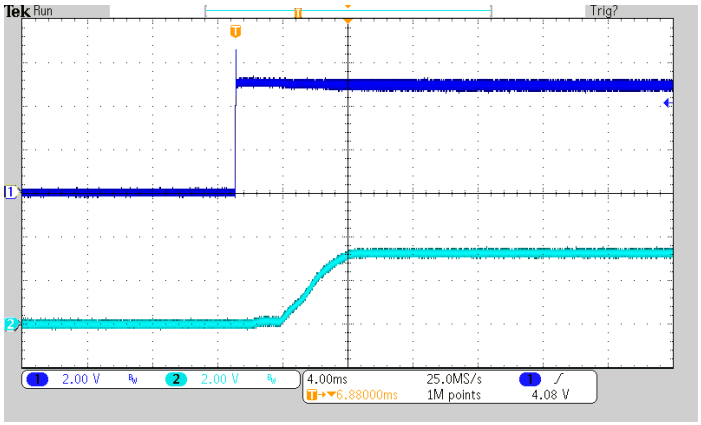
Vout Deviation vs. Output Load

Characteristic Curves (Continued)

All test conditions are at 25°C.The figures are identical for MPU02-05S3P3



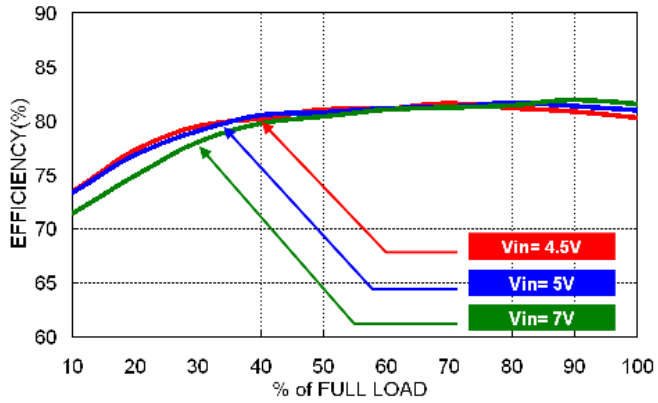
Typical Output Ripple and Noise.
Vin(nom), Full Load



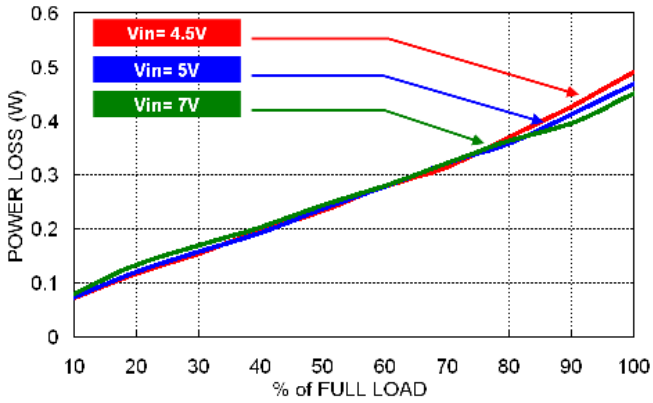
Typical Input Start-Up and Output Rise Characteristic
Vin(nom), Full Load

Characteristic Curves (Continued)

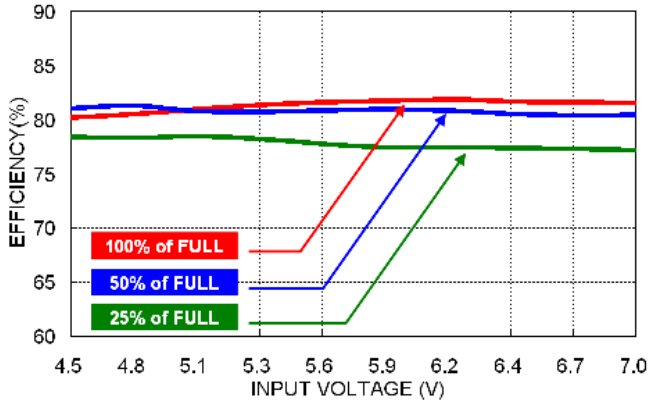
All test conditions are at 25℃.The figures are identical for MPU02-05S05



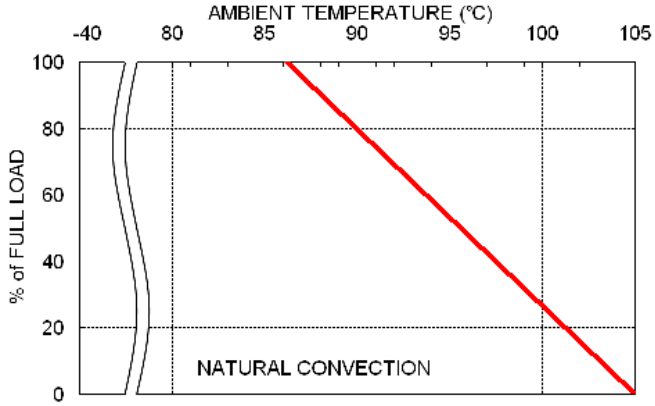
Efficiency Versus Output Load



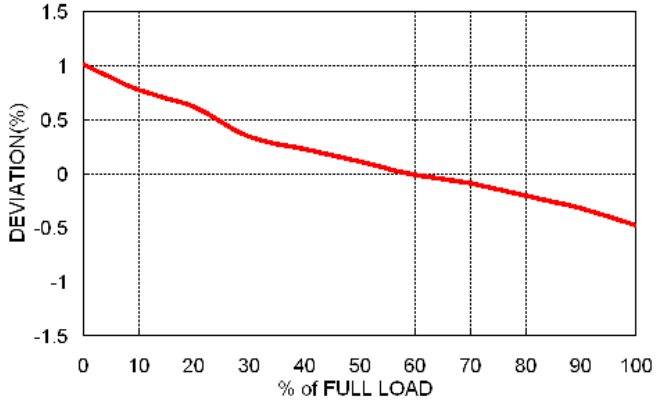
Power Dissipation Versus Output Load



Efficiency Versus Input Voltage.



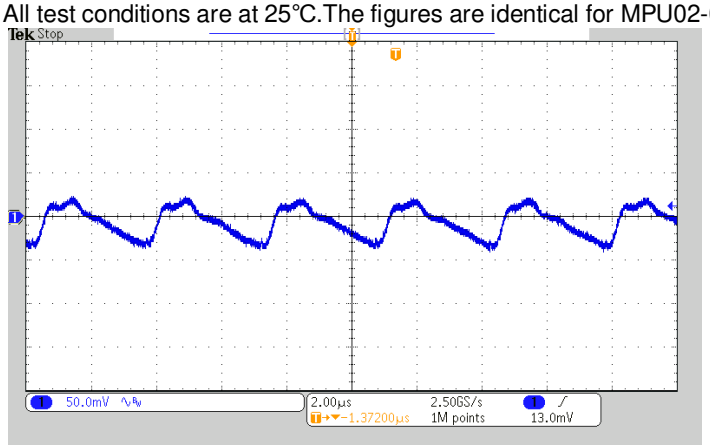
Derating Output Load Versus Ambient Temperature and Airflow
Vin(nom)



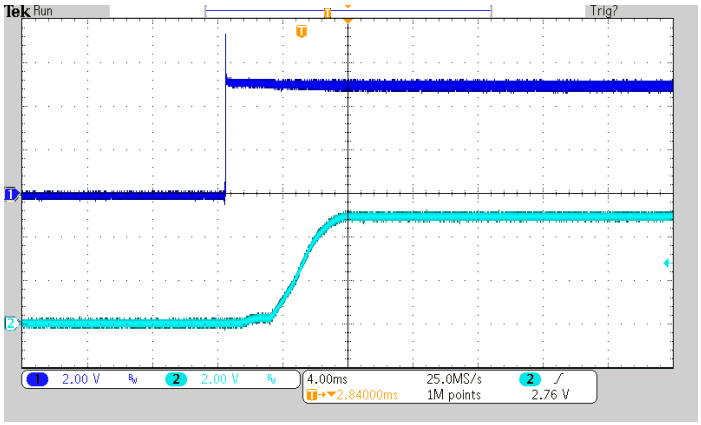
Vout Deviation vs. Output Load

Characteristic Curves (Continued)

All test conditions are at 25°C.The figures are identical for MPU02-05S05



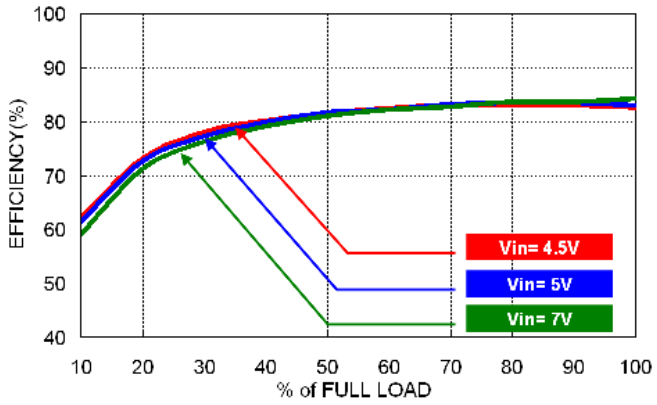
Typical Output Ripple and Noise.
Vin(nom), Full Load



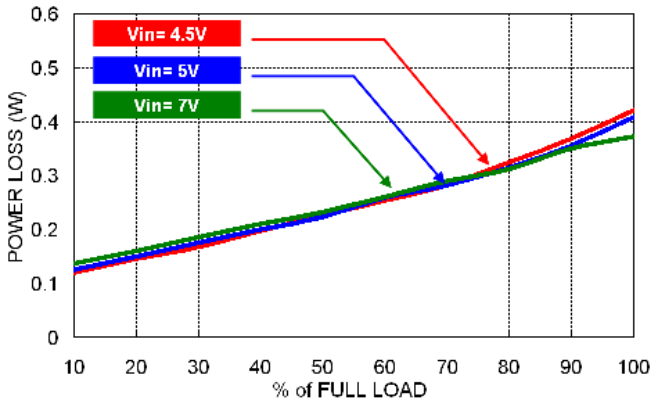
Typical Input Start-Up and Output Rise Characteristic
Vin(nom), Full Load

Characteristic Curves (Continued)

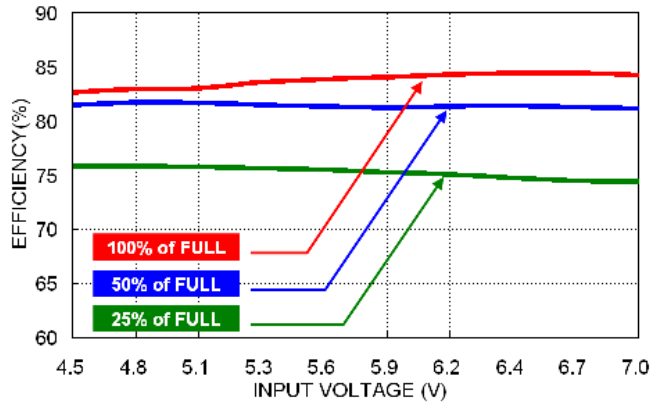
All test conditions are at 25℃.The figures are identical for MPU02-05S12



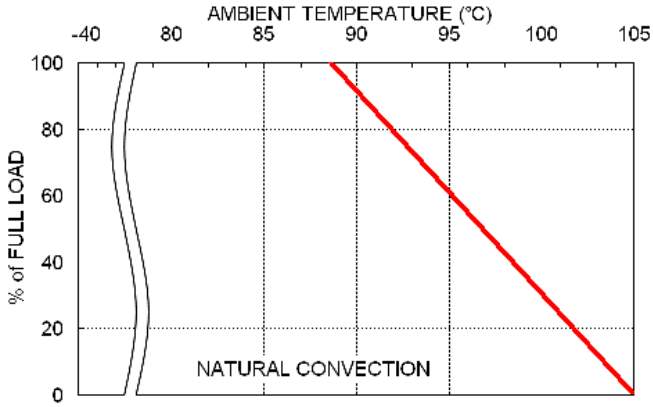
Efficiency Versus Output Load



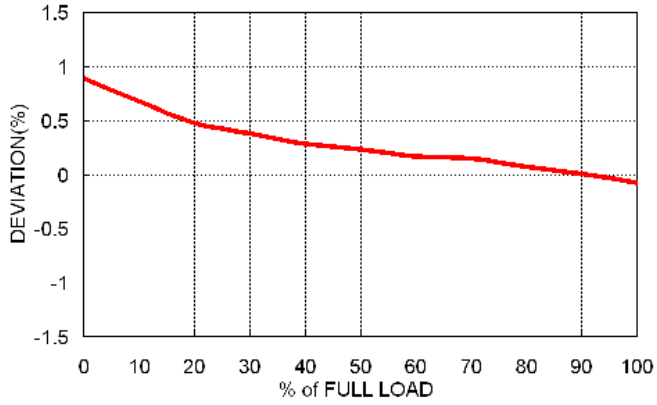
Power Dissipation Versus Output Load



Efficiency Versus Input Voltage.



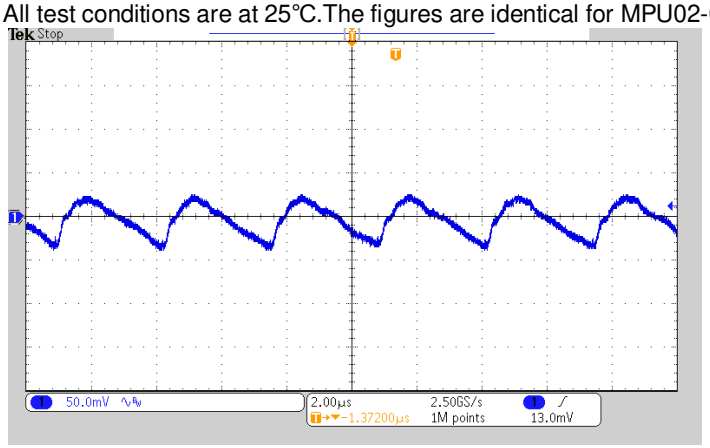
Derating Output Load Versus Ambient Temperature and Airflow
Vin(nom)



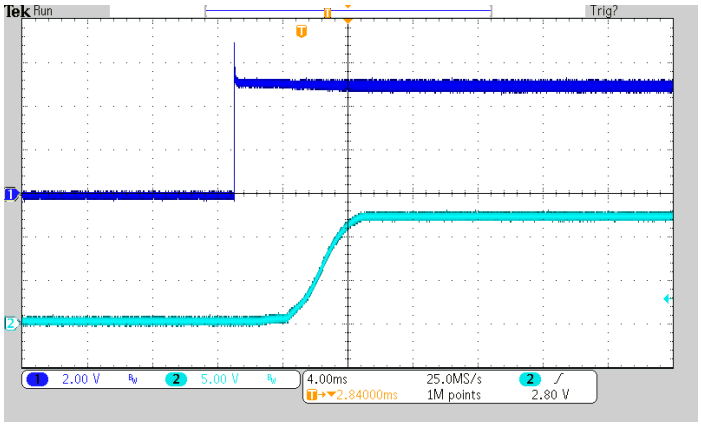
Vout Deviation vs. Output Load

Characteristic Curves (Continued)

All test conditions are at 25℃.The figures are identical for MPU02-05S12



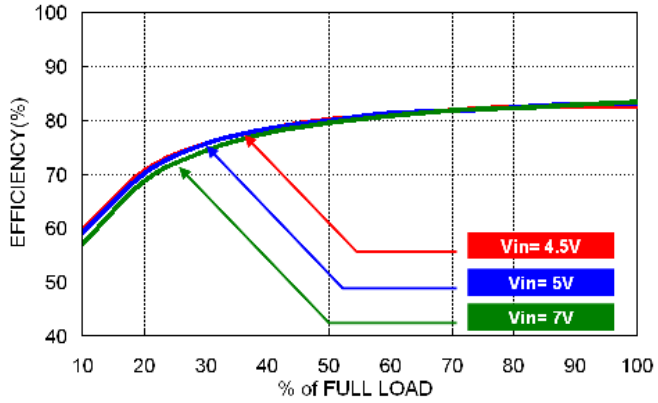
Typical Output Ripple and Noise.
Vin(nom), Full Load



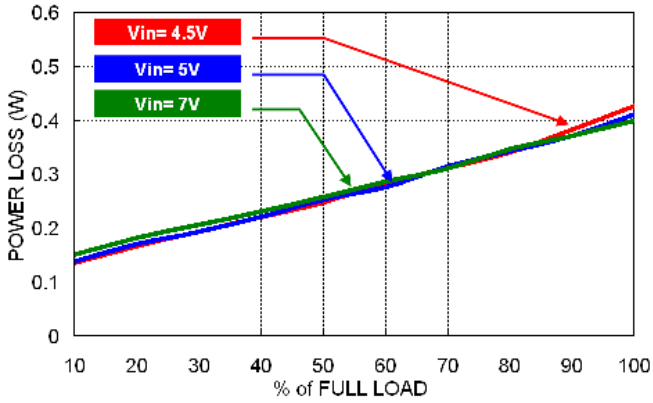
Typical Input Start-Up and Output Rise Characteristic
Vin(nom), Full Load

Characteristic Curves (Continued)

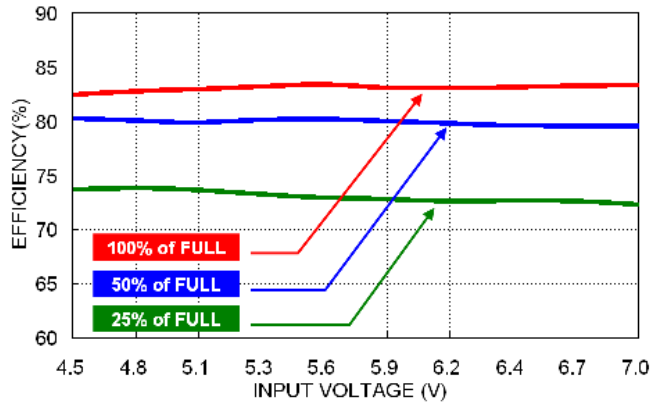
All test conditions are at 25℃.The figures are identical for MPU02-05S15



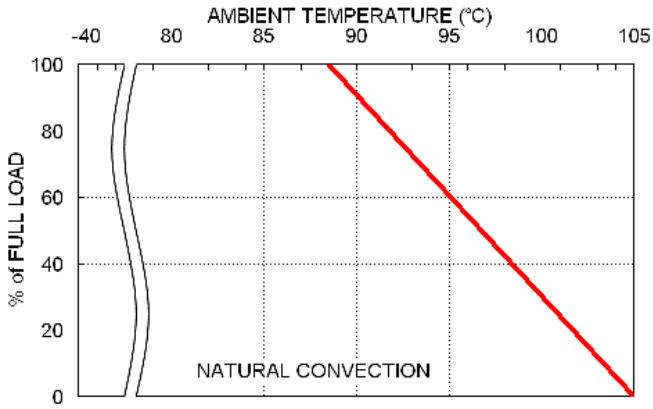
Efficiency Versus Output Load



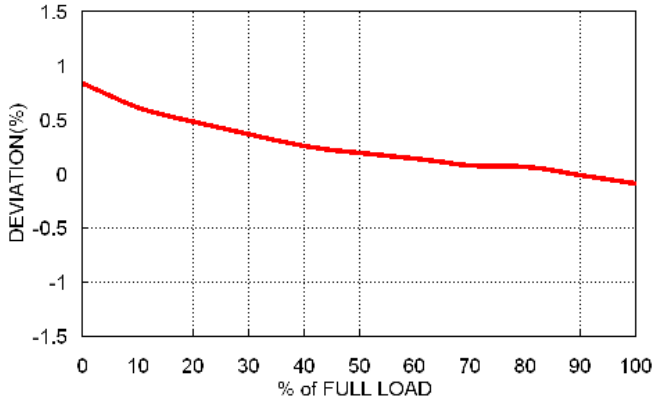
Power Dissipation Versus Output Load



Efficiency Versus Input Voltage.



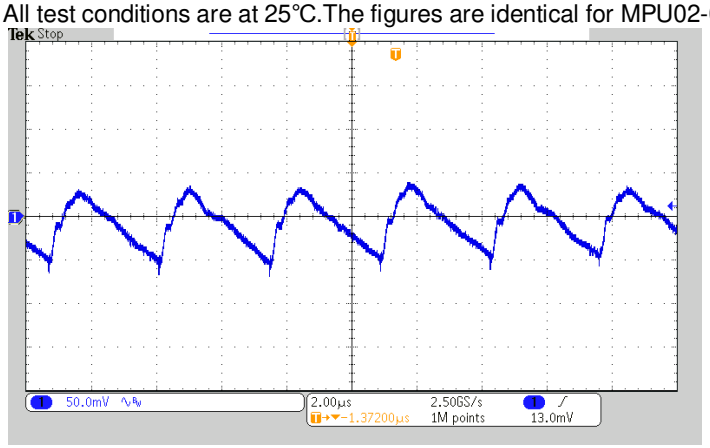
Derating Output Load Versus Ambient Temperature and Airflow Vin(nom)



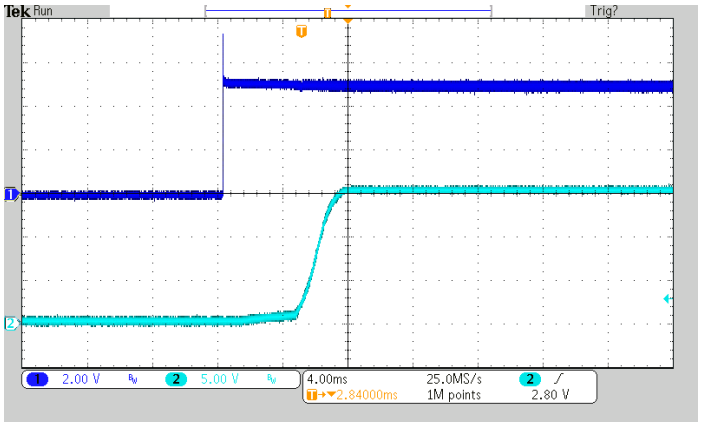
Vout Deviation vs. Output Load

Characteristic Curves (Continued)

All test conditions are at 25℃.The figures are identical for MPU02-05S15



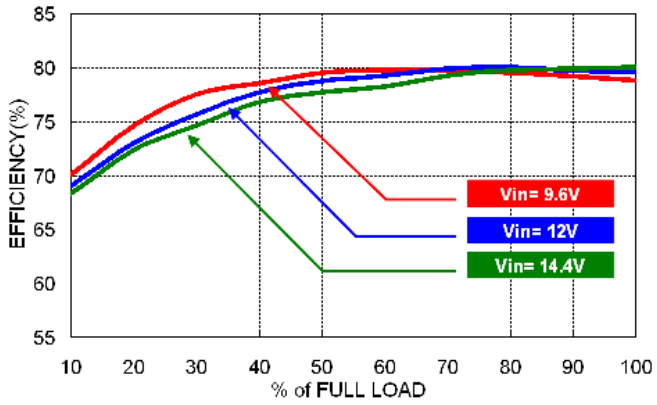
Typical Output Ripple and Noise.
Vin(nom), Full Load



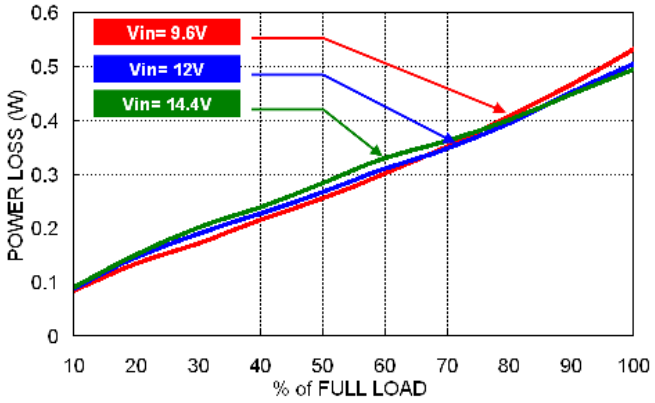
Typical Input Start-Up and Output Rise Characteristic
Vin(nom), Full Load

Characteristic Curves (Continued)

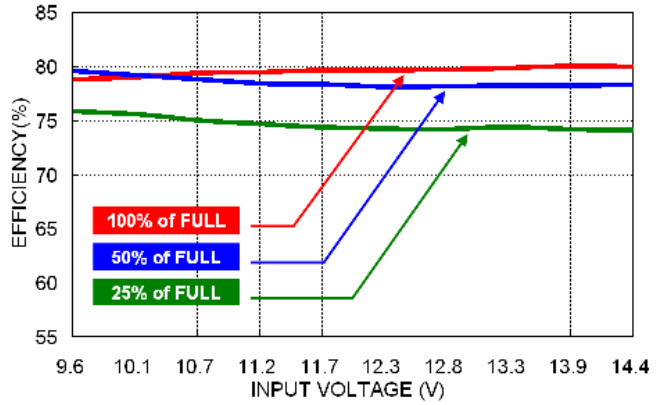
All test conditions are at 25℃.The figures are identical for MPU02-12S3P3



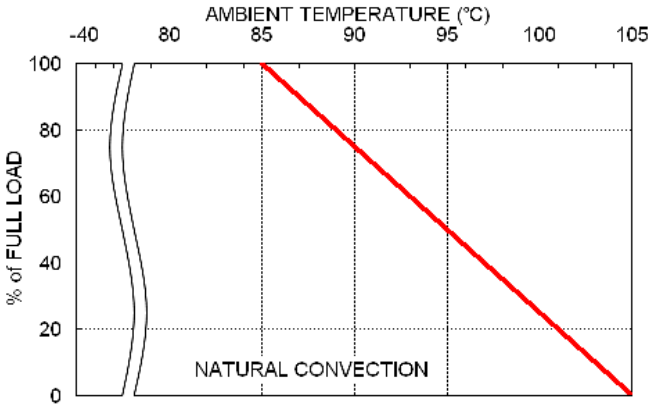
Efficiency Versus Output Load



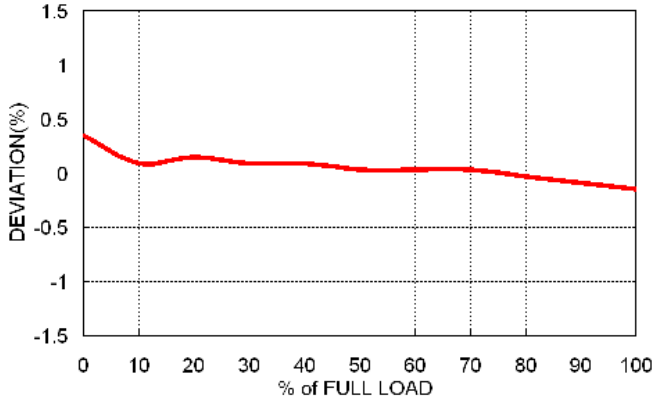
Power Dissipation Versus Output Load



Efficiency Versus Input Voltage.



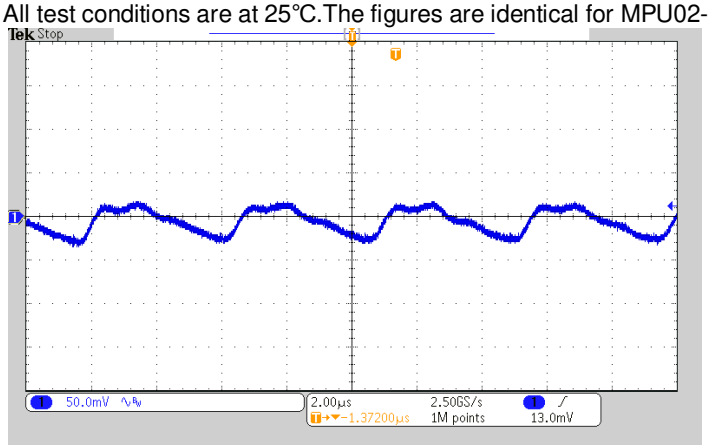
Derating Output Load Versus Ambient Temperature and Airflow
Vin(nom)



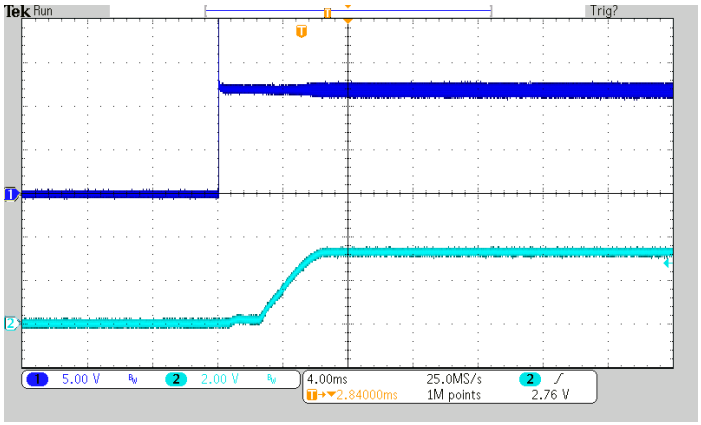
Vout Deviation vs. Output Load

Characteristic Curves (Continued)

All test conditions are at 25°C.The figures are identical for MPU02-12S3P3



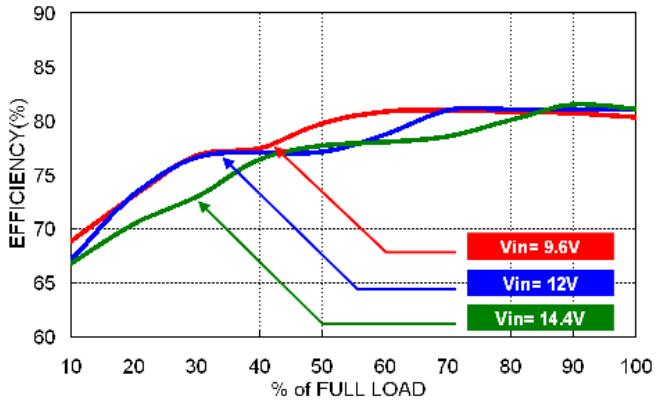
Typical Output Ripple and Noise.
Vin(nom), Full Load



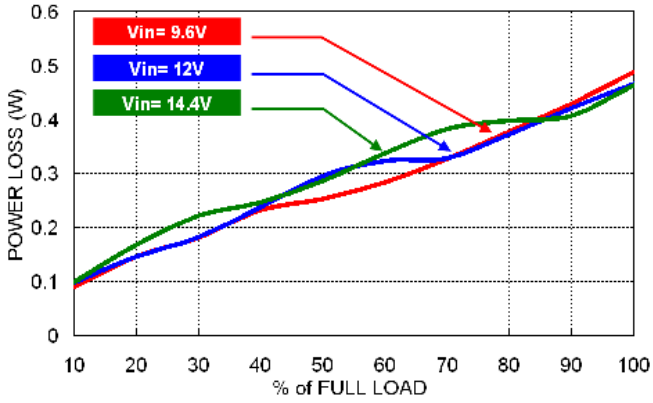
Typical Input Start-Up and Output Rise Characteristic
Vin(nom), Full Load

Characteristic Curves (Continued)

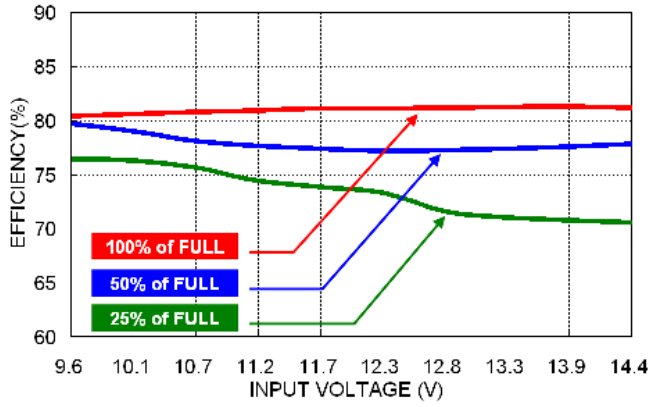
All test conditions are at 25℃.The figures are identical for MPU02-12S05



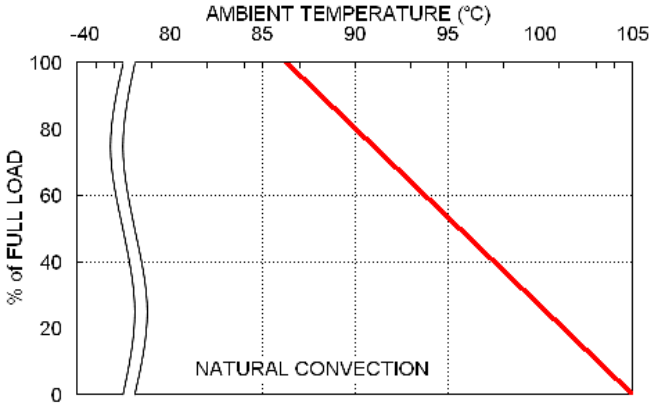
Efficiency Versus Output Load



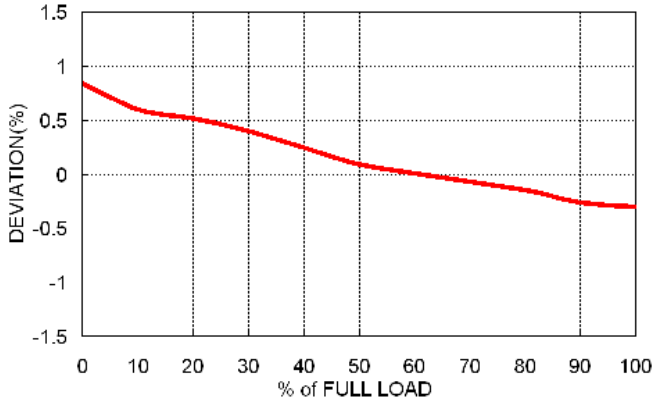
Power Dissipation Versus Output Load



Efficiency Versus Input Voltage.



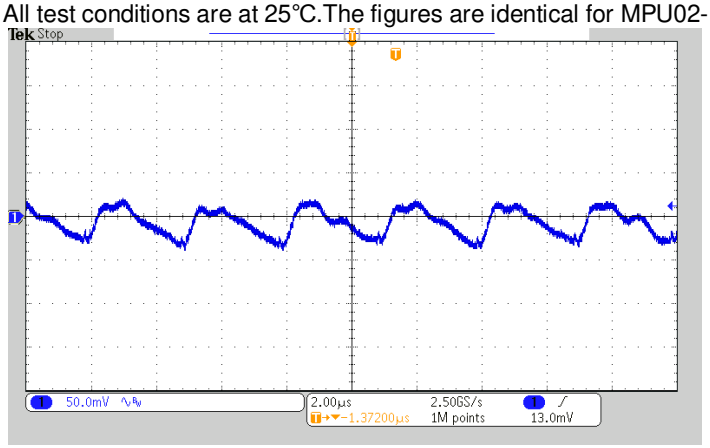
Derating Output Load Versus Ambient Temperature and Airflow
Vin(nom)



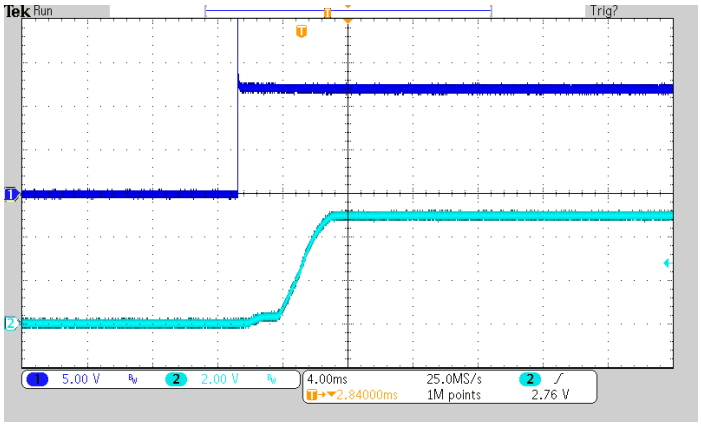
Vout Deviation vs. Output Load

Characteristic Curves (Continued)

All test conditions are at 25℃.The figures are identical for MPU02-12S05



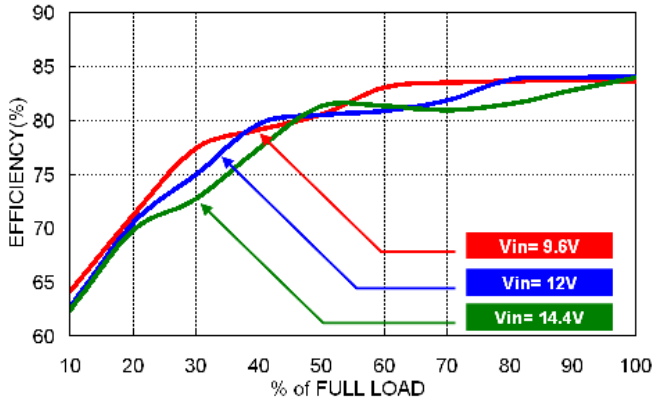
Typical Output Ripple and Noise.
Vin(nom), Full Load



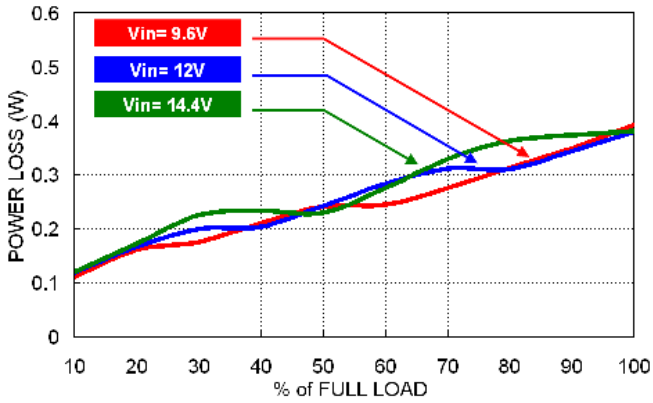
Typical Input Start-Up and Output Rise Characteristic
Vin(nom), Full Load

Characteristic Curves (Continued)

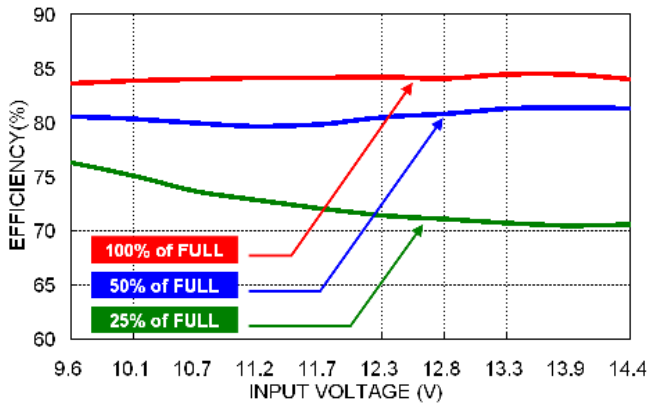
All test conditions are at 25℃.The figures are identical for MPU02-12S12



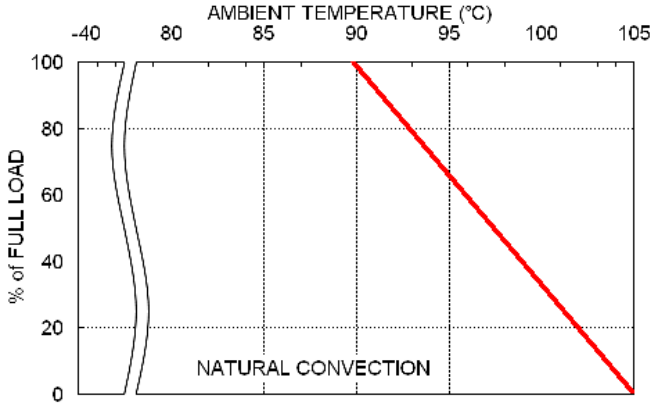
Efficiency Versus Output Load



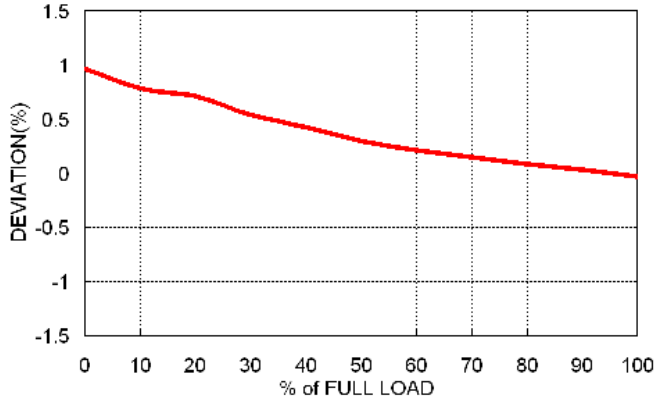
Power Dissipation Versus Output Load



Efficiency Versus Input Voltage.



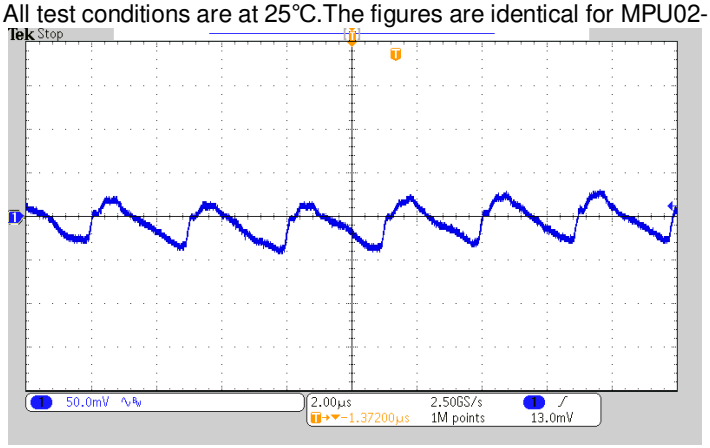
Derating Output Load Versus Ambient Temperature and Airflow
Vin(nom)



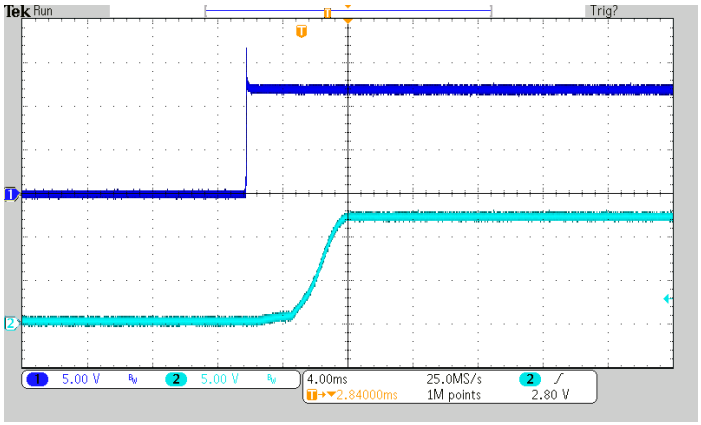
Vout Deviation vs. Output Load

Characteristic Curves (Continued)

All test conditions are at 25℃.The figures are identical for MPU02-12S12



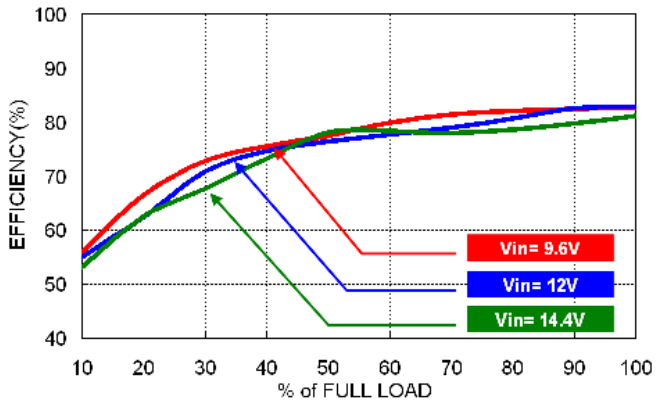
Typical Output Ripple and Noise.
Vin(nom), Full Load



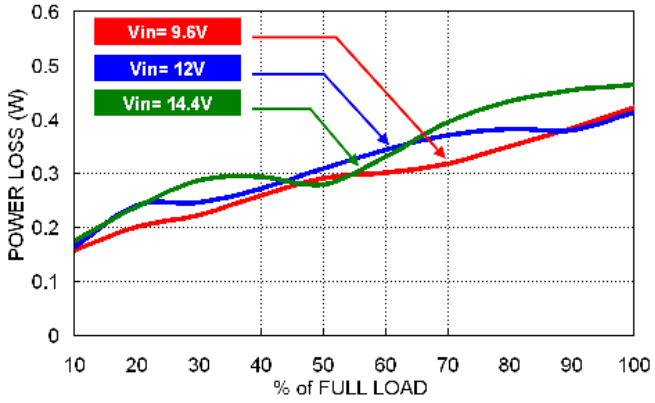
Typical Input Start-Up and Output Rise Characteristic
Vin(nom), Full Load

Characteristic Curves (Continued)

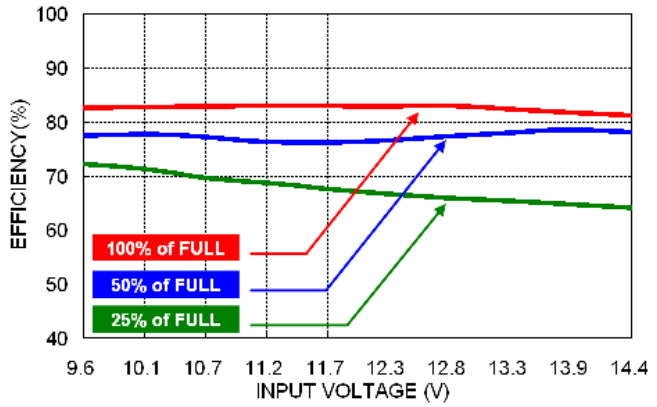
All test conditions are at 25℃.The figures are identical for MPU02-12S15



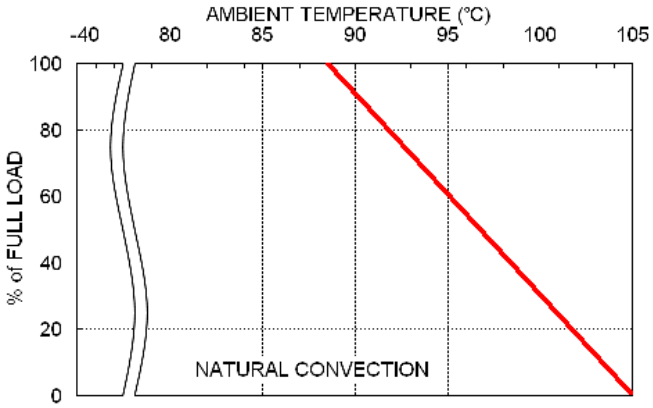
Efficiency Versus Output Load



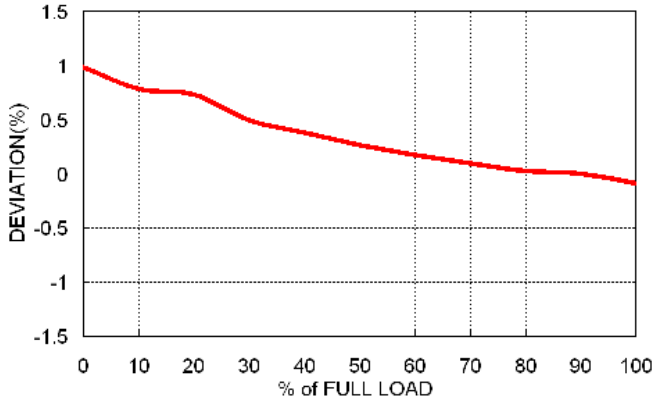
Power Dissipation Versus Output Load



Efficiency Versus Input Voltage.



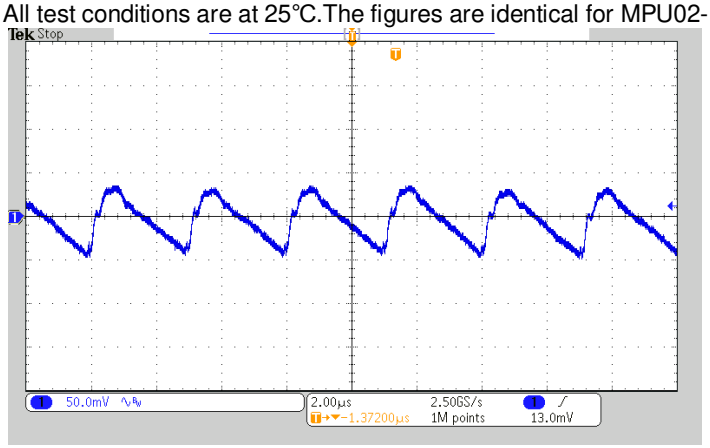
Derating Output Load Versus Ambient Temperature and Airflow Vin(nom)



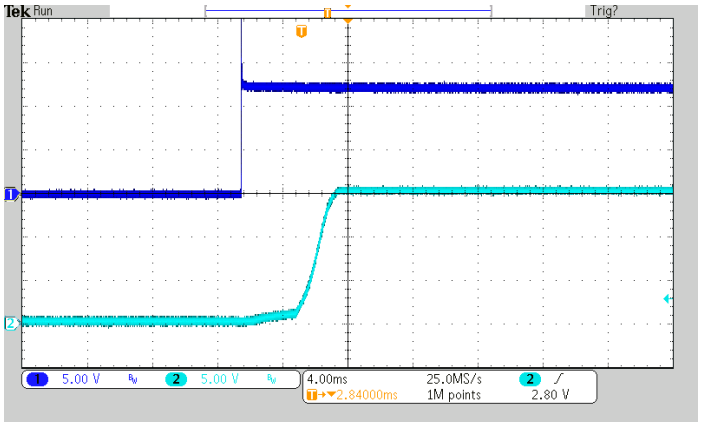
Vout Deviation vs. Output Load

Characteristic Curves (Continued)

All test conditions are at 25℃.The figures are identical for MPU02-12S15



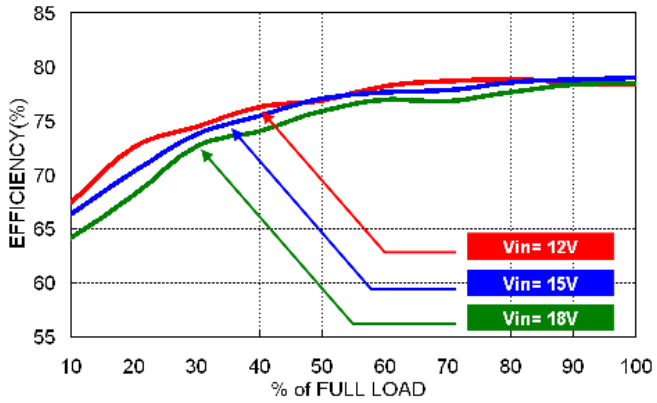
Typical Output Ripple and Noise.
Vin(nom), Full Load



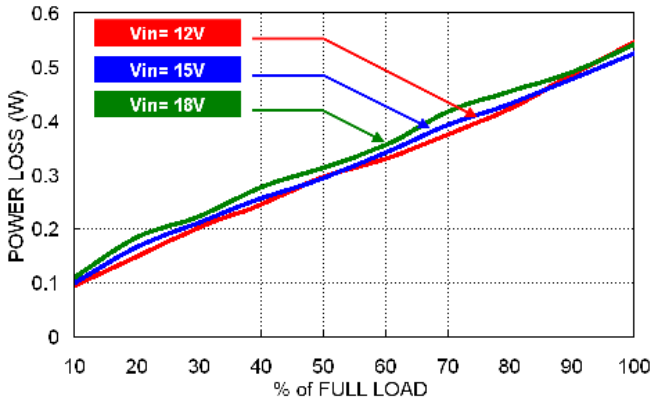
Typical Input Start-Up and Output Rise Characteristic
Vin(nom), Full Load

Characteristic Curves (Continued)

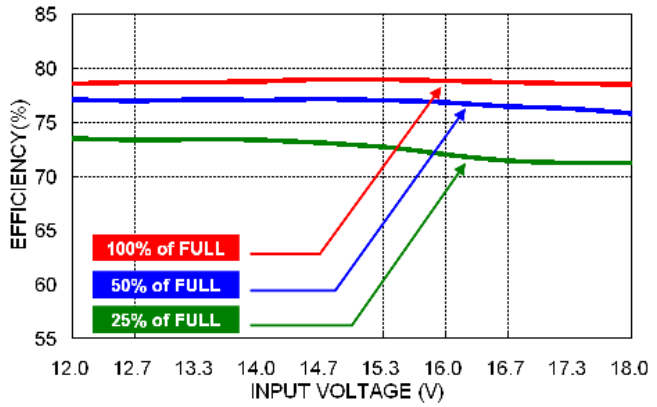
All test conditions are at 25℃.The figures are identical for MPU02-15S3P3



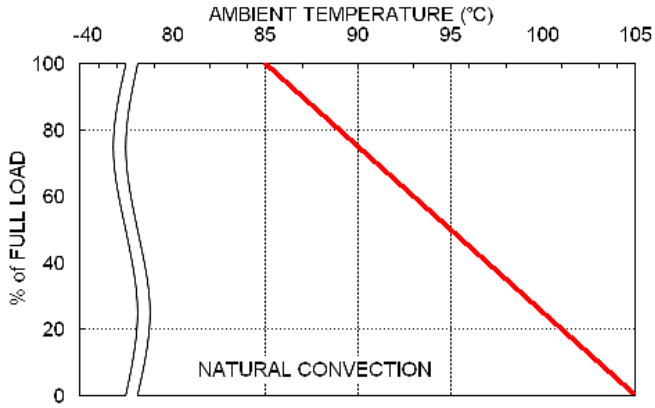
Efficiency Versus Output Load



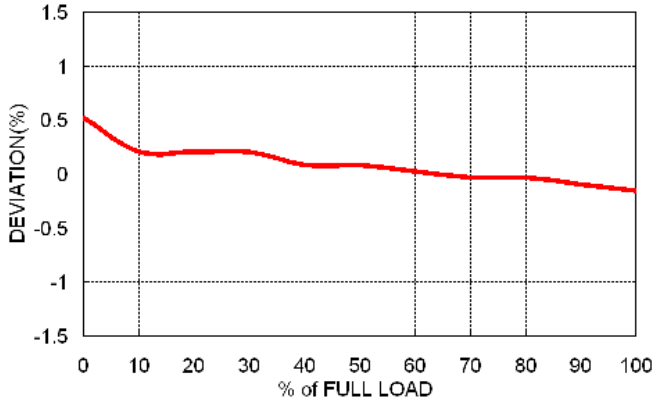
Power Dissipation Versus Output Load



Efficiency Versus Input Voltage.



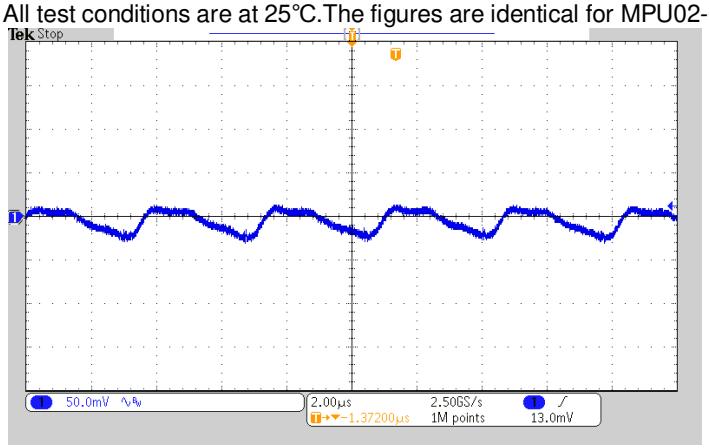
Derating Output Load Versus Ambient Temperature and Airflow
Vin(nom)



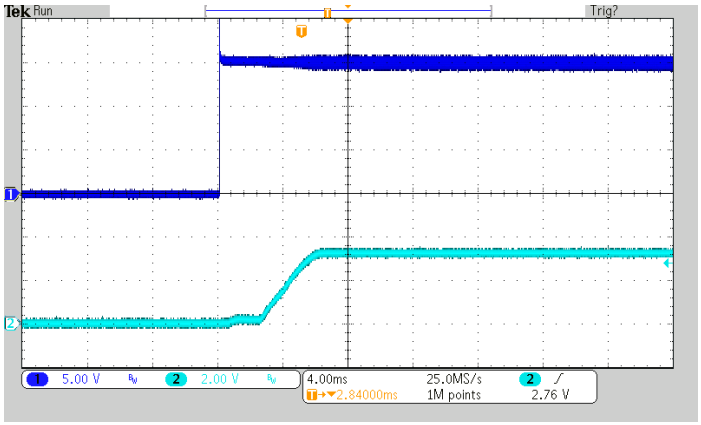
Vout Deviation vs. Output Load

Characteristic Curves (Continued)

All test conditions are at 25°C.The figures are identical for MPU02-15S3P3



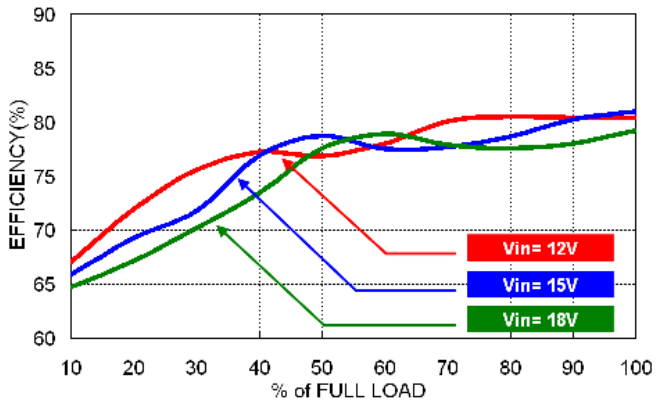
Typical Output Ripple and Noise.
Vin(nom), Full Load



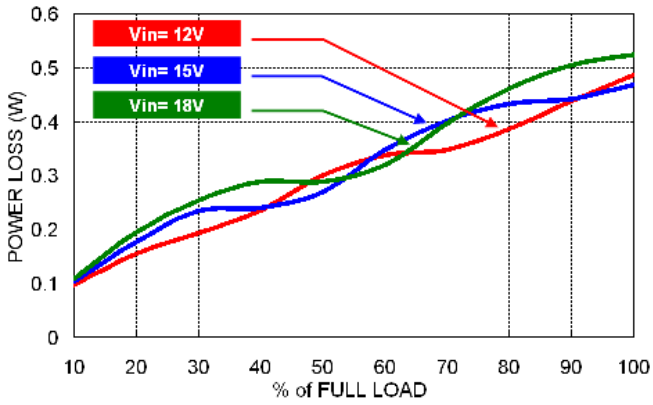
Typical Input Start-Up and Output Rise Characteristic
Vin(nom), Full Load

Characteristic Curves (Continued)

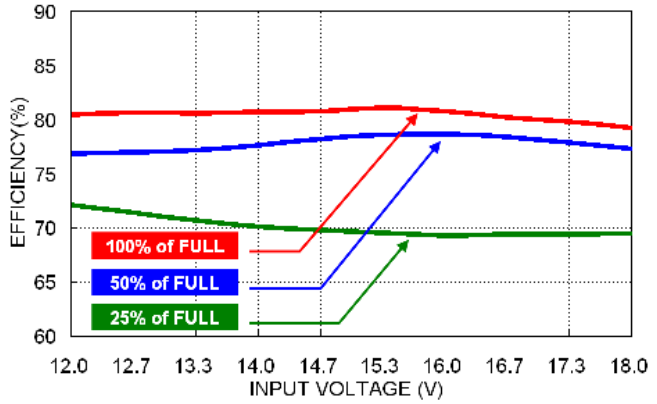
All test conditions are at 25℃.The figures are identical for MPU02-15S05



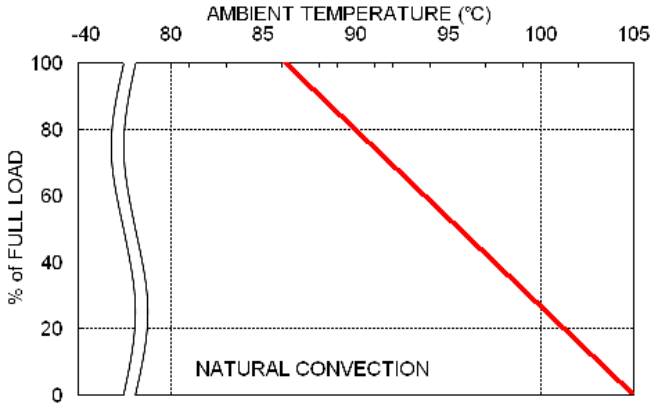
Efficiency Versus Output Load



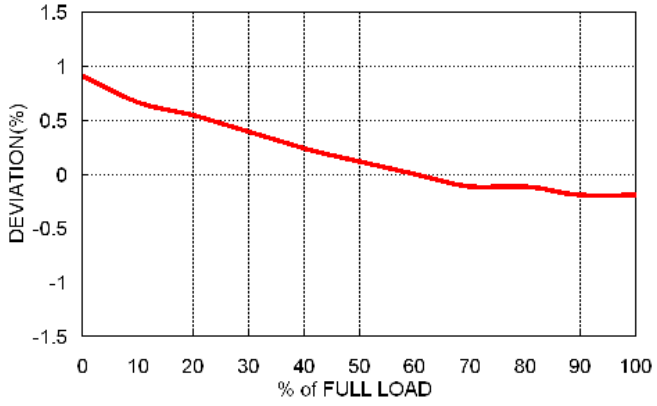
Power Dissipation Versus Output Load



Efficiency Versus Input Voltage.



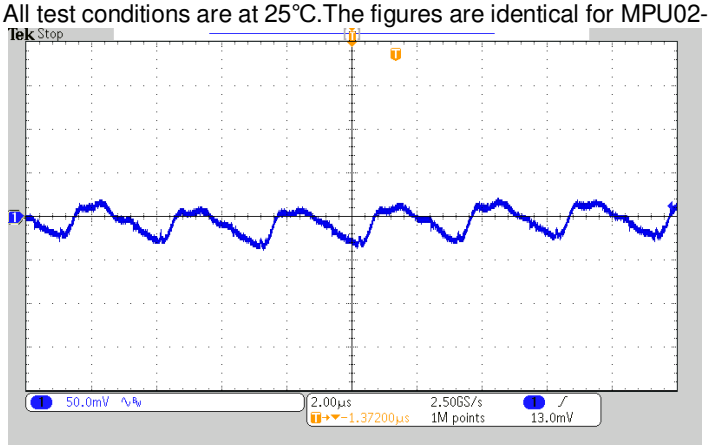
Derating Output Load Versus Ambient Temperature and Airflow
Vin(nom)



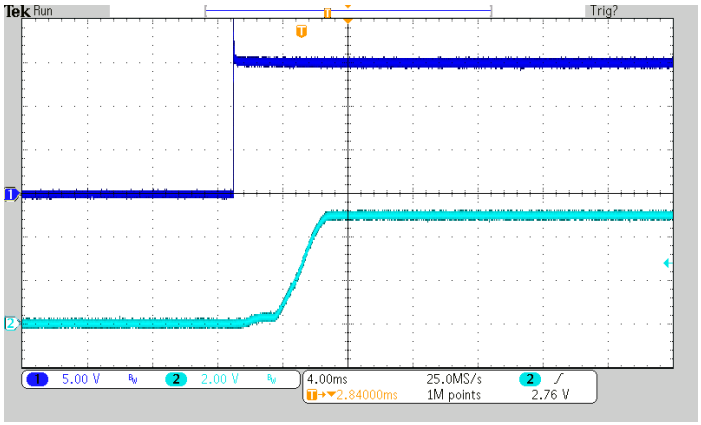
Vout Deviation vs. Output Load

Characteristic Curves (Continued)

All test conditions are at 25°C.The figures are identical for MPU02-15S05



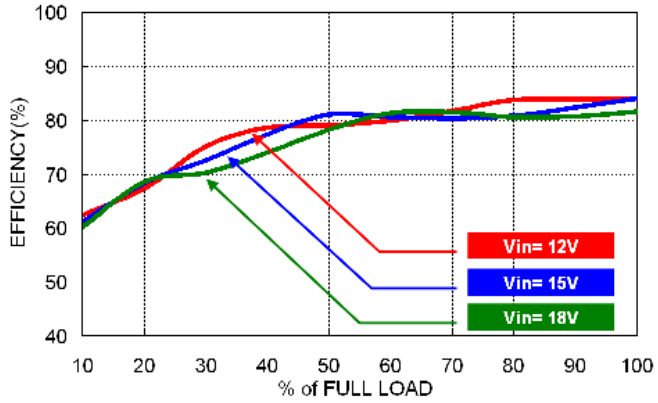
Typical Output Ripple and Noise.
Vin(nom), Full Load



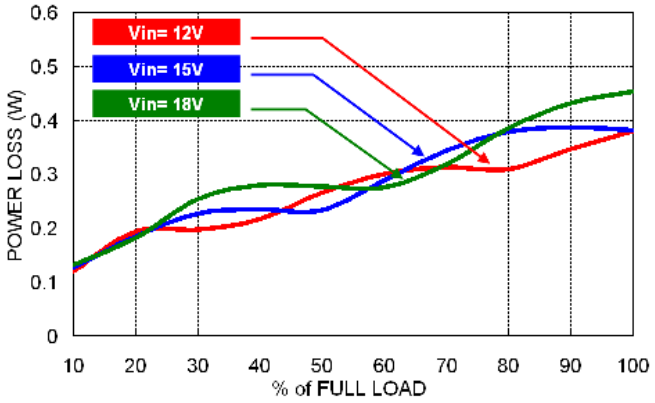
Typical Input Start-Up and Output Rise Characteristic
Vin(nom), Full Load

Characteristic Curves (Continued)

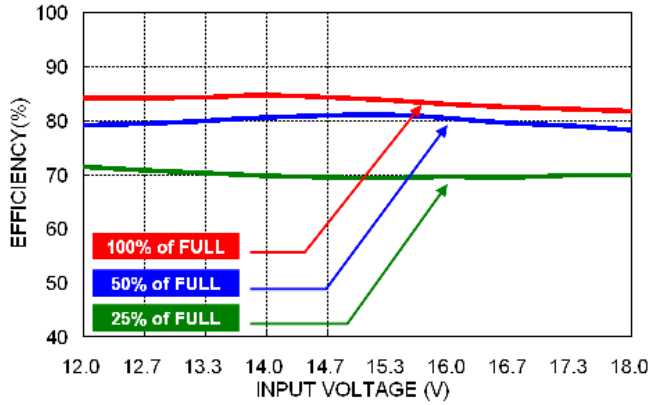
All test conditions are at 25℃.The figures are identical for MPU02-15S12



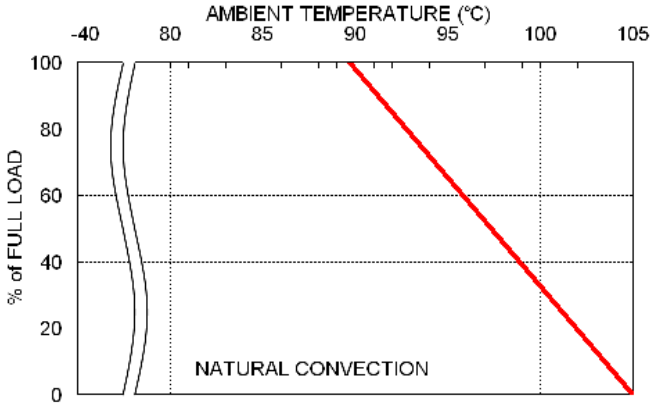
Efficiency Versus Output Load



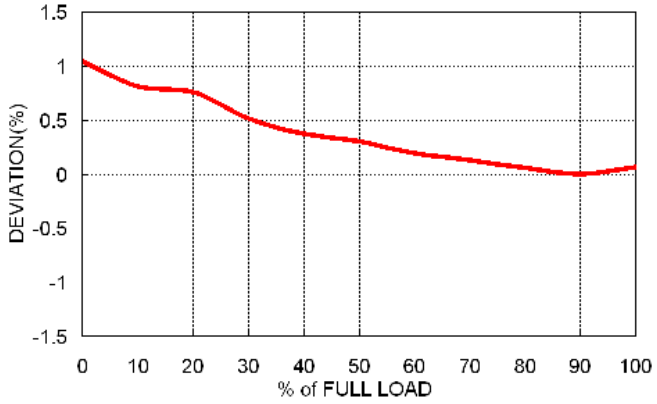
Power Dissipation Versus Output Load



Efficiency Versus Input Voltage.



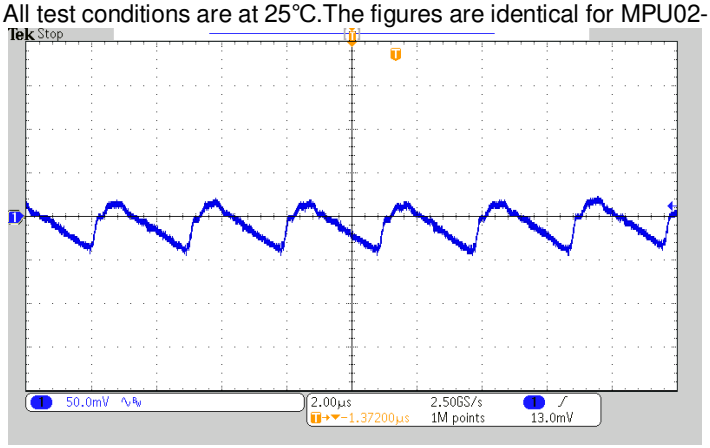
Derating Output Load Versus Ambient Temperature and Airflow
Vin(nom)



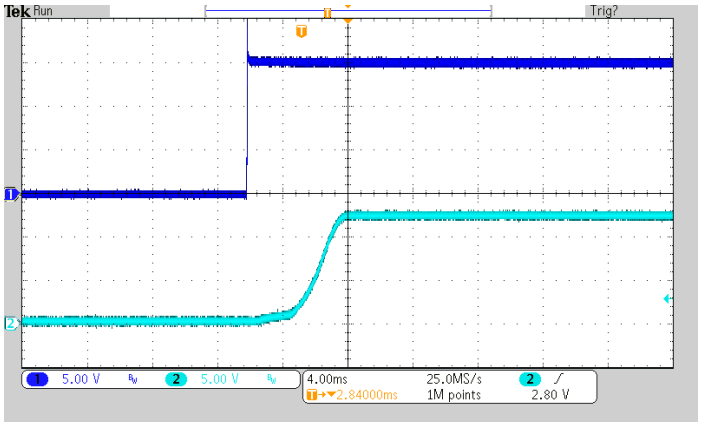
Vout Deviation vs. Output Load

Characteristic Curves (Continued)

All test conditions are at 25℃.The figures are identical for MPU02-15S12



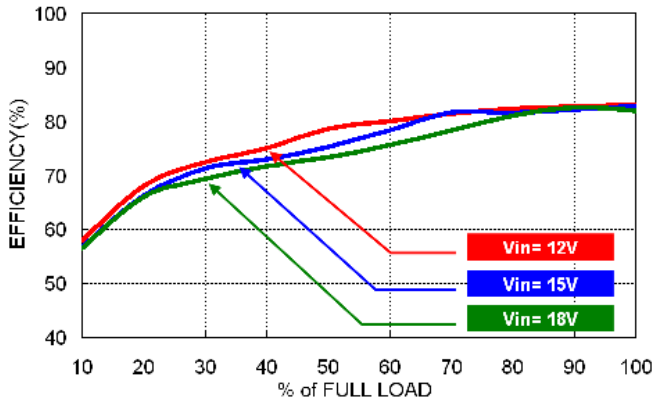
Typical Output Ripple and Noise.
Vin(nom), Full Load



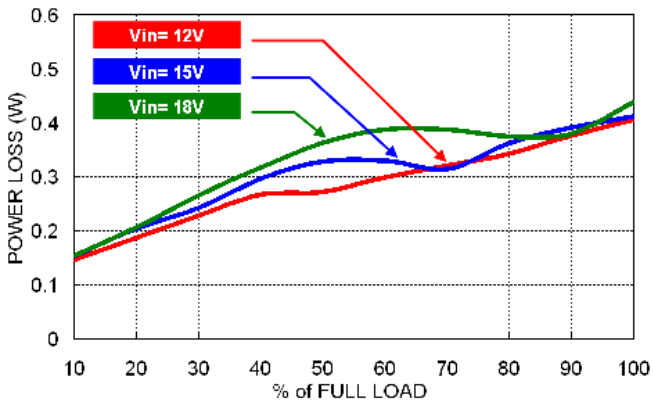
Typical Input Start-Up and Output Rise Characteristic
Vin(nom), Full Load

Characteristic Curves (Continued)

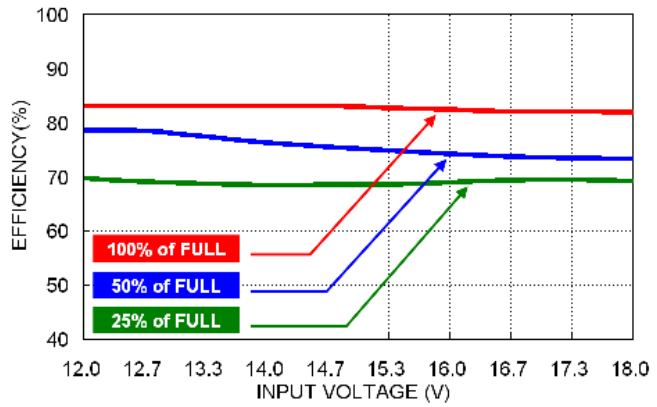
All test conditions are at 25℃.The figures are identical for MPU02-15S15



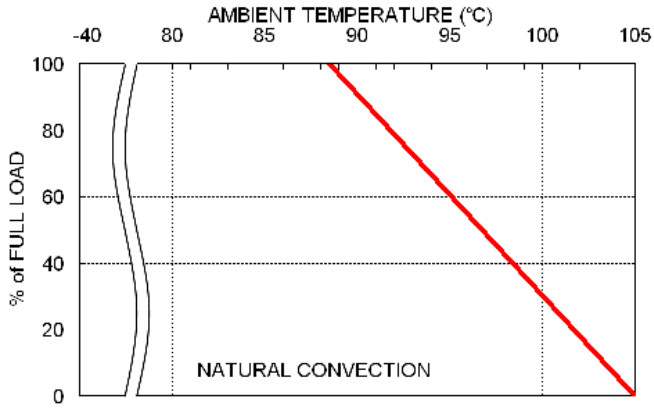
Efficiency Versus Output Load



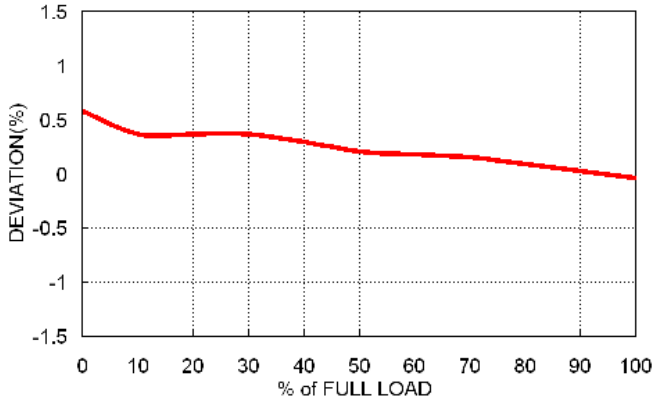
Power Dissipation Versus Output Load



Efficiency Versus Input Voltage.



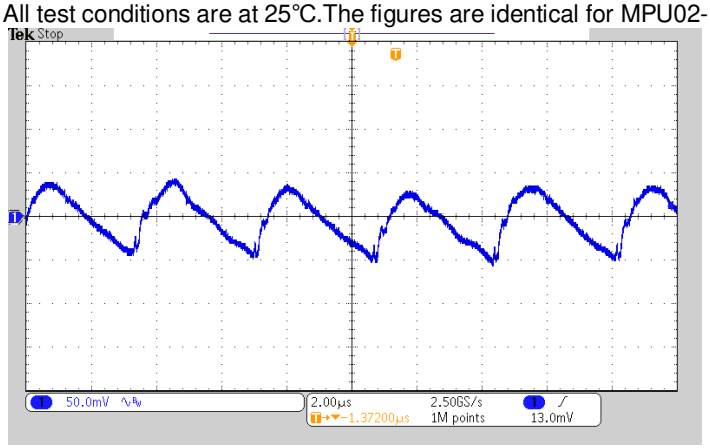
Derating Output Load Versus Ambient Temperature and Airflow
Vin(nom)



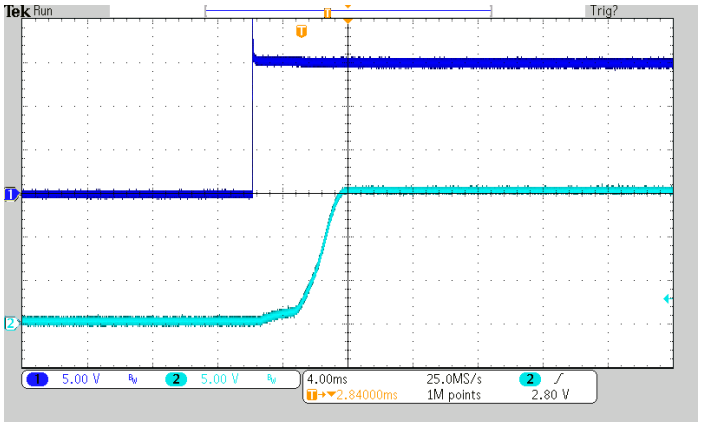
Vout Deviation vs. Output Load

Characteristic Curves (Continued)

All test conditions are at 25℃.The figures are identical for MPU02-15S15



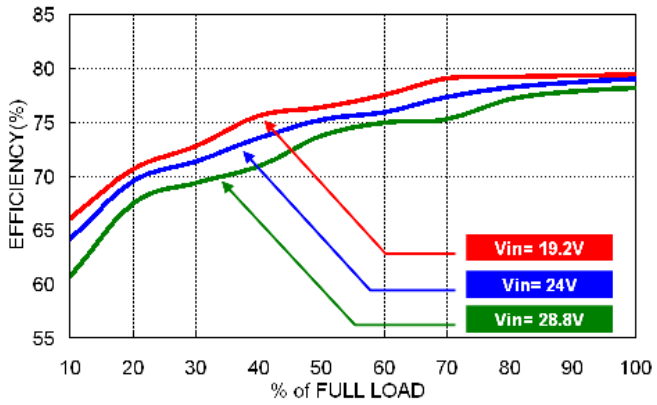
Typical Output Ripple and Noise.
Vin(nom), Full Load



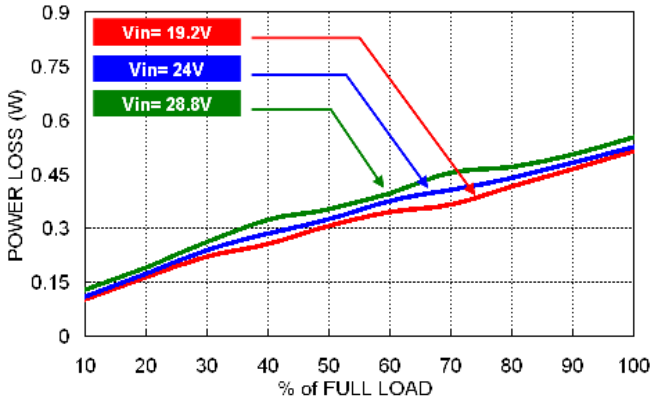
Typical Input Start-Up and Output Rise Characteristic
Vin(nom), Full Load

Characteristic Curves (Continued)

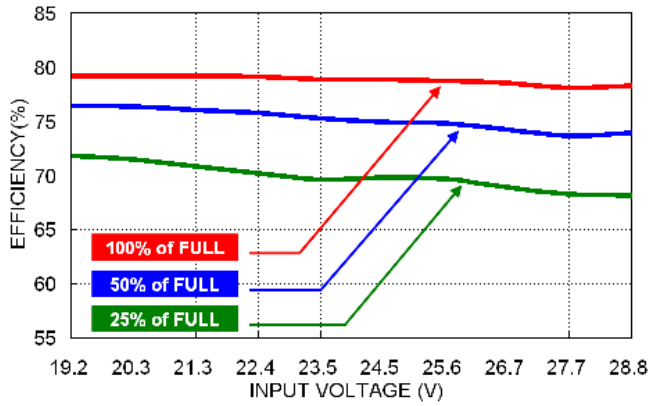
All test conditions are at 25℃.The figures are identical for MPU02-24S3P3



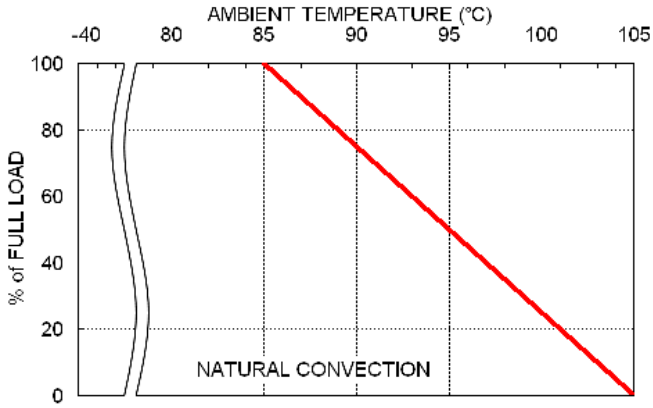
Efficiency Versus Output Load



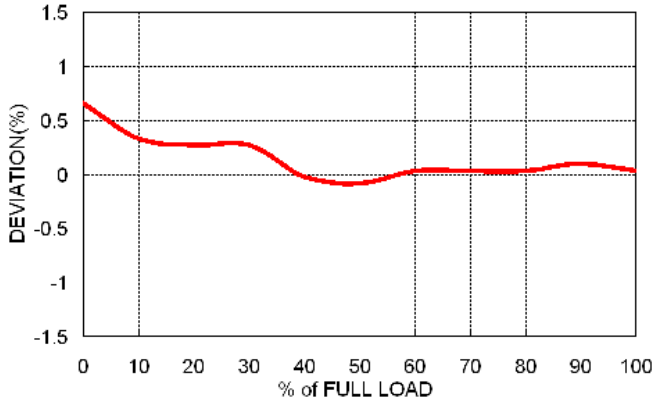
Power Dissipation Versus Output Load



Efficiency Versus Input Voltage.



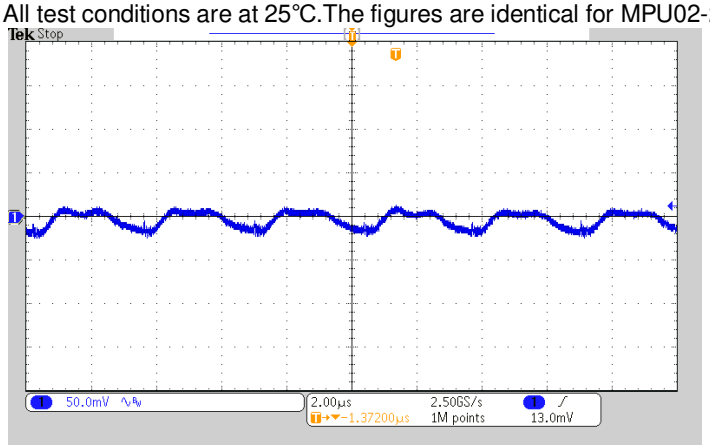
Derating Output Load Versus Ambient Temperature and Airflow
Vin(nom)



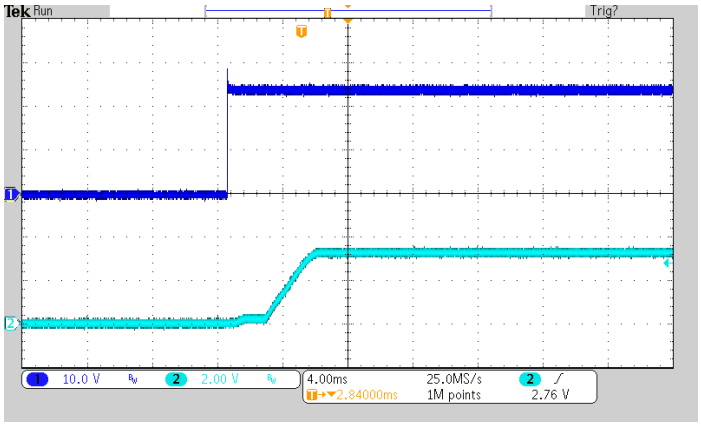
Vout Deviation vs. Output Load

Characteristic Curves (Continued)

All test conditions are at 25°C.The figures are identical for MPU02-24S3P3



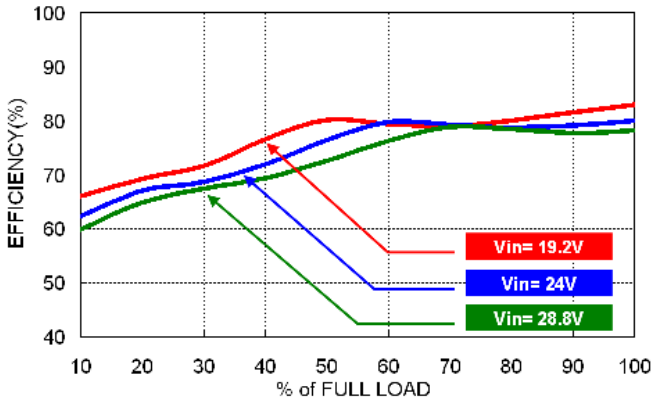
Typical Output Ripple and Noise.
Vin(nom), Full Load



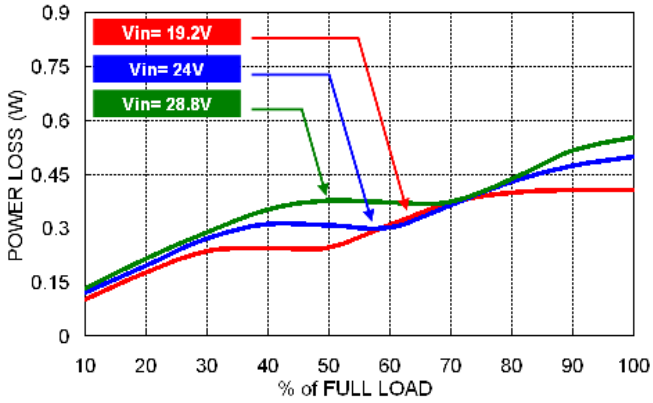
Typical Input Start-Up and Output Rise Characteristic
Vin(nom), Full Load

Characteristic Curves (Continued)

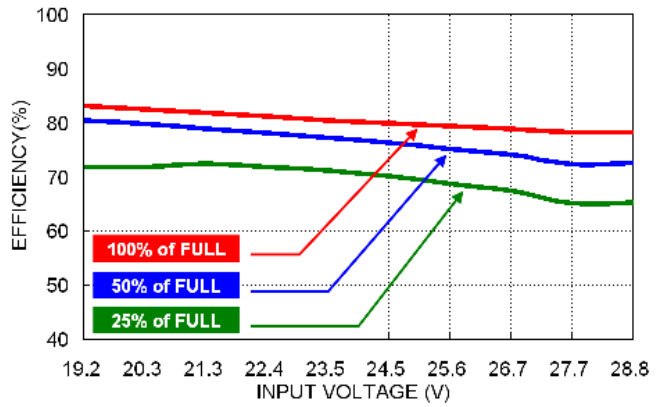
All test conditions are at 25℃.The figures are identical for MPU02-24S05



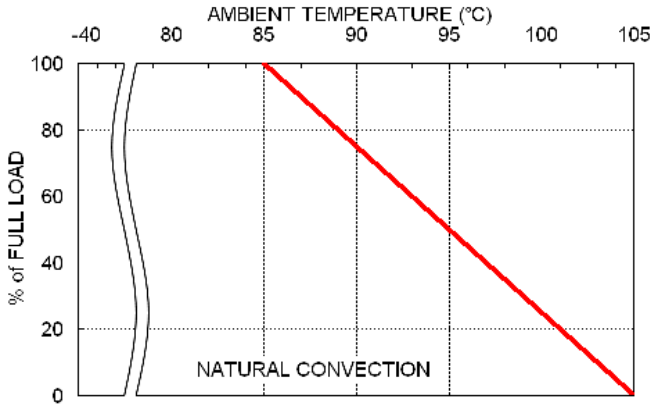
Efficiency Versus Output Load



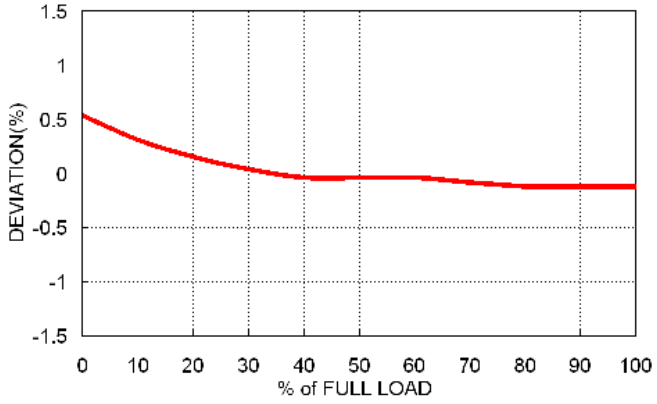
Power Dissipation Versus Output Load



Efficiency Versus Input Voltage.



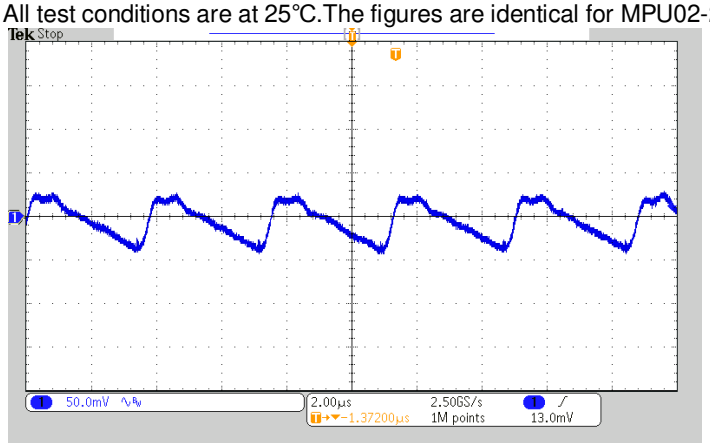
Derating Output Load Versus Ambient Temperature and Airflow
Vin(nom)



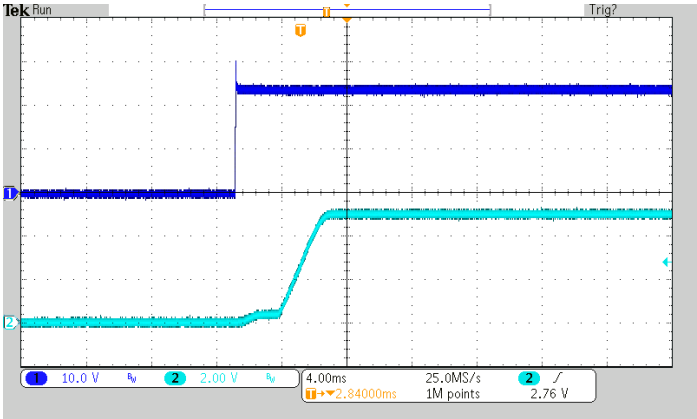
Vout Deviation vs. Output Load

Characteristic Curves (Continued)

All test conditions are at 25℃.The figures are identical for MPU02-24S05



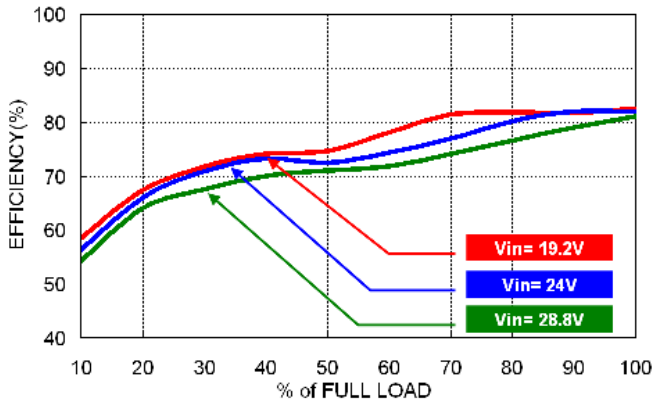
Typical Output Ripple and Noise.
Vin(nom), Full Load



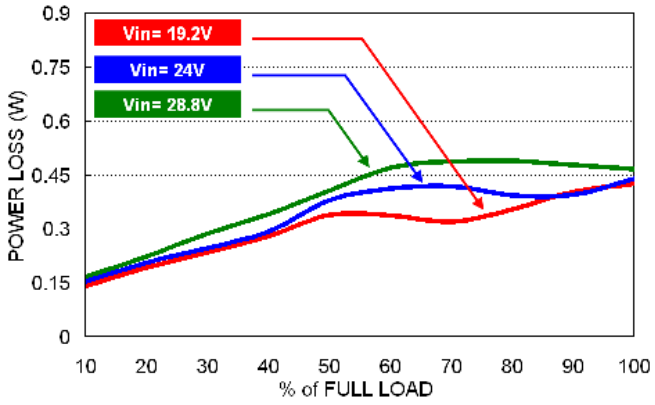
Typical Input Start-Up and Output Rise Characteristic
Vin(nom), Full Load

Characteristic Curves (Continued)

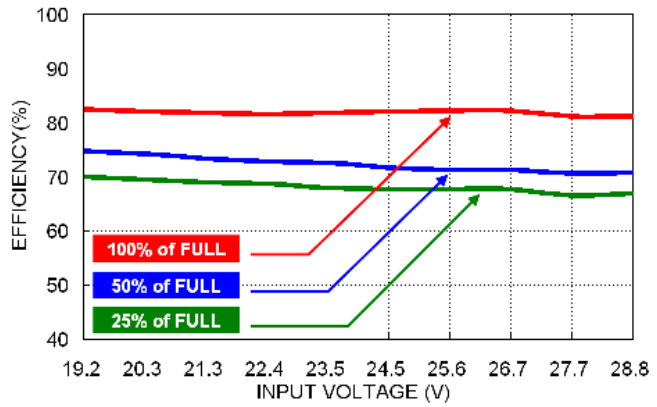
All test conditions are at 25℃.The figures are identical for MPU02-24S12



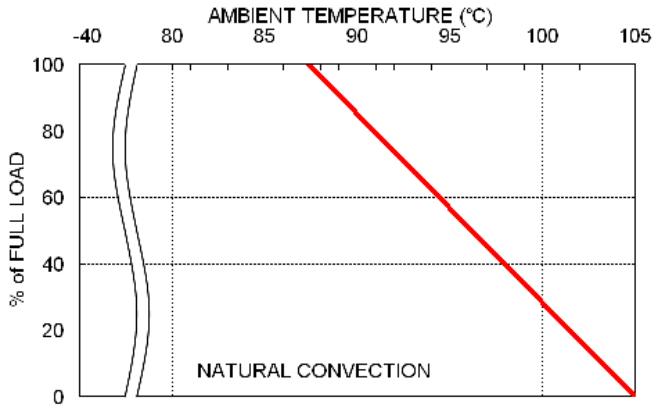
Efficiency Versus Output Load



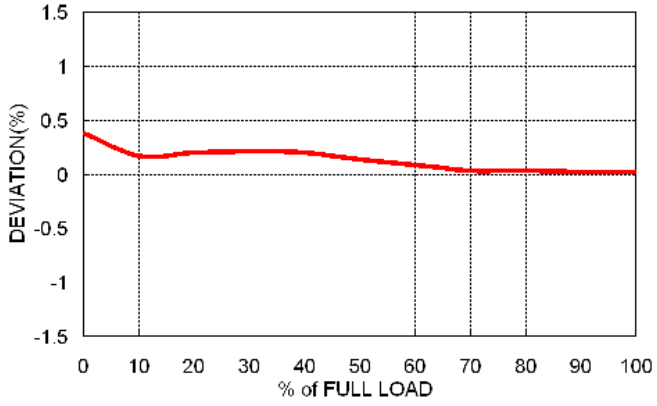
Power Dissipation Versus Output Load



Efficiency Versus Input Voltage.



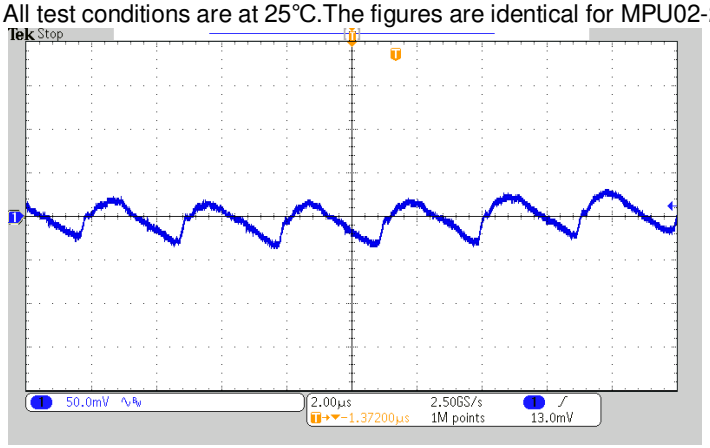
Derating Output Load Versus Ambient Temperature and Airflow
Vin(nom)



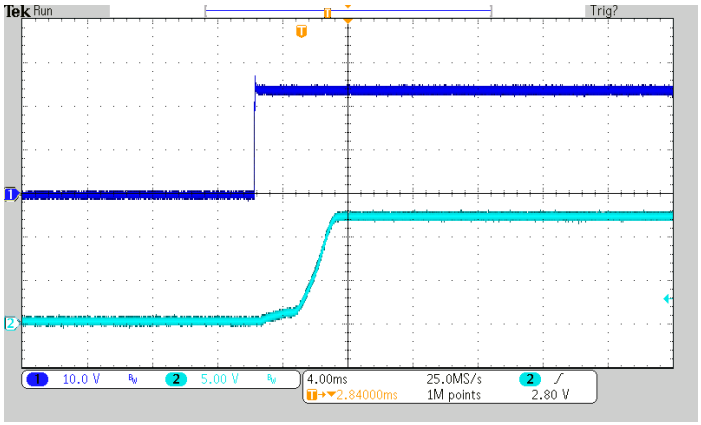
Vout Deviation vs. Output Load

Characteristic Curves (Continued)

All test conditions are at 25℃.The figures are identical for MPU02-24S12



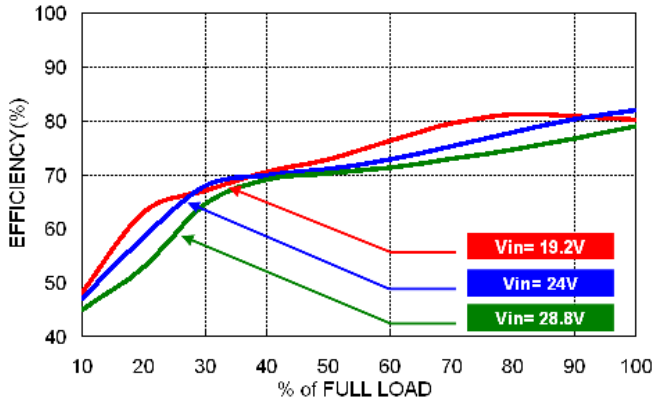
Typical Output Ripple and Noise.
Vin(nom), Full Load



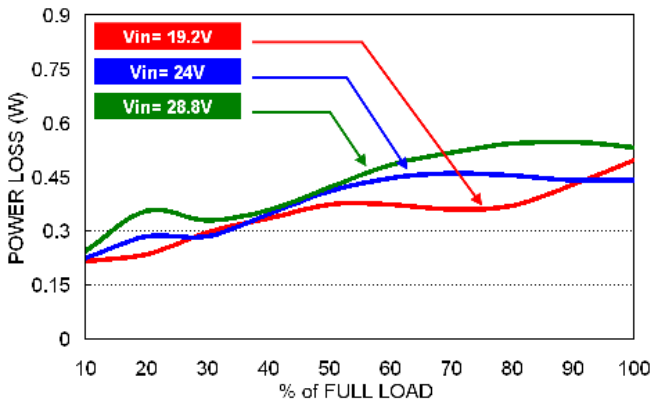
Typical Input Start-Up and Output Rise Characteristic
Vin(nom), Full Load

Characteristic Curves (Continued)

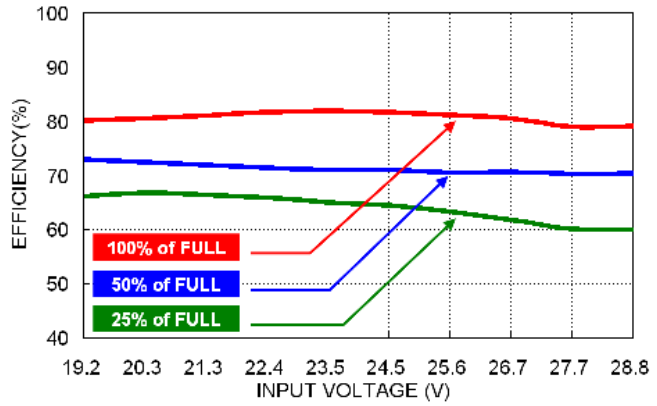
All test conditions are at 25℃.The figures are identical for MPU02-24S15



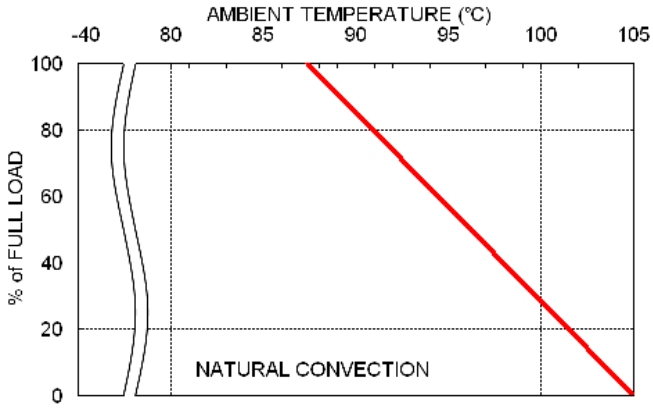
Efficiency Versus Output Load



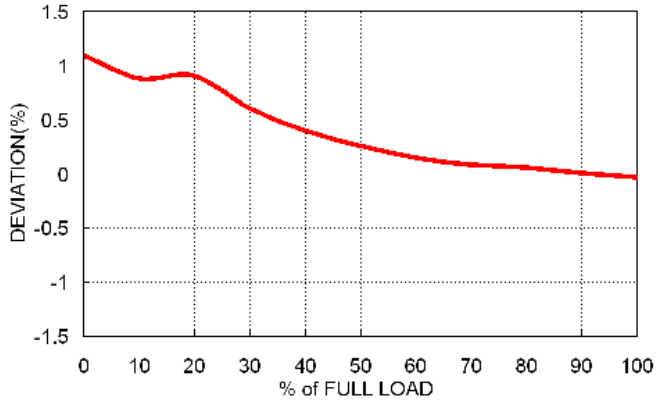
Power Dissipation Versus Output Load



Efficiency Versus Input Voltage.



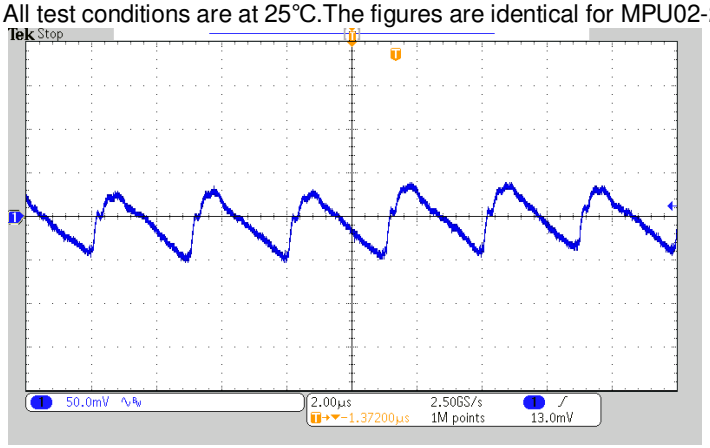
Derating Output Load Versus Ambient Temperature and Airflow
Vin(nom)



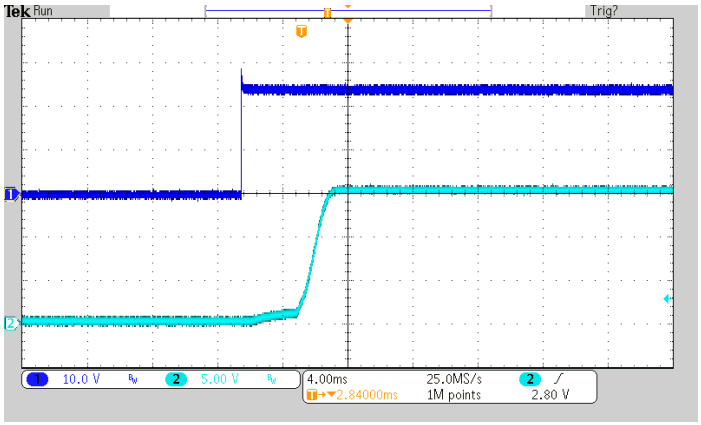
Vout Deviation vs. Output Load

Characteristic Curves (Continued)

All test conditions are at 25°C.The figures are identical for MPU02-24S15



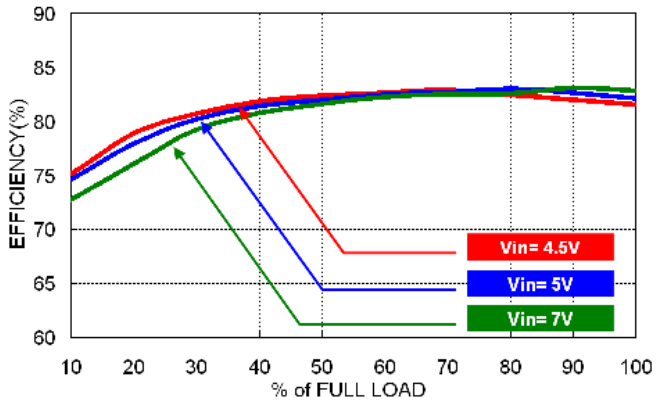
Typical Output Ripple and Noise.
Vin(nom), Full Load



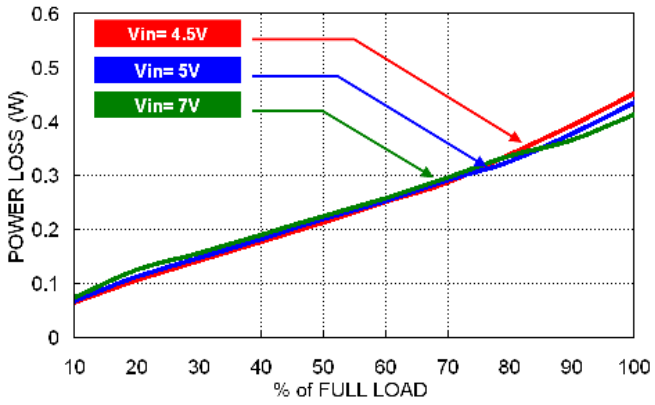
Typical Input Start-Up and Output Rise Characteristic
Vin(nom), Full Load

Characteristic Curves (Continued)

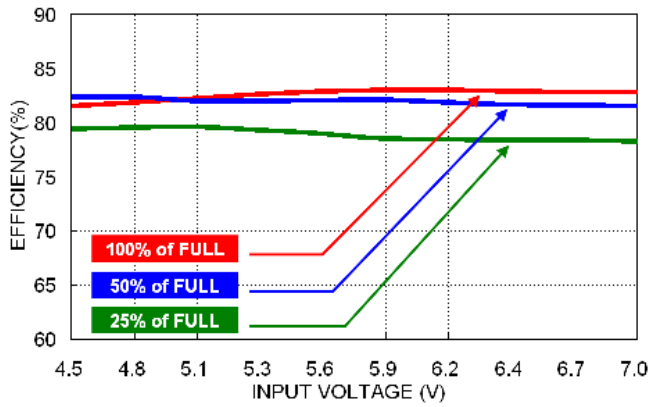
All test conditions are at 25℃.The figures are identical for MPU02-05D05



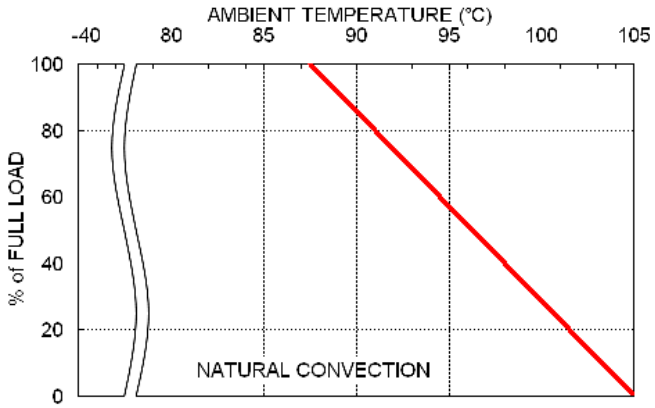
Efficiency Versus Output Load



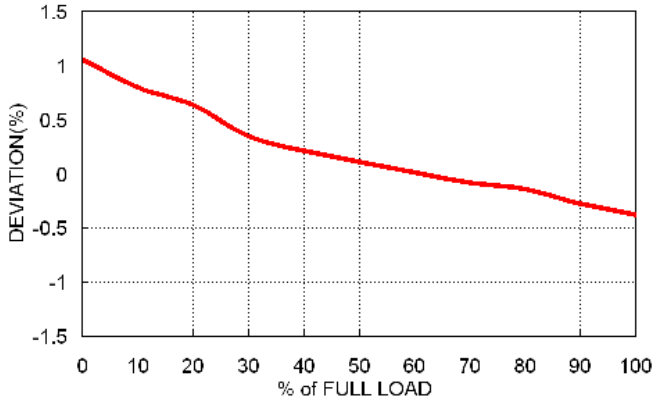
Power Dissipation Versus Output Load



Efficiency Versus Input Voltage.



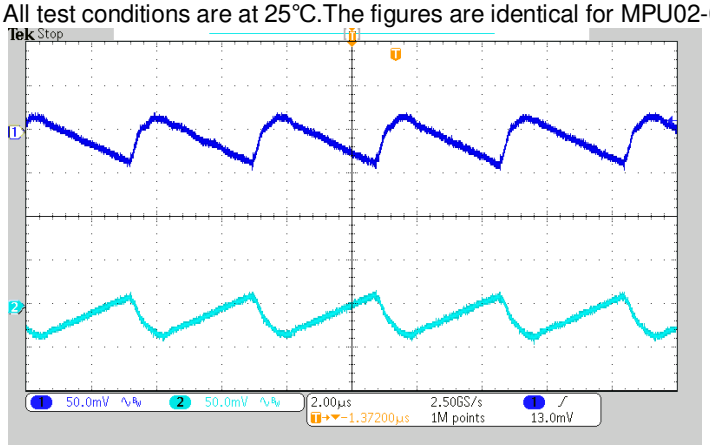
Derating Output Load Versus Ambient Temperature and Airflow
Vin(nom)



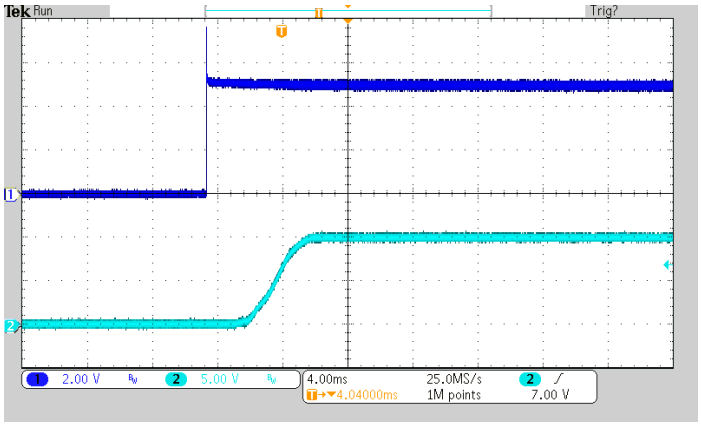
Vout Deviation vs. Output Load

Characteristic Curves (Continued)

All test conditions are at 25°C.The figures are identical for MPU02-05D05



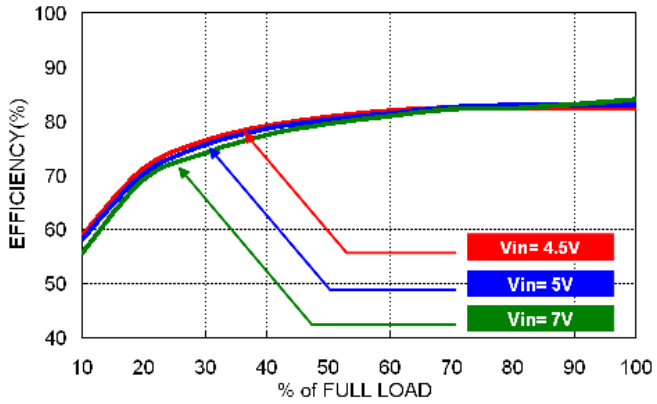
Typical Output Ripple and Noise.
Vin(nom), Full Load



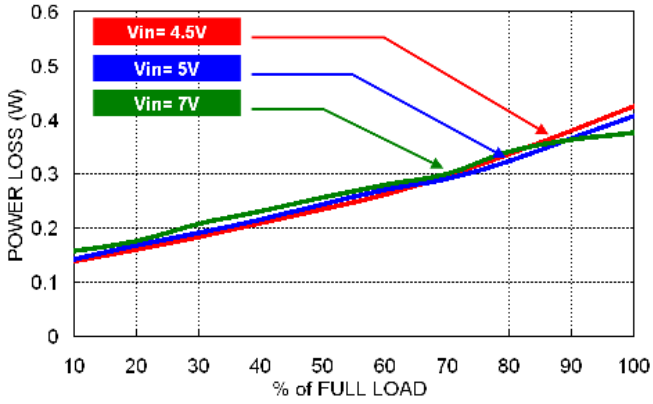
Typical Input Start-Up and Output Rise Characteristic
Vin(nom), Full Load

Characteristic Curves (Continued)

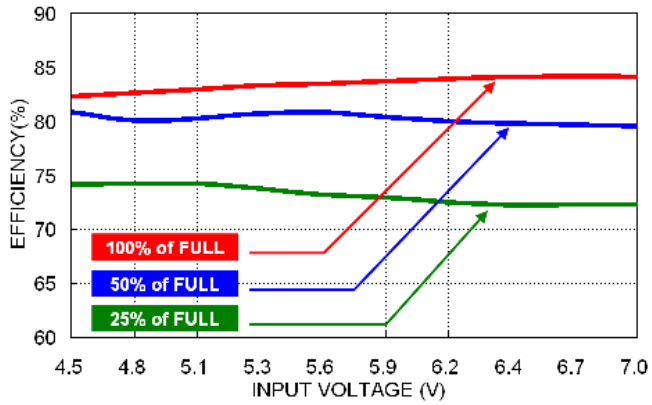
All test conditions are at 25℃.The figures are identical for MPU02-05D12



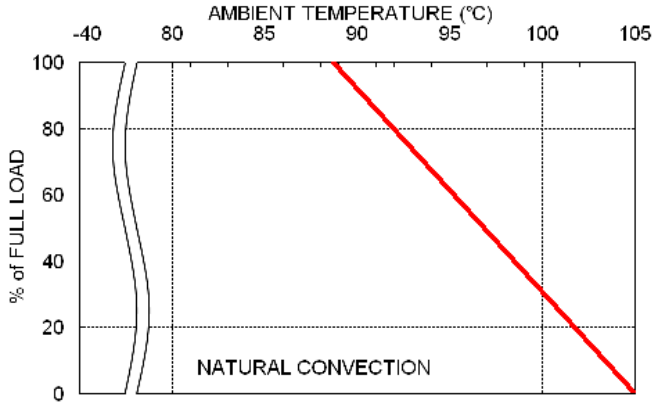
Efficiency Versus Output Load



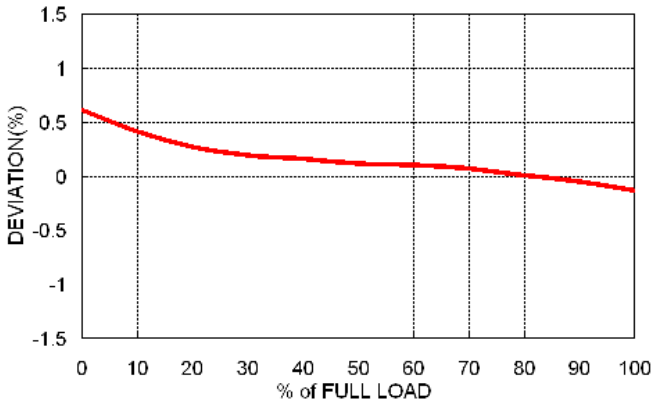
Power Dissipation Versus Output Load



Efficiency Versus Input Voltage.



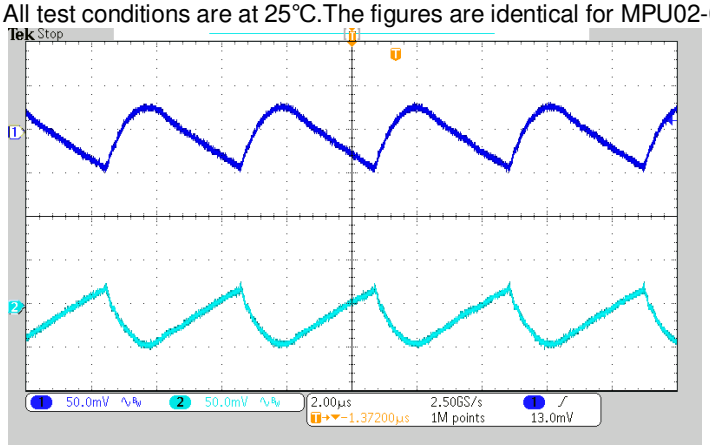
Derating Output Load Versus Ambient Temperature and Airflow
Vin(nom)



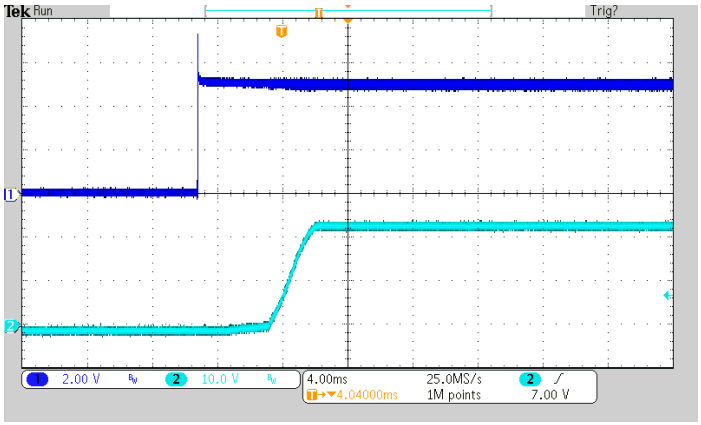
Vout Deviation vs. Output Load

Characteristic Curves (Continued)

All test conditions are at 25℃.The figures are identical for MPU02-05D12



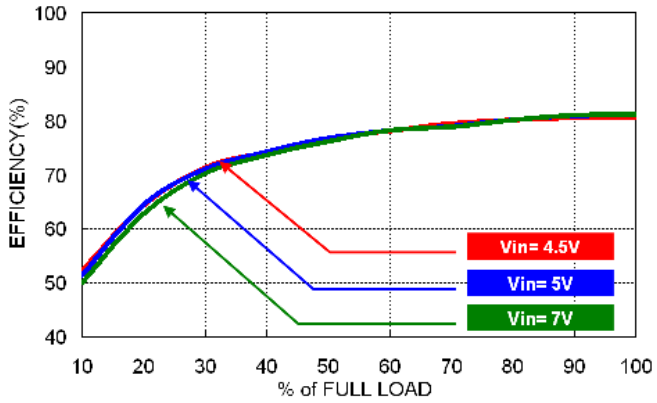
Typical Output Ripple and Noise.
Vin(nom), Full Load



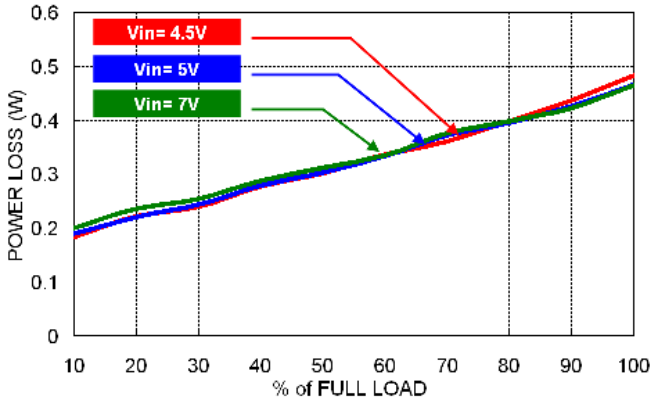
Typical Input Start-Up and Output Rise Characteristic
Vin(nom), Full Load

Characteristic Curves (Continued)

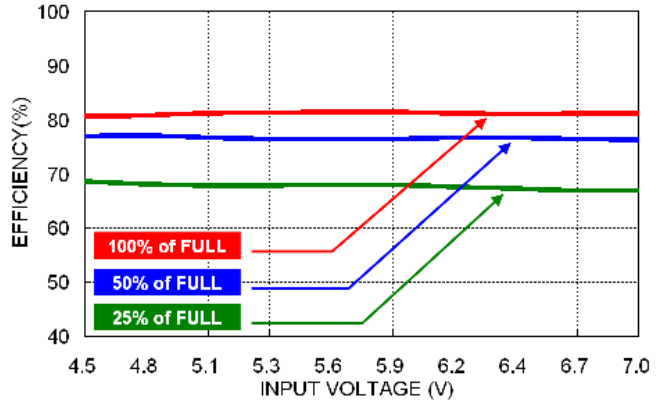
All test conditions are at 25℃.The figures are identical for MPU02-05D15



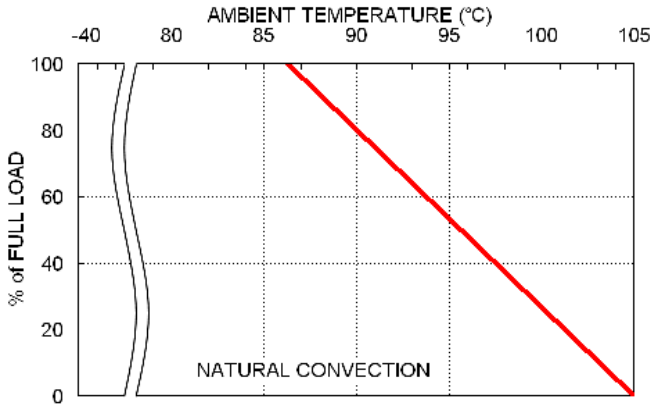
Efficiency Versus Output Load



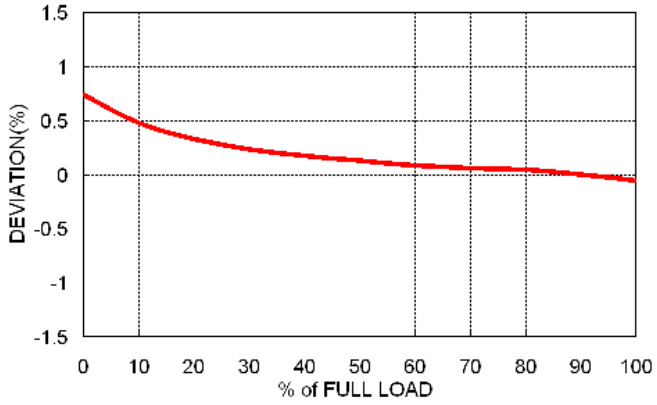
Power Dissipation Versus Output Load



Efficiency Versus Input Voltage.



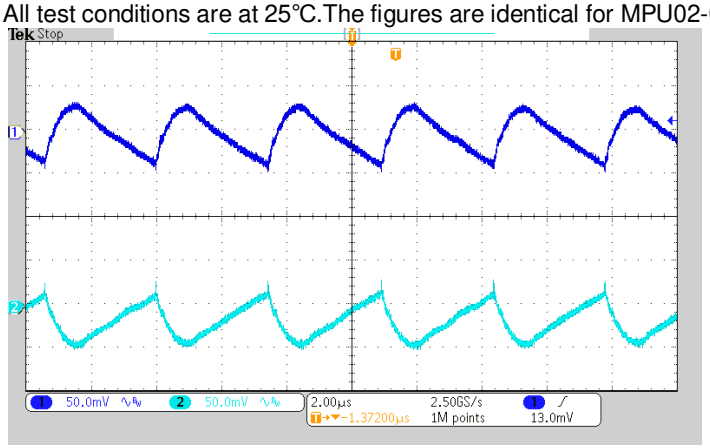
Derating Output Load Versus Ambient Temperature and Airflow
Vin(nom)



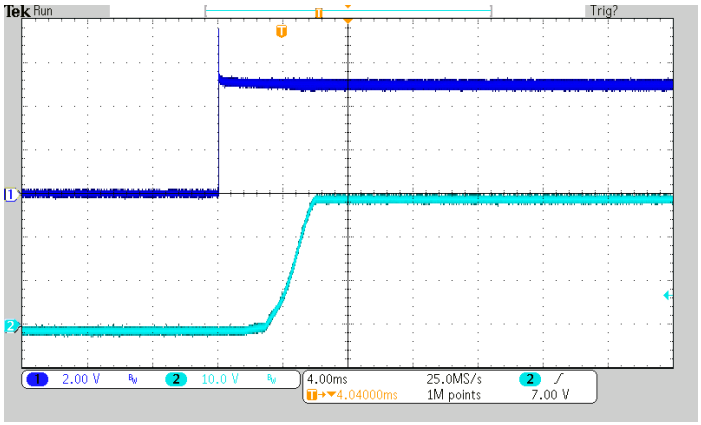
Vout Deviation vs. Output Load

Characteristic Curves (Continued)

All test conditions are at 25℃.The figures are identical for MPU02-05D15



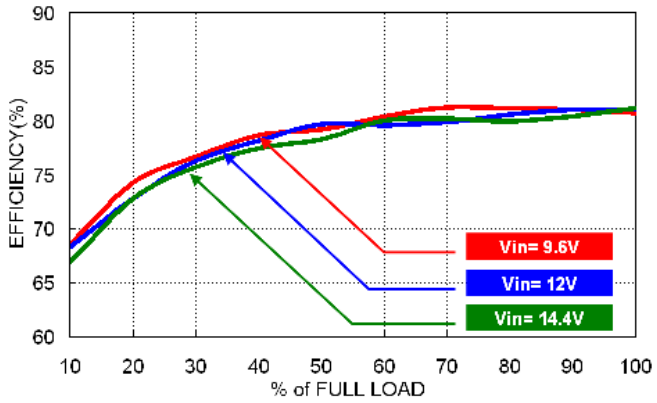
Typical Output Ripple and Noise.
Vin(nom), Full Load



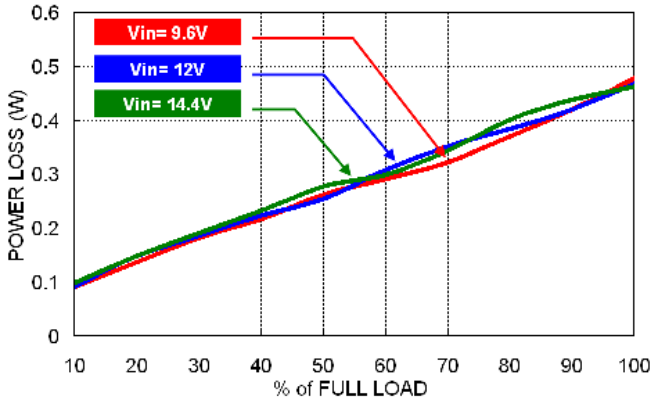
Typical Input Start-Up and Output Rise Characteristic
Vin(nom), Full Load

Characteristic Curves (Continued)

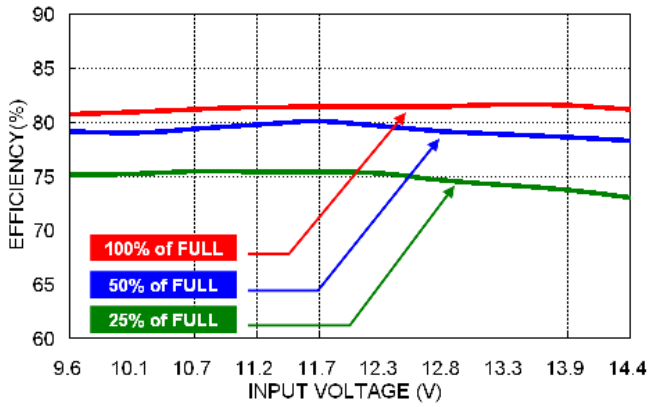
All test conditions are at 25℃.The figures are identical for MPU02-12D05



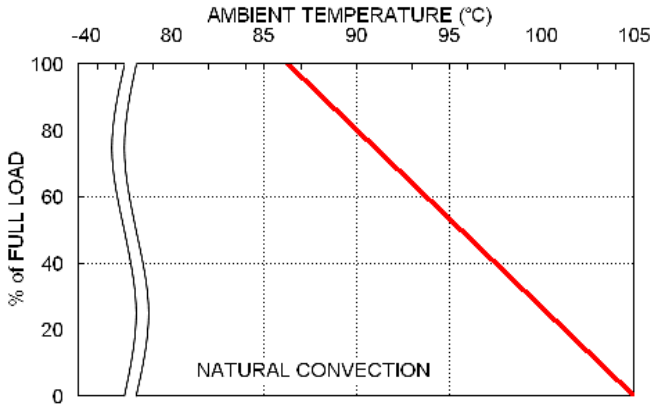
Efficiency Versus Output Load



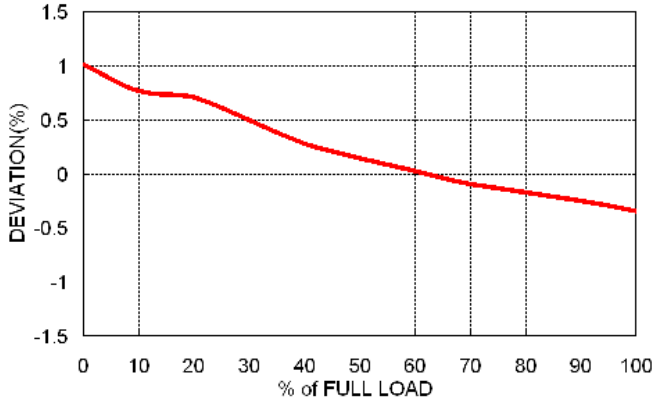
Power Dissipation Versus Output Load



Efficiency Versus Input Voltage.



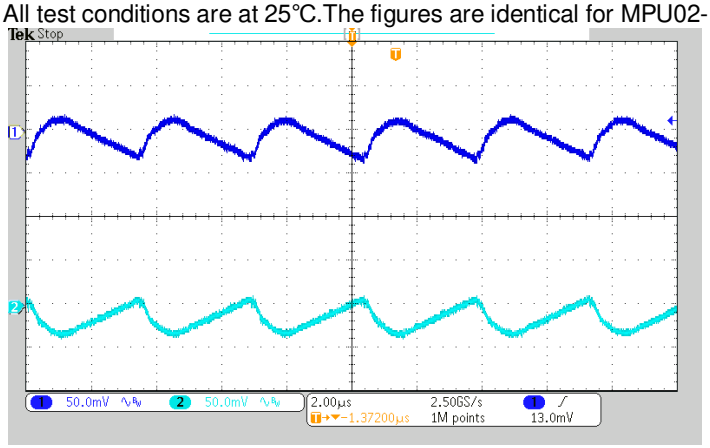
Derating Output Load Versus Ambient Temperature and Airflow
Vin(nom)



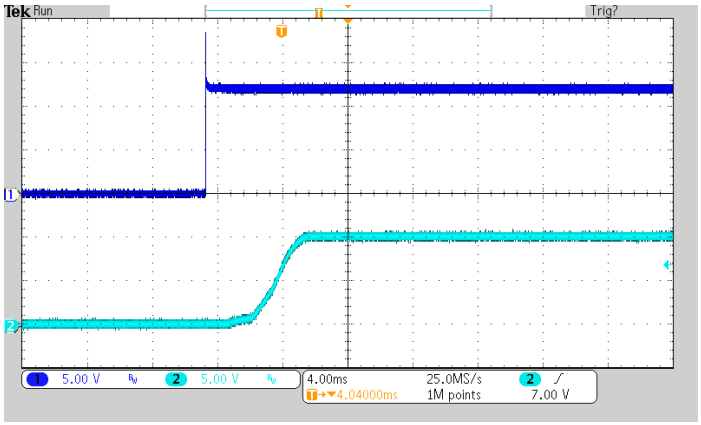
Vout Deviation vs. Output Load

Characteristic Curves (Continued)

All test conditions are at 25℃.The figures are identical for MPU02-12D05



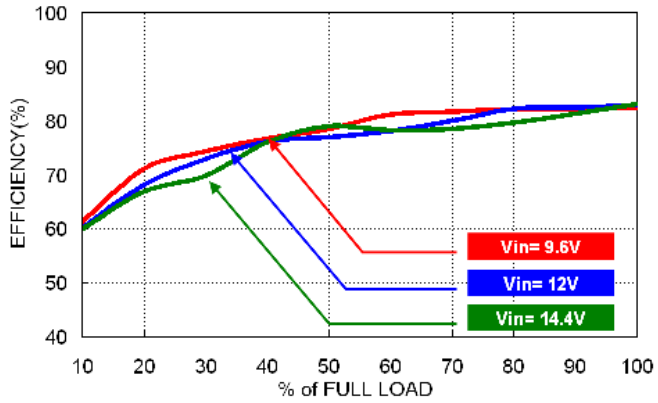
Typical Output Ripple and Noise.
Vin(nom), Full Load



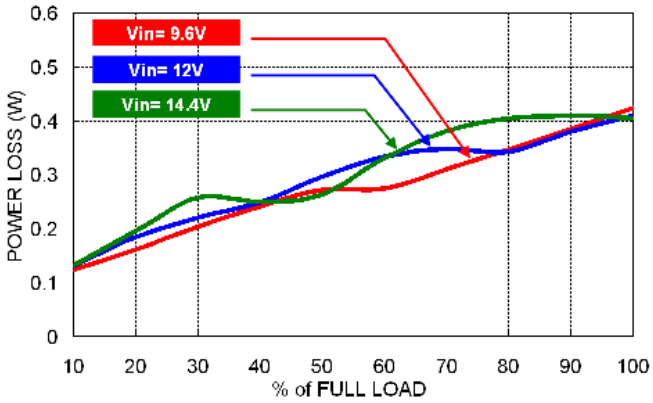
Typical Input Start-Up and Output Rise Characteristic
Vin(nom), Full Load

Characteristic Curves (Continued)

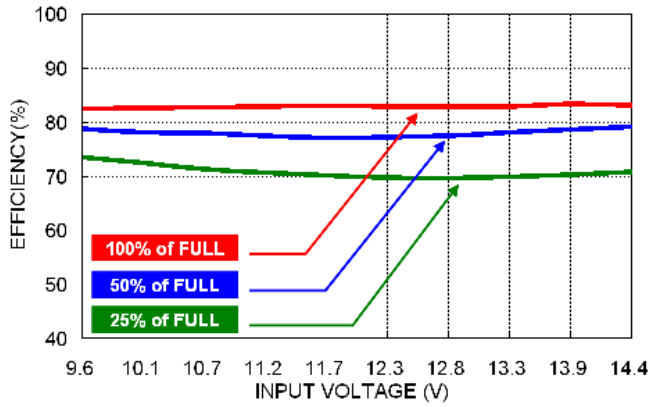
All test conditions are at 25℃.The figures are identical for MPU02-12D12



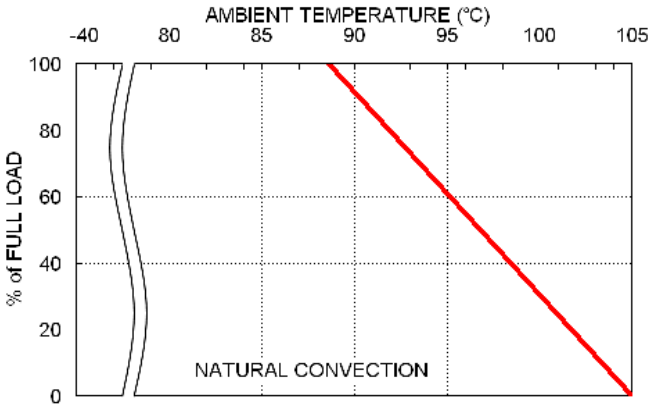
Efficiency Versus Output Load



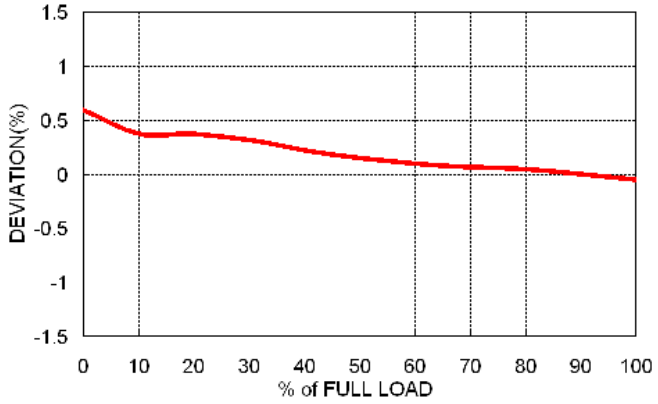
Power Dissipation Versus Output Load



Efficiency Versus Input Voltage.



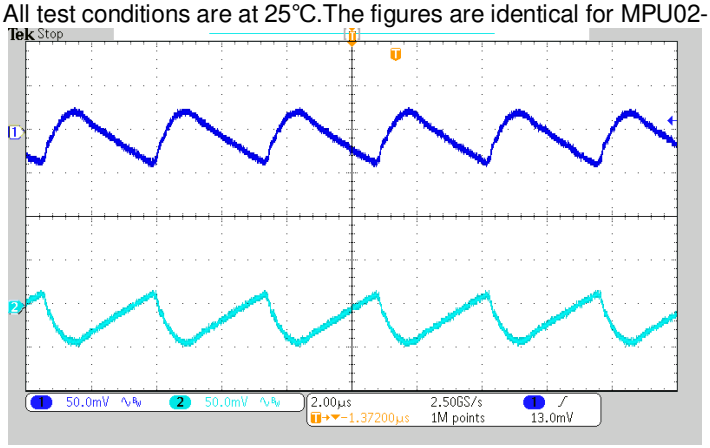
Derating Output Load Versus Ambient Temperature and Airflow
Vin(nom)



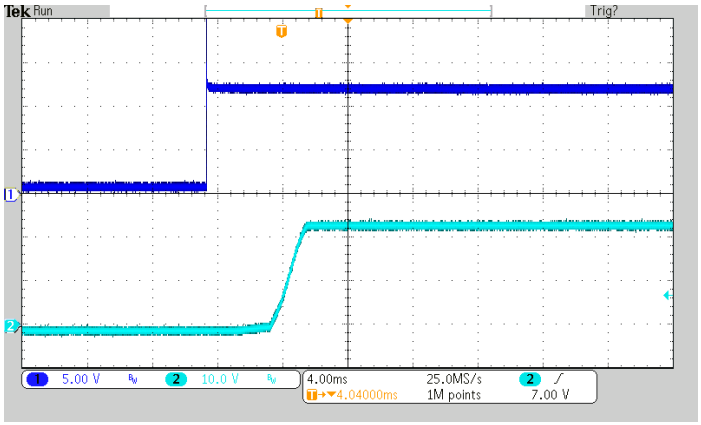
Vout Deviation vs. Output Load

Characteristic Curves (Continued)

All test conditions are at 25℃.The figures are identical for MPU02-12D12



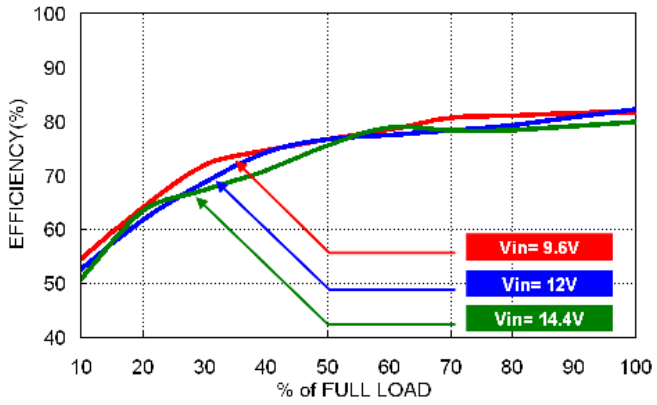
Typical Output Ripple and Noise.
Vin(nom), Full Load



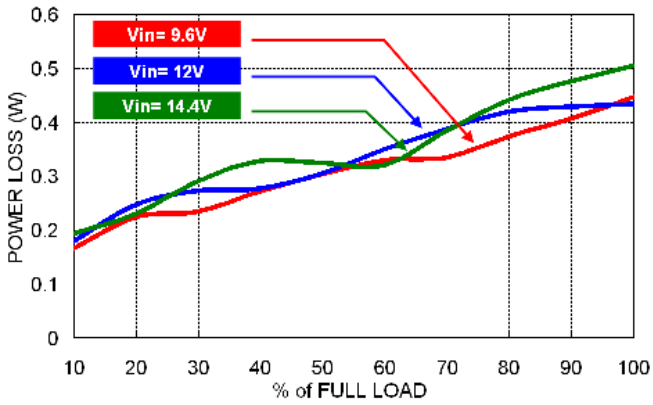
Typical Input Start-Up and Output Rise Characteristic
Vin(nom), Full Load

Characteristic Curves (Continued)

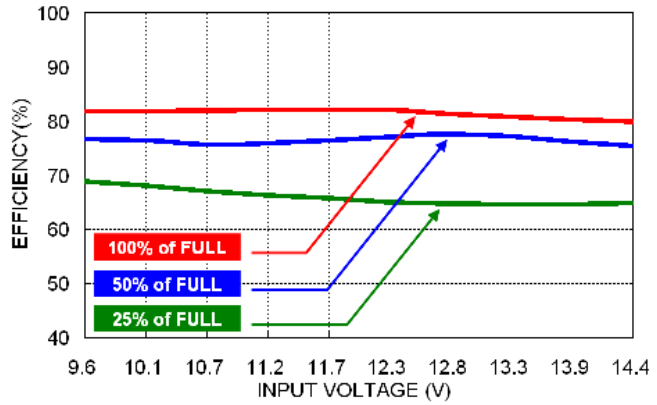
All test conditions are at 25℃.The figures are identical for MPU02-12D15



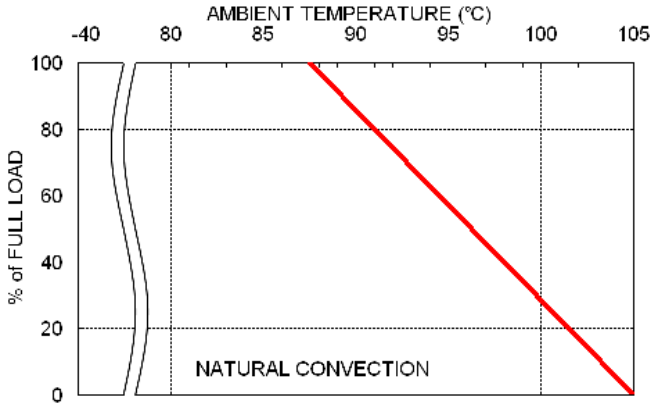
Efficiency Versus Output Load



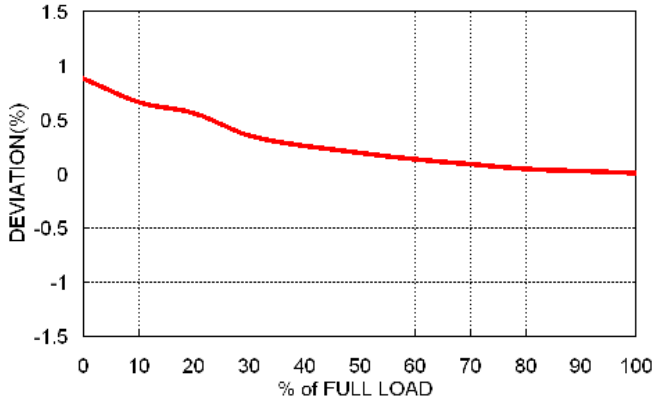
Power Dissipation Versus Output Load



Efficiency Versus Input Voltage.



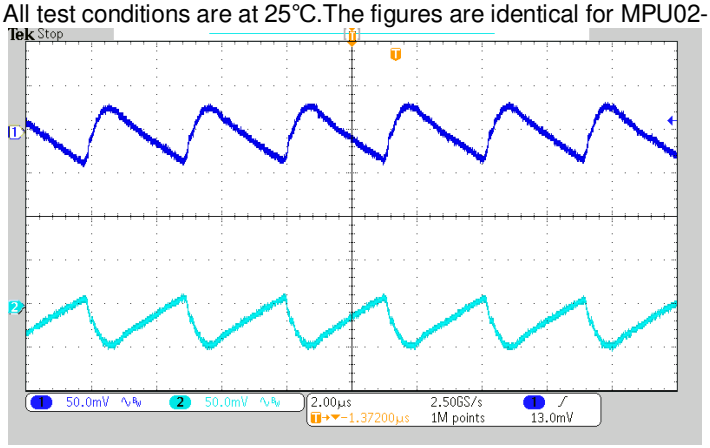
Derating Output Load Versus Ambient Temperature and Airflow
Vin(nom)



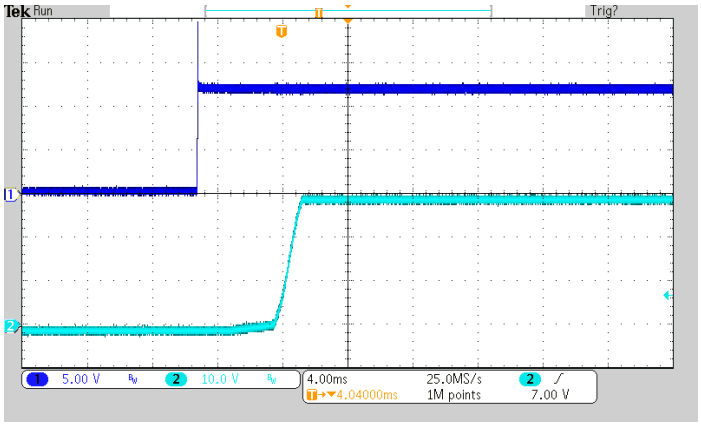
Vout Deviation vs. Output Load

Characteristic Curves (Continued)

All test conditions are at 25℃.The figures are identical for MPU02-12D15



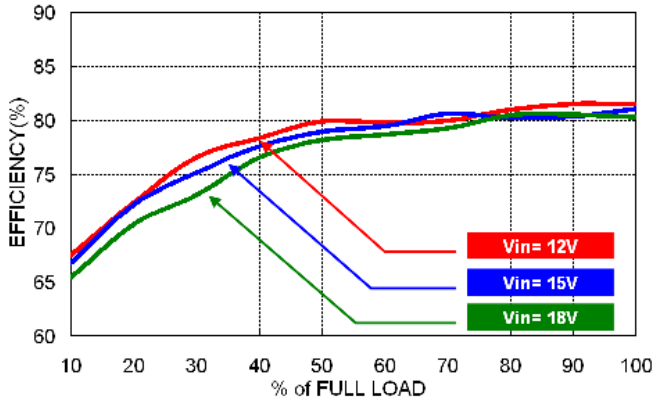
Typical Output Ripple and Noise.
Vin(nom), Full Load



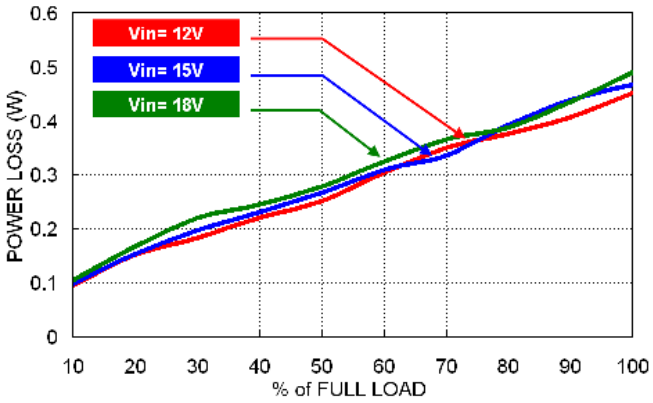
Typical Input Start-Up and Output Rise Characteristic
Vin(nom), Full Load

Characteristic Curves (Continued)

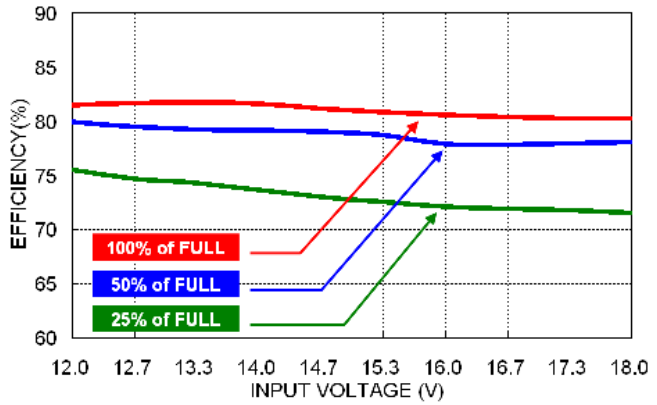
All test conditions are at 25℃.The figures are identical for MPU02-15D05



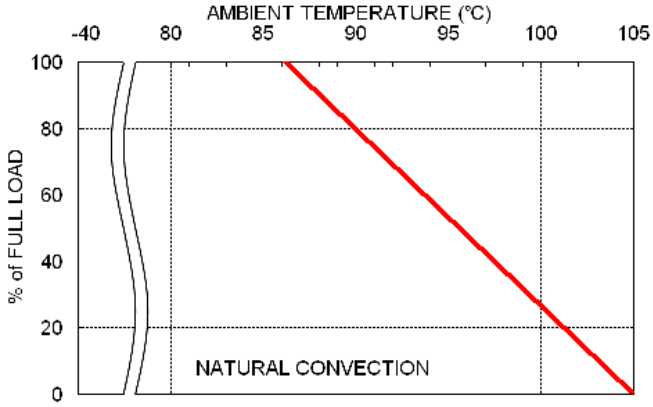
Efficiency Versus Output Load



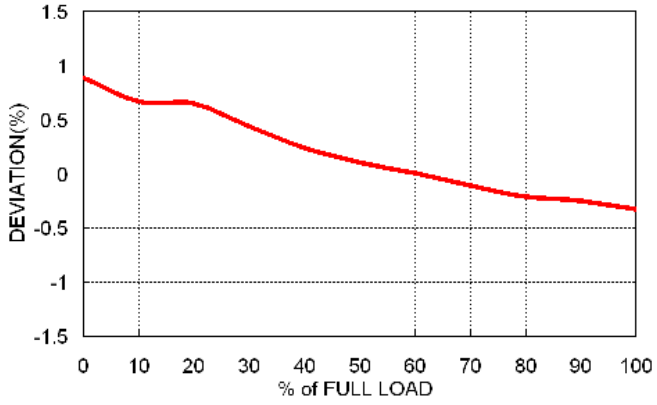
Power Dissipation Versus Output Load



Efficiency Versus Input Voltage.



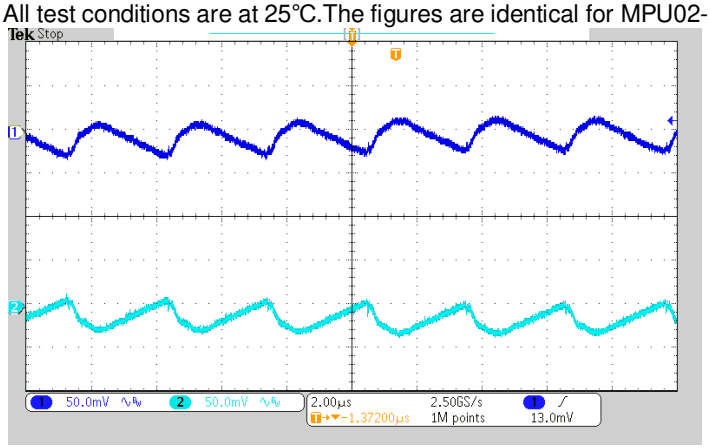
Derating Output Load Versus Ambient Temperature and Airflow Vin(nom)



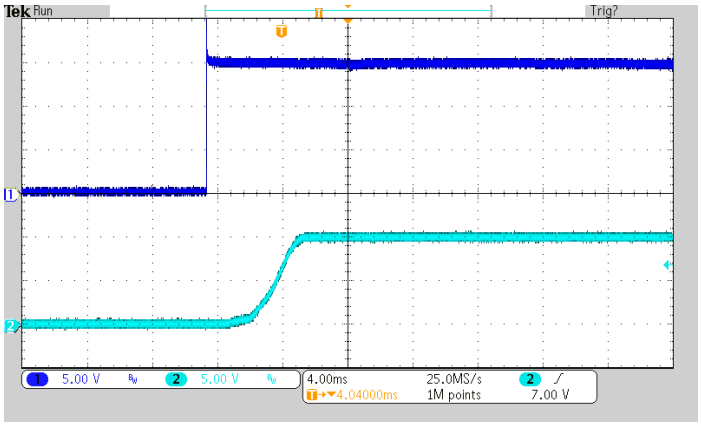
Vout Deviation vs. Output Load

Characteristic Curves (Continued)

All test conditions are at 25℃.The figures are identical for MPU02-15D05



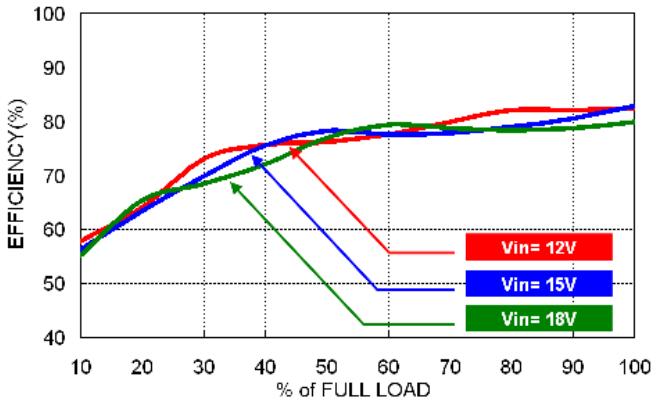
Typical Output Ripple and Noise.
Vin(nom), Full Load



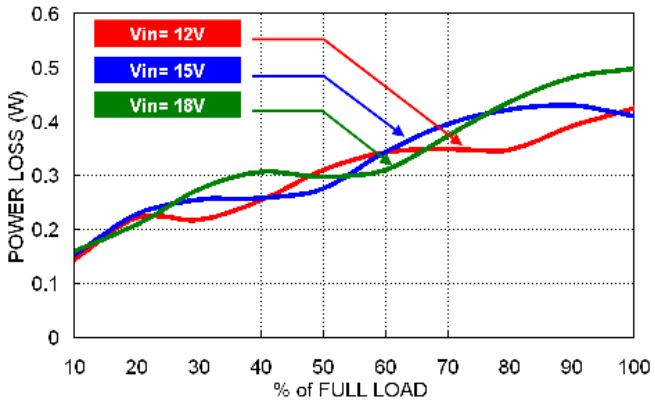
Typical Input Start-Up and Output Rise Characteristic
Vin(nom), Full Load

Characteristic Curves (Continued)

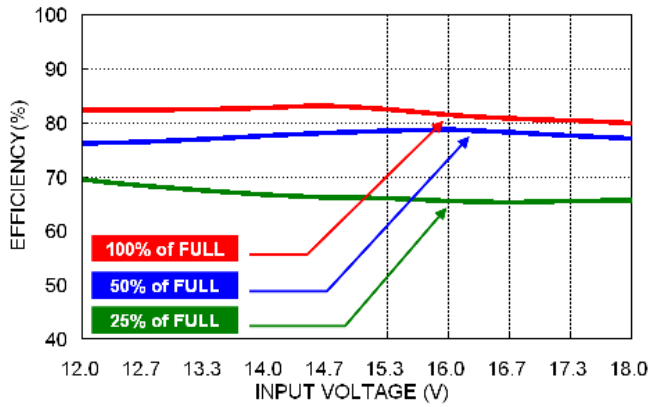
All test conditions are at 25℃.The figures are identical for MPU02-15D12



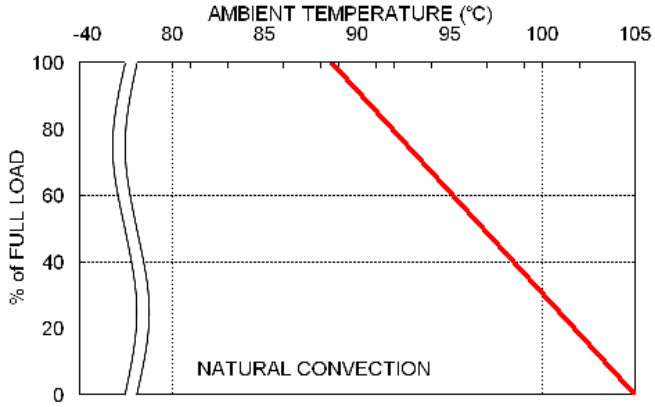
Efficiency Versus Output Load



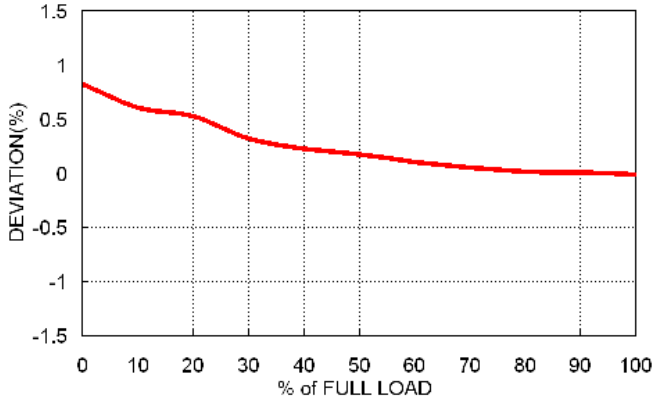
Power Dissipation Versus Output Load



Efficiency Versus Input Voltage.



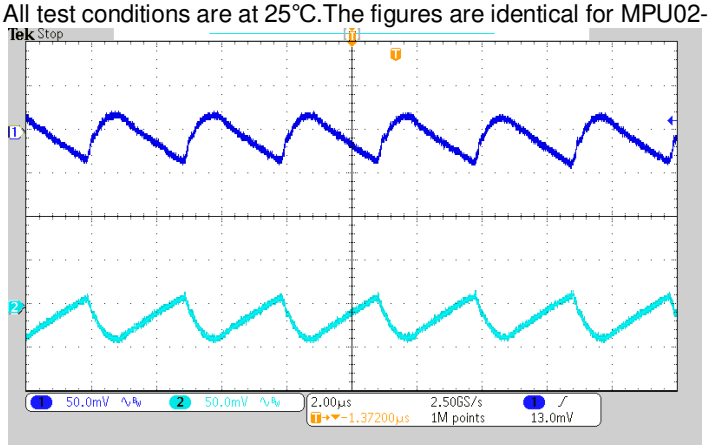
Derating Output Load Versus Ambient Temperature and Airflow
Vin(nom)



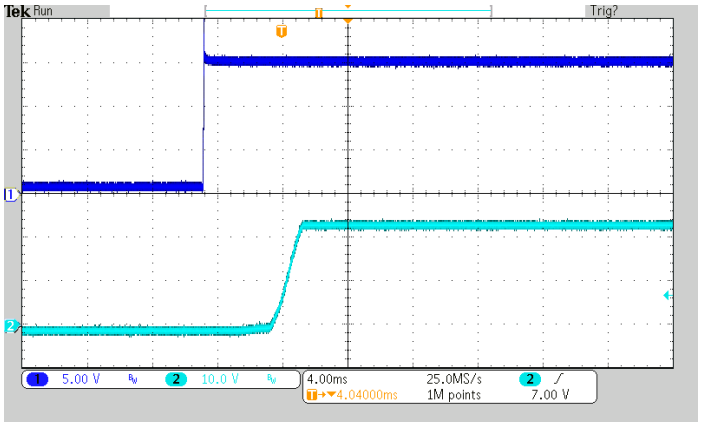
Vout Deviation vs. Output Load

Characteristic Curves (Continued)

All test conditions are at 25℃.The figures are identical for MPU02-15D12



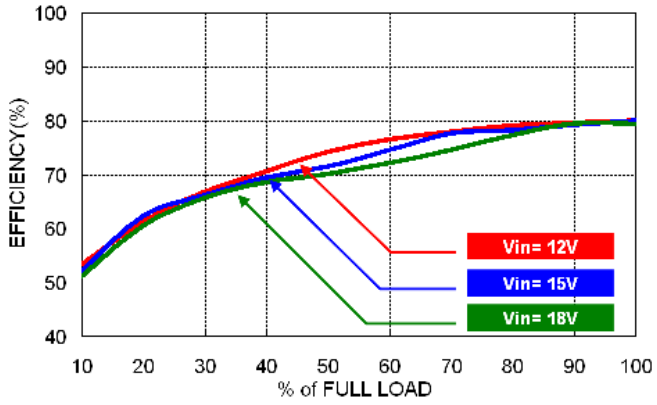
Typical Output Ripple and Noise.
Vin(nom), Full Load



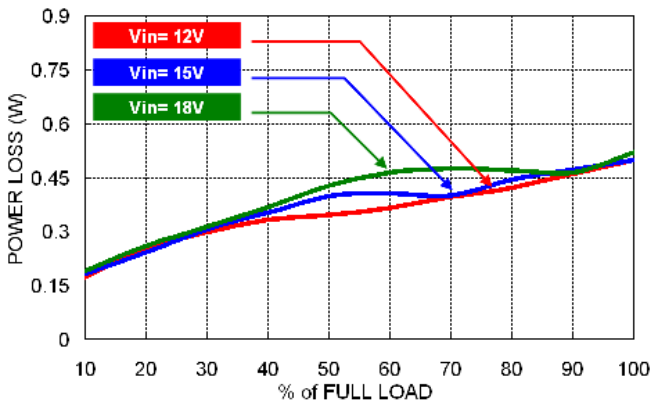
Typical Input Start-Up and Output Rise Characteristic
Vin(nom), Full Load

Characteristic Curves (Continued)

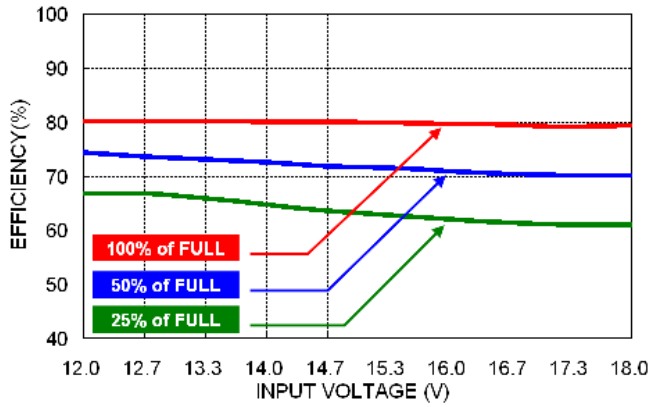
All test conditions are at 25℃.The figures are identical for MPU02-15D15



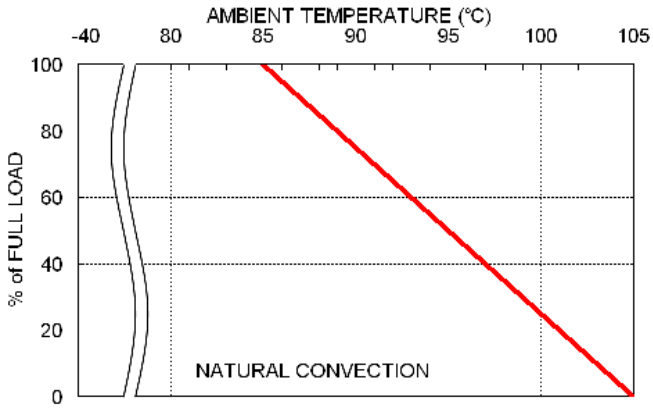
Efficiency Versus Output Load



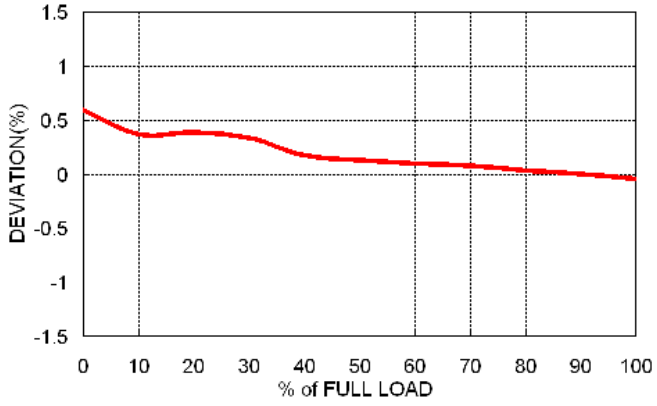
Power Dissipation Versus Output Load



Efficiency Versus Input Voltage.



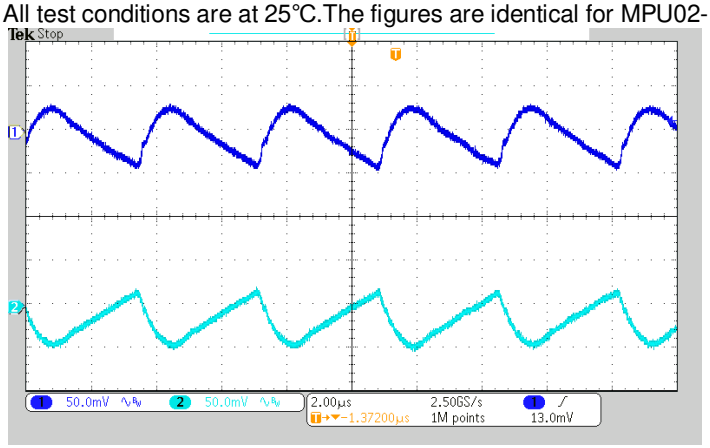
Derating Output Load Versus Ambient Temperature and Airflow
Vin(nom)



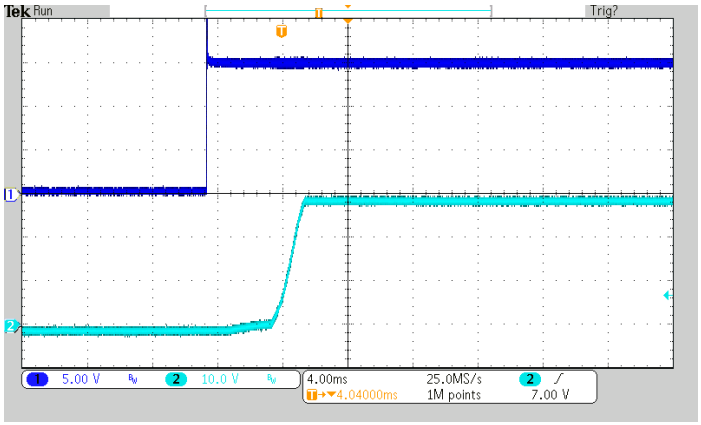
Vout Deviation vs. Output Load

Characteristic Curves (Continued)

All test conditions are at 25℃.The figures are identical for MPU02-15D15



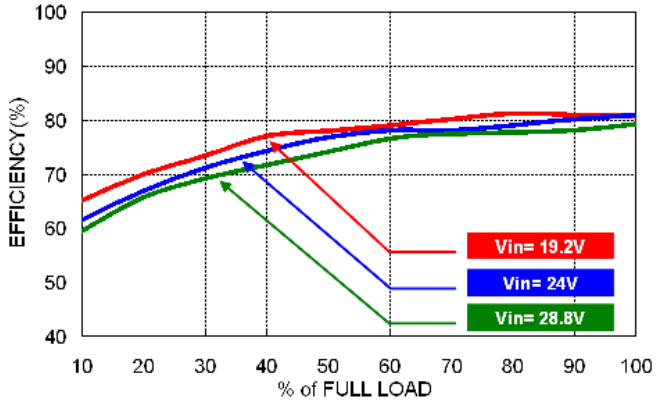
Typical Output Ripple and Noise.
Vin(nom), Full Load



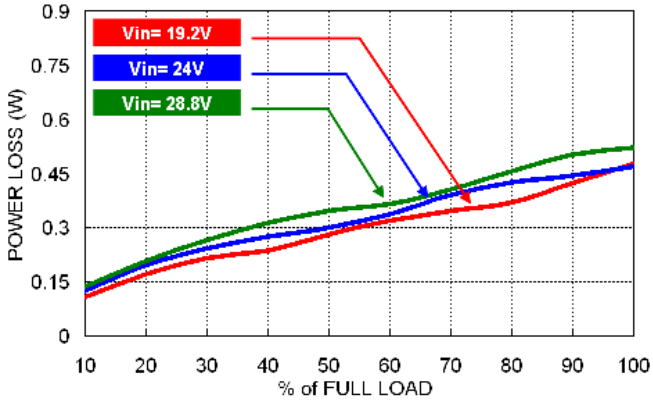
Typical Input Start-Up and Output Rise Characteristic
Vin(nom), Full Load

Characteristic Curves (Continued)

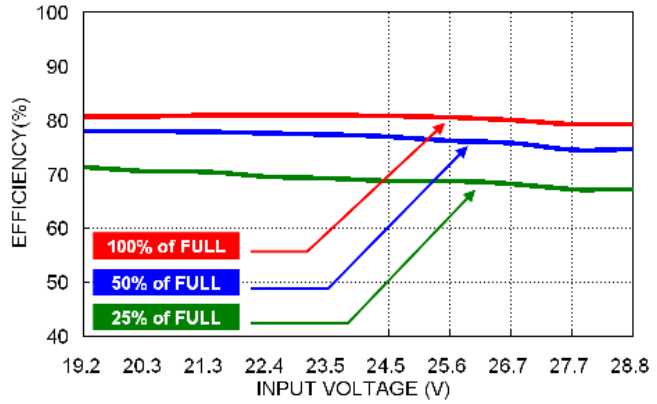
All test conditions are at 25℃.The figures are identical for MPU02-24D05



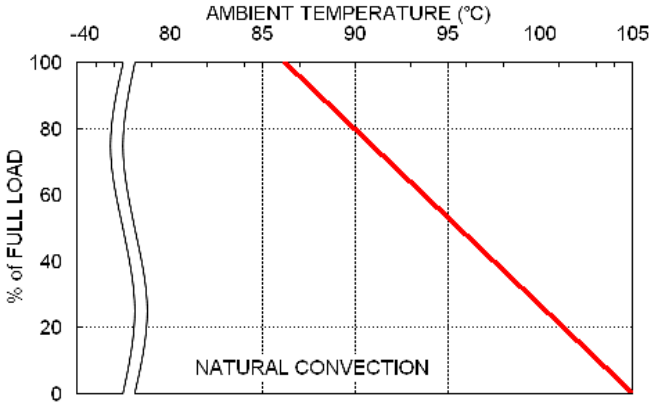
Efficiency Versus Output Load



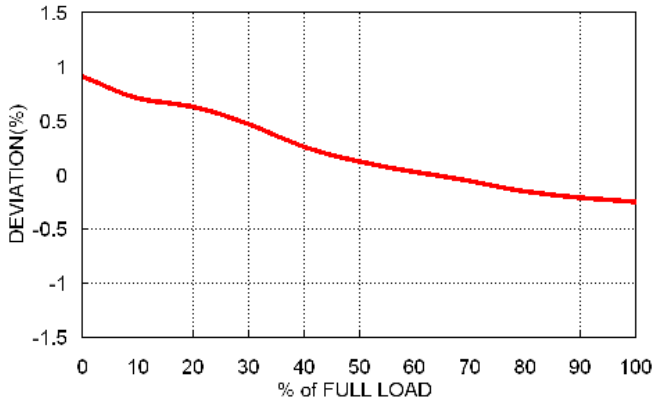
Power Dissipation Versus Output Load



Efficiency Versus Input Voltage.



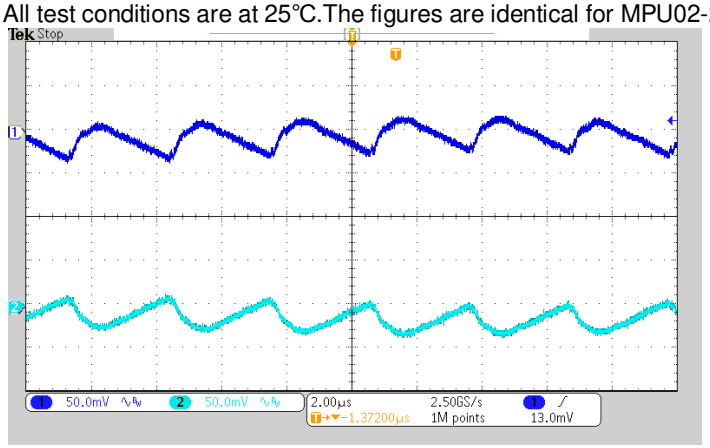
Derating Output Load Versus Ambient Temperature and Airflow
Vin(nom)



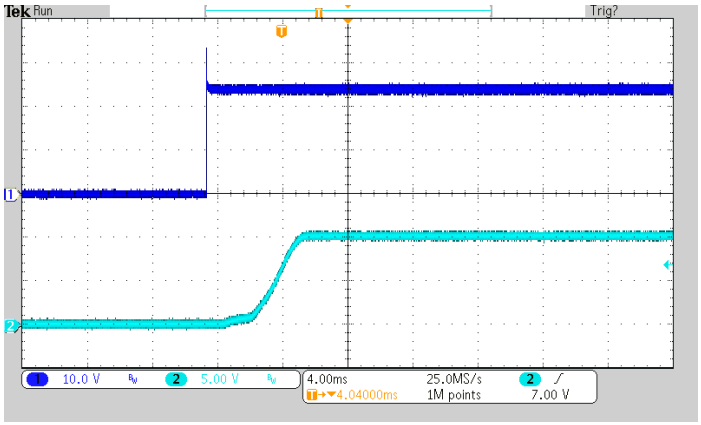
Vout Deviation vs. Output Load

Characteristic Curves (Continued)

All test conditions are at 25℃.The figures are identical for MPU02-24D05



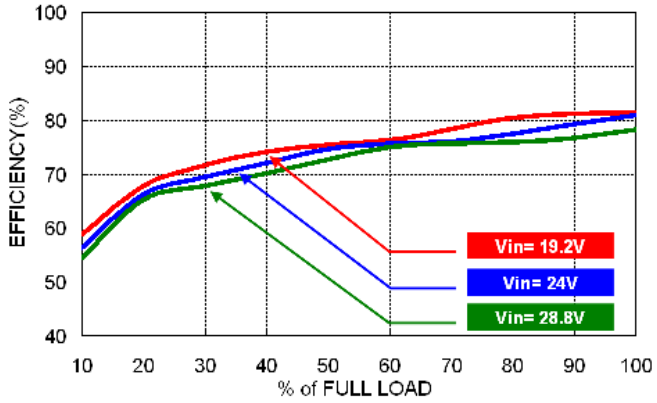
Typical Output Ripple and Noise.
Vin(nom), Full Load



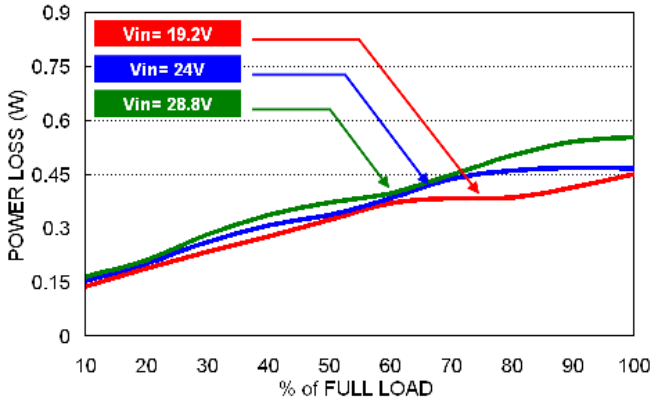
Typical Input Start-Up and Output Rise Characteristic
Vin(nom), Full Load

Characteristic Curves (Continued)

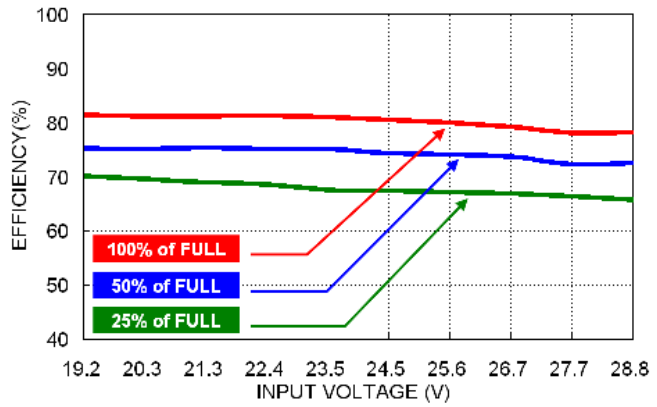
All test conditions are at 25℃.The figures are identical for MPU02-24D12



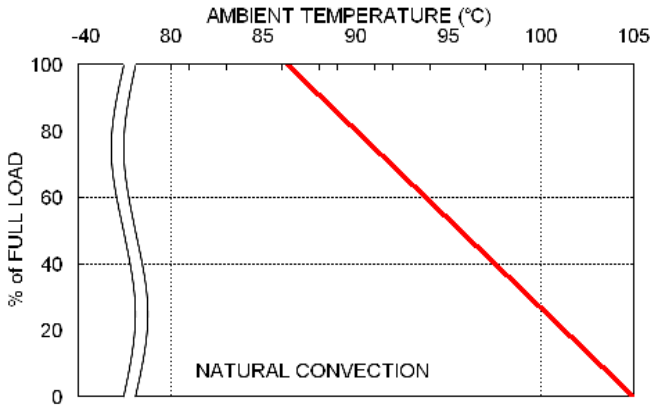
Efficiency Versus Output Load



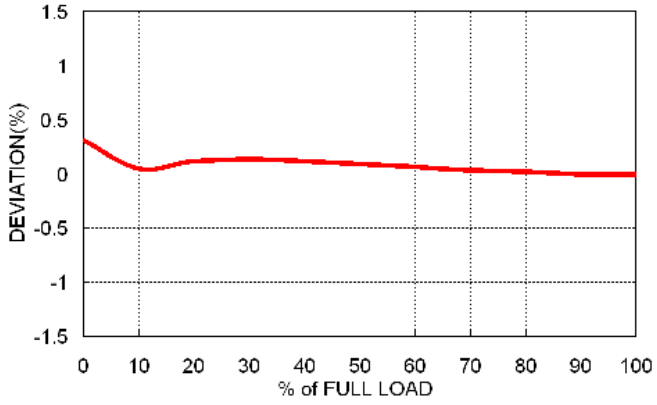
Power Dissipation Versus Output Load



Efficiency Versus Input Voltage.



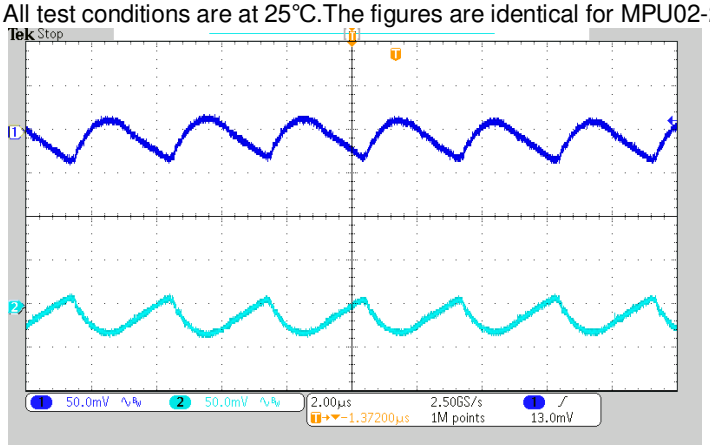
Derating Output Load Versus Ambient Temperature and Airflow
Vin(nom)



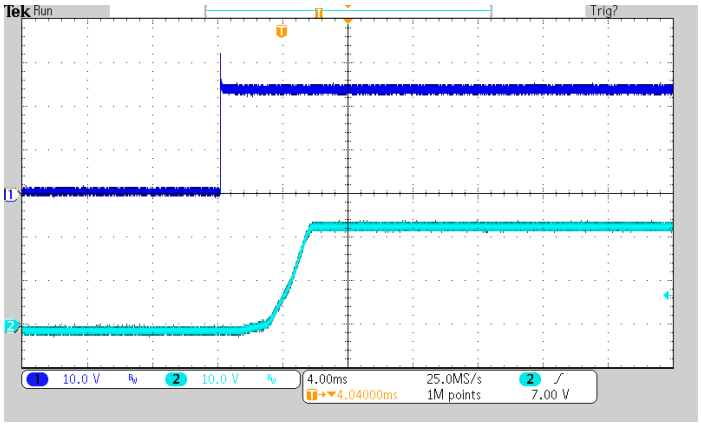
Vout Deviation vs. Output Load

Characteristic Curves (Continued)

All test conditions are at 25℃.The figures are identical for MPU02-24D12



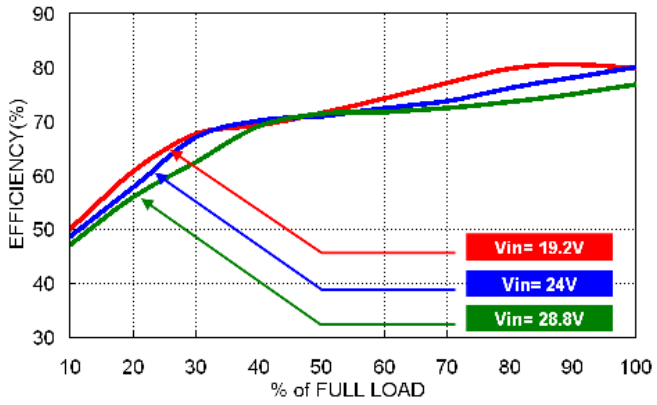
Typical Output Ripple and Noise.
Vin(nom), Full Load



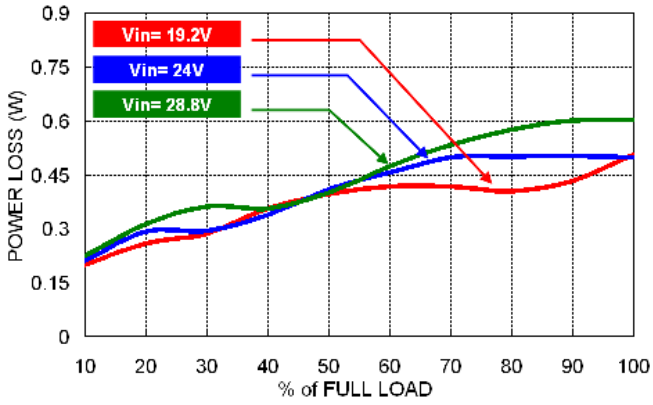
Typical Input Start-Up and Output Rise Characteristic
Vin(nom), Full Load

Characteristic Curves (Continued)

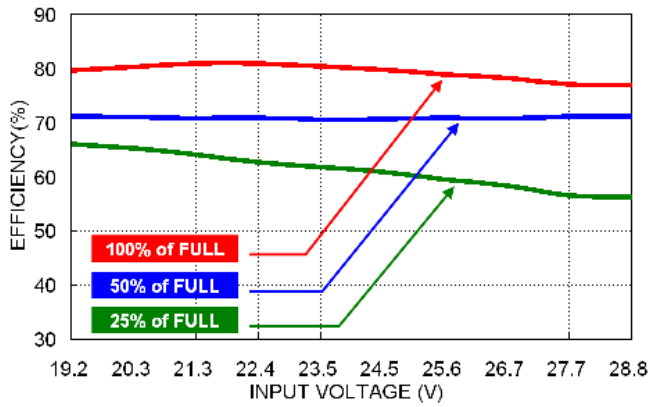
All test conditions are at 25℃.The figures are identical for MPU02-24D15



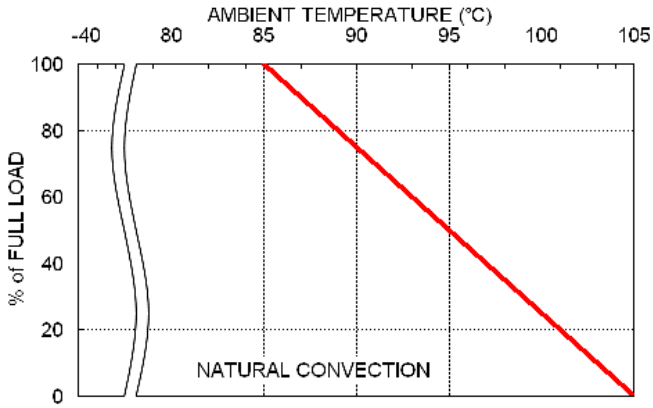
Efficiency Versus Output Load



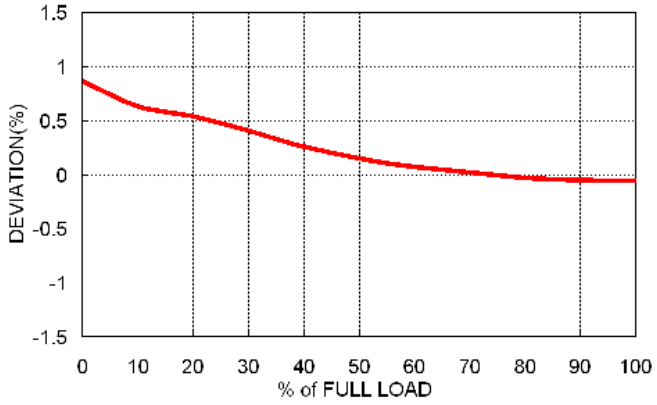
Power Dissipation Versus Output Load



Efficiency Versus Input Voltage.



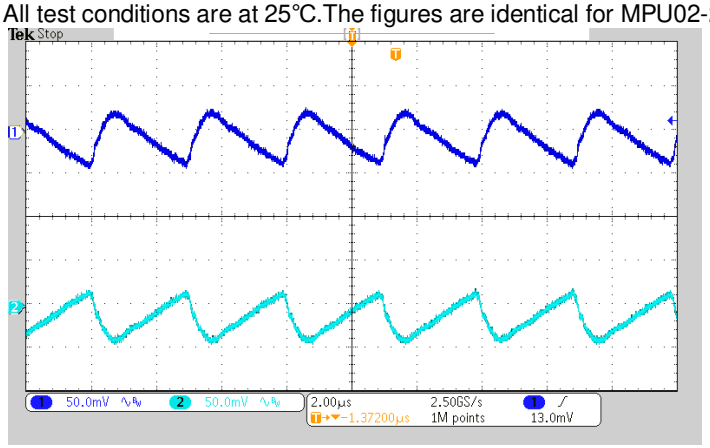
Derating Output Load Versus Ambient Temperature and Airflow
Vin(nom)



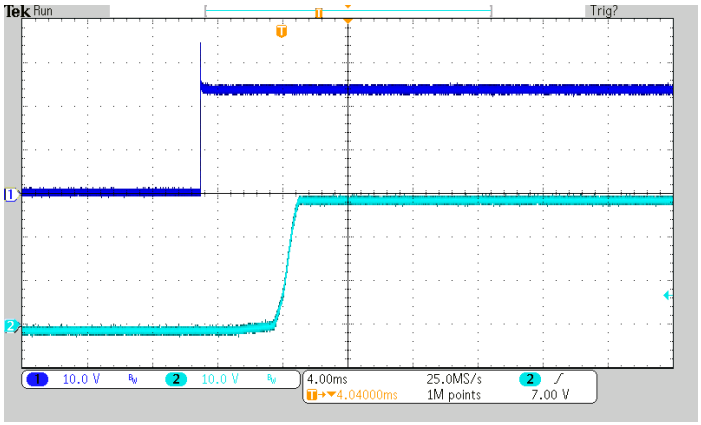
Vout Deviation vs. Output Load

Characteristic Curves (Continued)

All test conditions are at 25℃.The figures are identical for MPU02-24D15



Typical Output Ripple and Noise.
Vin(nom), Full Load



Typical Input Start-Up and Output Rise Characteristic
Vin(nom), Full Load