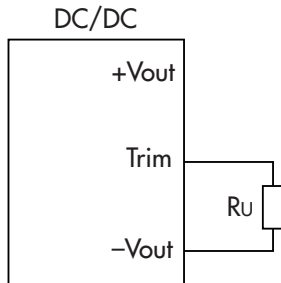


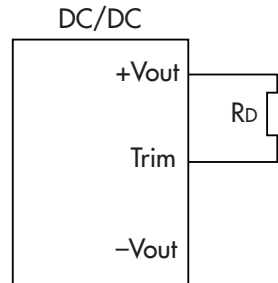
Output Voltage Adjustment

This feature allows increasing and decreasing the output voltage of single output models. This is accomplished by connecting an external resistor between the Trim pin and either the +Vout or -Vout pin. The resulting external Trim resistor is specified in Ohm and needs to be at least 1/16 Watt of rated power.

Connection of trim up resistor



Connection of trim down resistor



Trim up equation

$$R_U = \frac{G \cdot L}{(U_{out,up} - L - K)} - H$$

Trim down equation

$$R_D = \frac{(U_{out,down} - L) \cdot G}{(U_{out,nom} - U_{out,down})} - H$$

Trim constants				
Models	G	H	K	L
THM xx-xx11(WI)	5110	2050	2.5	2.5
THM xx-xx12(WI)	10000	5110	9.5	2.5
THM xx-xx13(WI)	10000	5110	12.5	2.5
THM xx-xx15(WI)	56000	13000	21.5	2.5

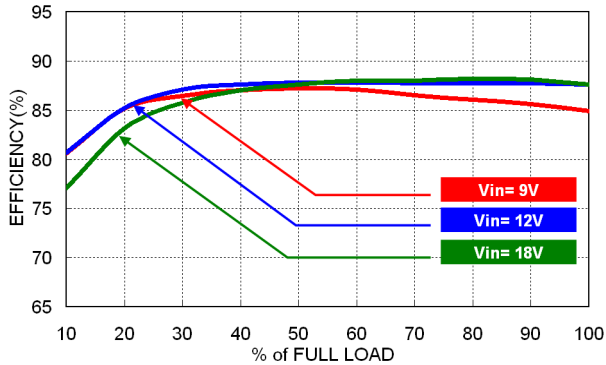
For example: Trim up model THM 15-2411WI with $\Delta U = 10\%$ to output voltage of $U_{out,up} = 5.5\text{ V}$

$$R_U = \frac{G \cdot L}{(U_{out,up} - L - K)} - H = \frac{5110 \cdot 2.5}{(5.5 - 2.5 - 2.5)} - 2050 = 23500 \Omega$$

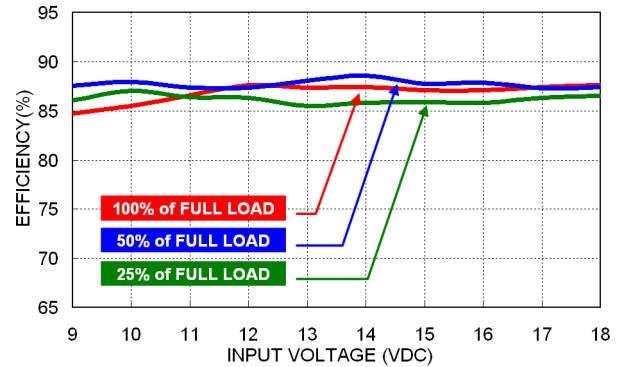
Characteristic Curves

THM 30-1211

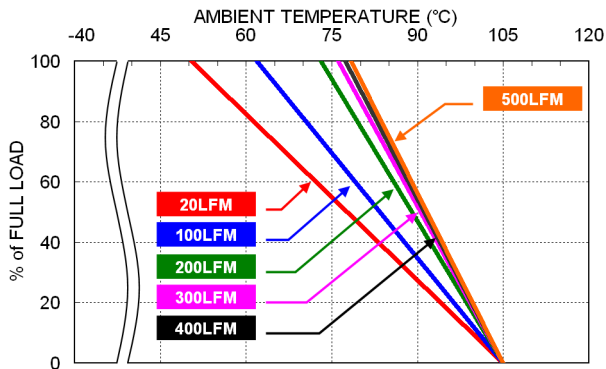
Efficiency versus Output Load



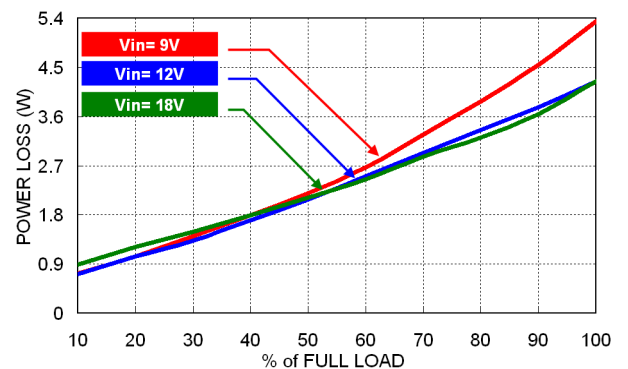
Efficiency versus Input Voltage



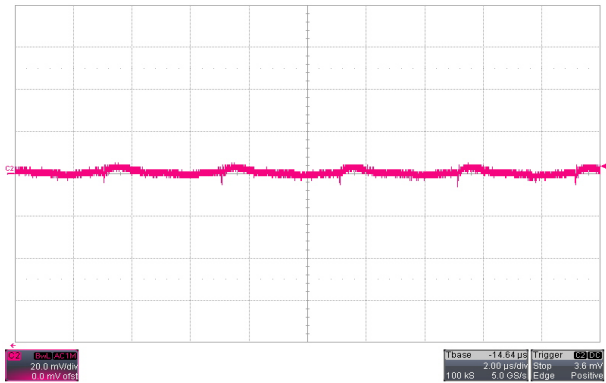
Derating Output Load versus Ambient Temperature



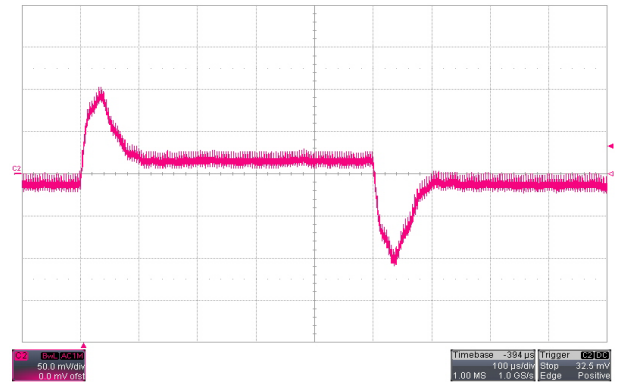
Power Dissipation versus Output Load



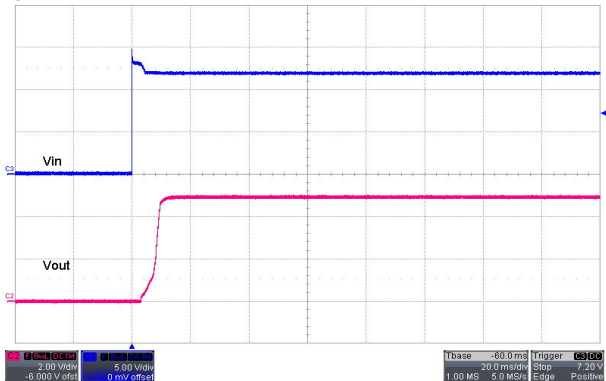
Typical Output Ripple and Noise



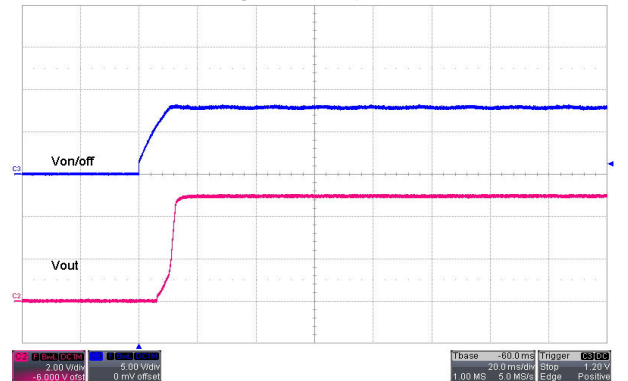
Transient Response to Dynamic Load Change (25%)



Typical Start-Up and Output Rise Characteristic

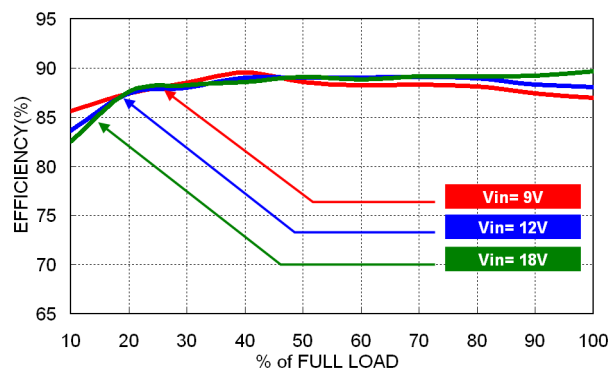


Remote on/off Voltage Start-Up Characteristic

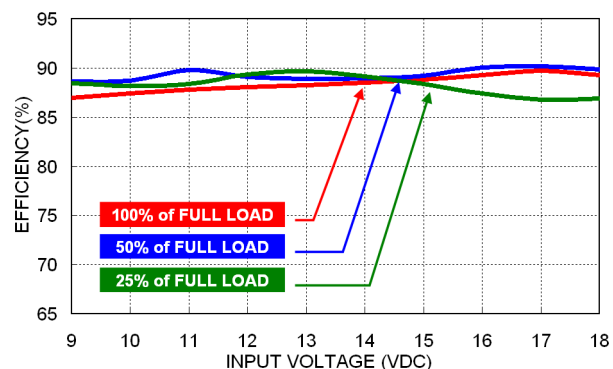


THM 30-1212

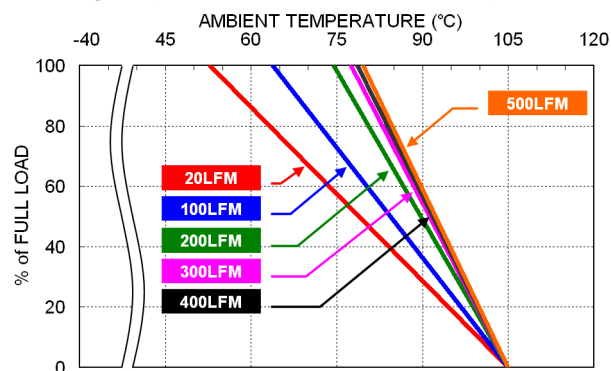
Efficiency versus Output Load



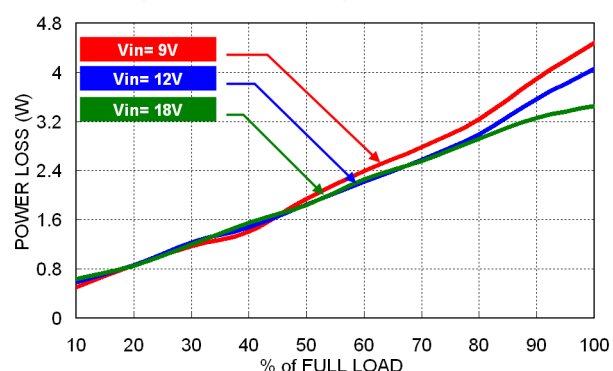
Efficiency versus Input Voltage



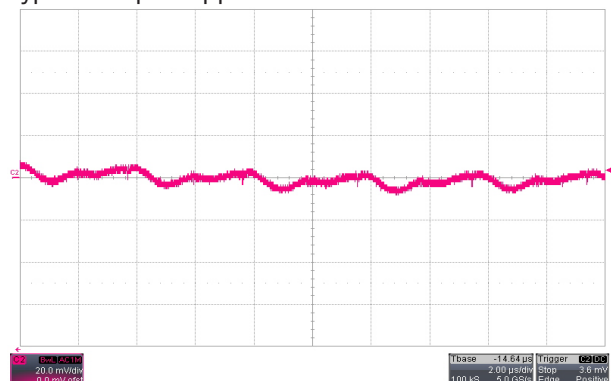
Derating Output Load versus Ambient Temperature



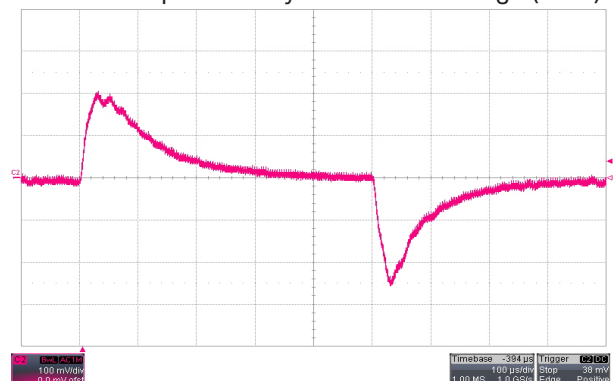
Power Dissipation versus Output Load



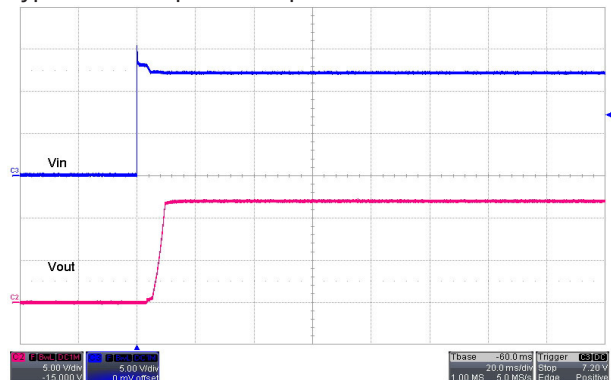
Typical Output Ripple and Noise



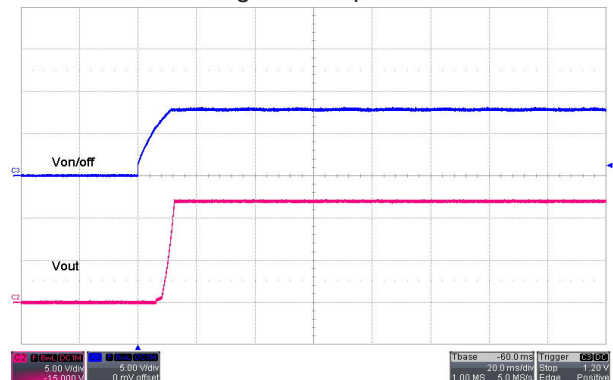
Transient Response to Dynamic Load Change (25%)



Typical Start-Up and Output Rise Characteristic



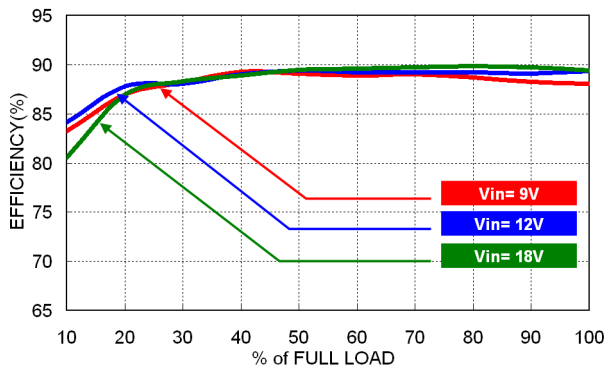
Remote on/off Voltage Start-Up Characteristic



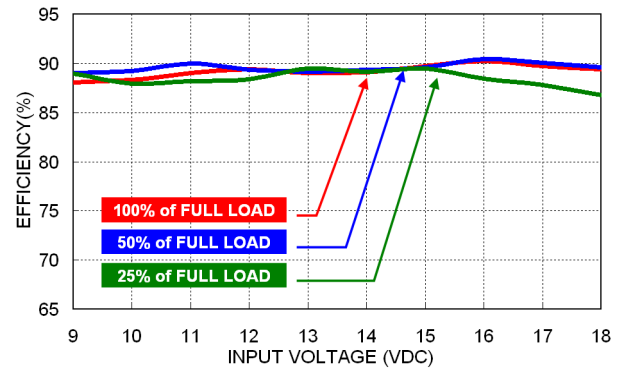
All specifications valid at nominal input voltage, full load and +25°C after warm-up time unless otherwise stated.

THM 30-1213

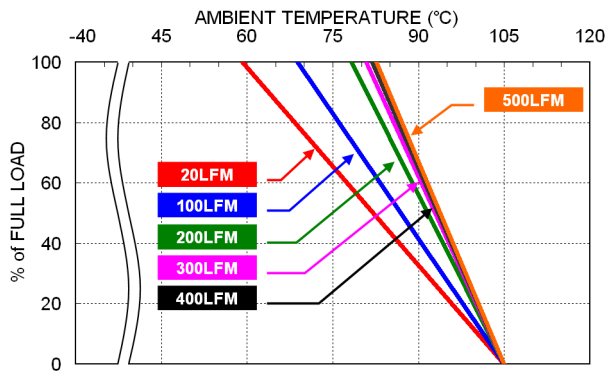
Efficiency versus Output Load



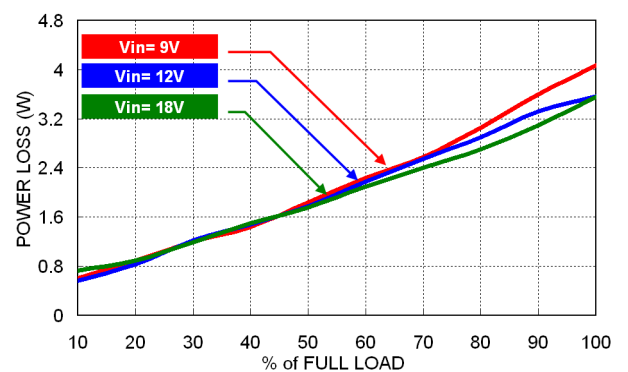
Efficiency versus Input Voltage



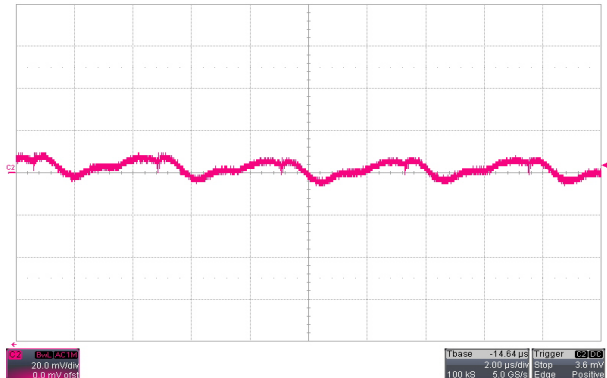
Derating Output Load versus Ambient Temperature



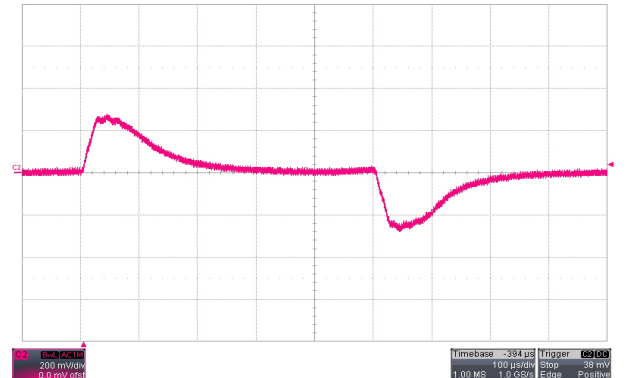
Power Dissipation versus Output Load



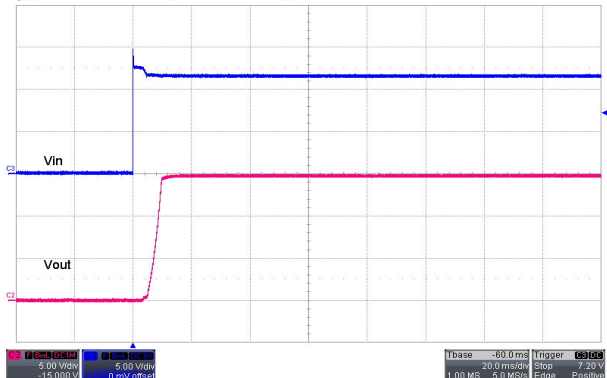
Typical Output Ripple and Noise



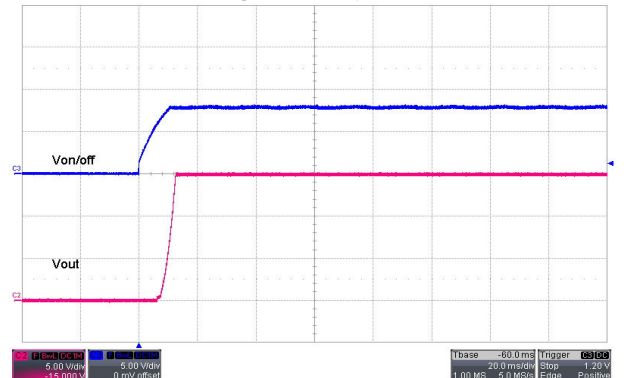
Transient Response to Dynamic Load Change (25%)



Typical Start-Up and Output Rise Characteristic



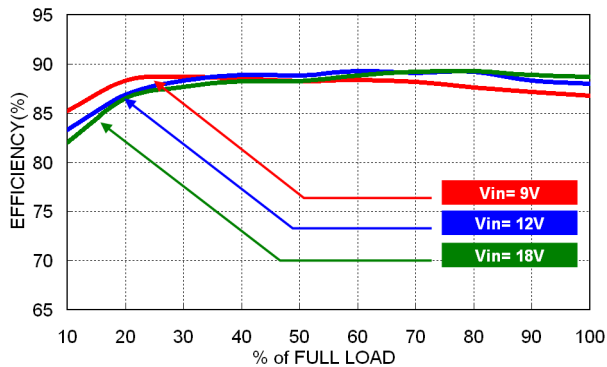
Remote on/off Voltage Start-Up Characteristic



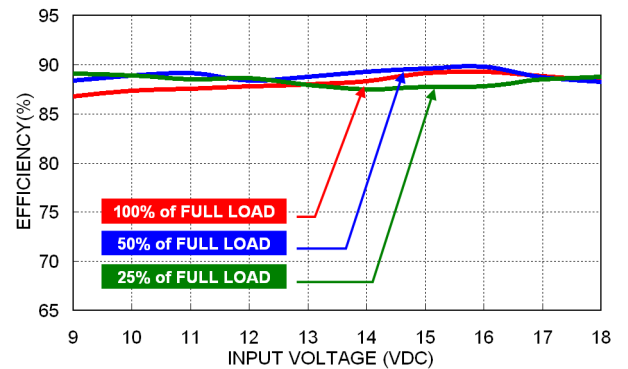
All specifications valid at nominal input voltage, full load and +25°C after warm-up time unless otherwise stated.

THM 30-1215

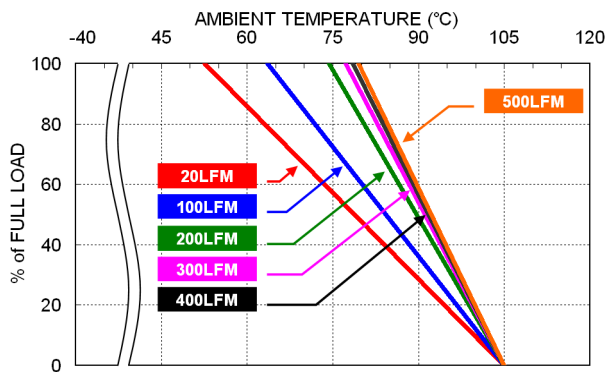
Efficiency versus Output Load



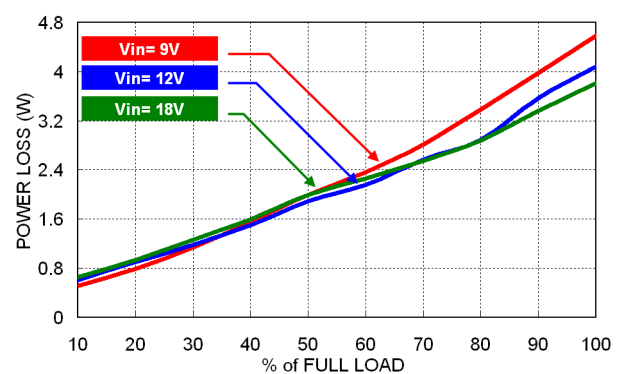
Efficiency versus Input Voltage



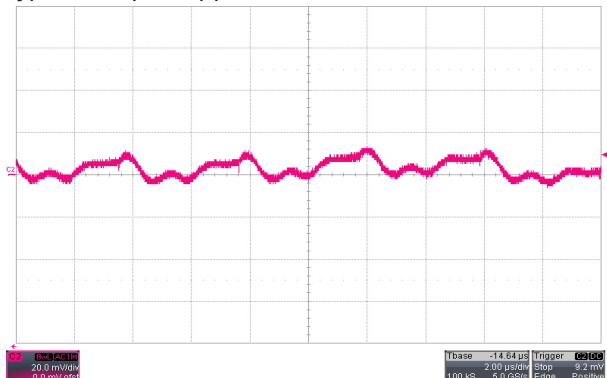
Derating Output Load versus Ambient Temperature



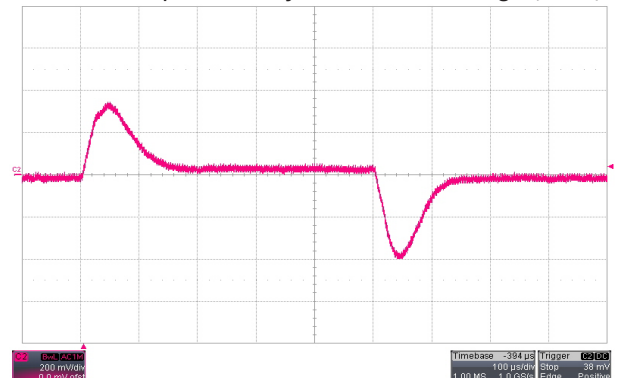
Power Dissipation versus Output Load



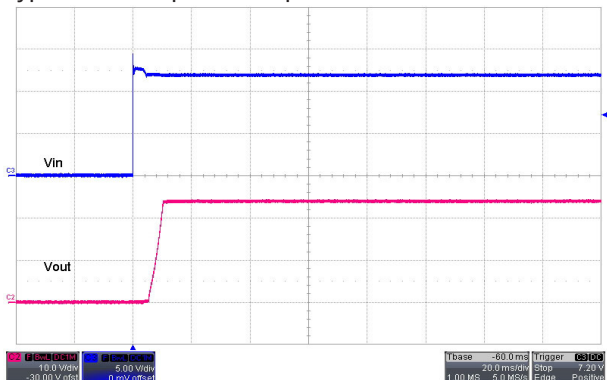
Typical Output Ripple and Noise



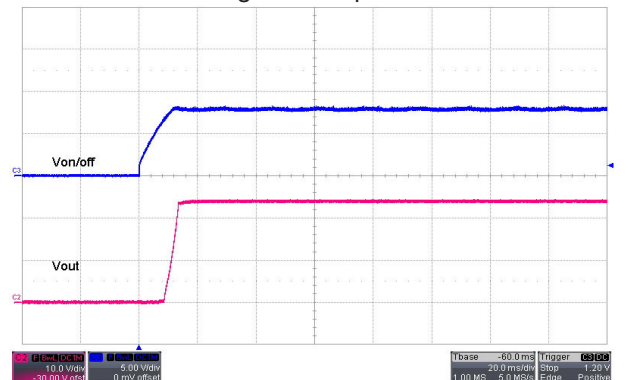
Transient Response to Dynamic Load Change (25%)



Typical Start-Up and Output Rise Characteristic



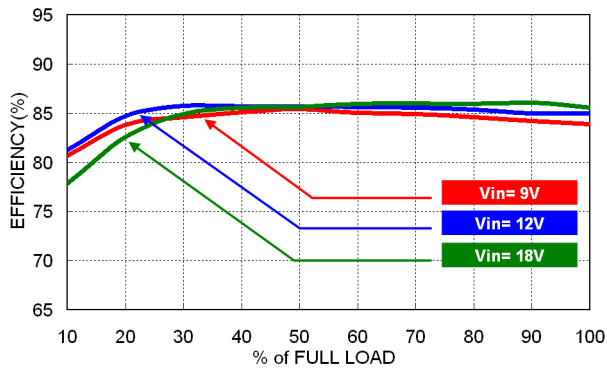
Remote on/off Voltage Start-Up Characteristic



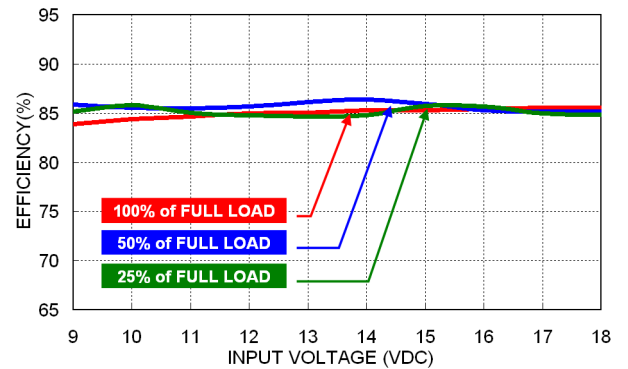
All specifications valid at nominal input voltage, full load and +25°C after warm-up time unless otherwise stated.

THM 30-1221

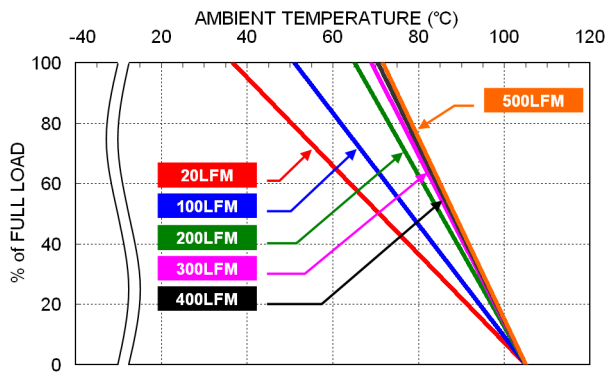
Efficiency versus Output Load



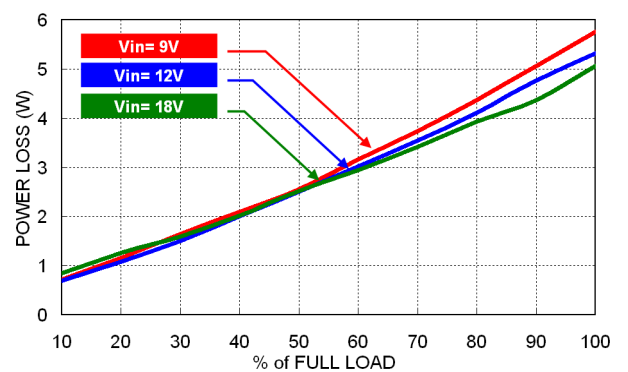
Efficiency versus Input Voltage



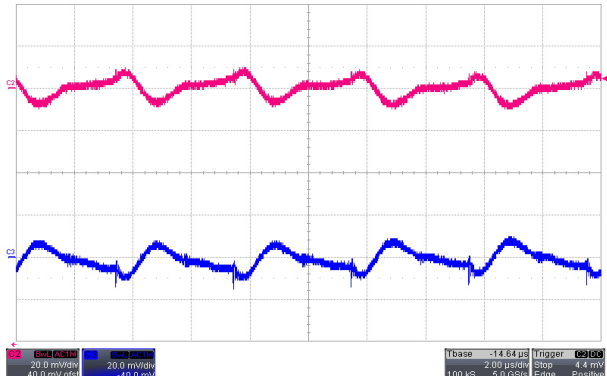
Derating Output Load versus Ambient Temperature



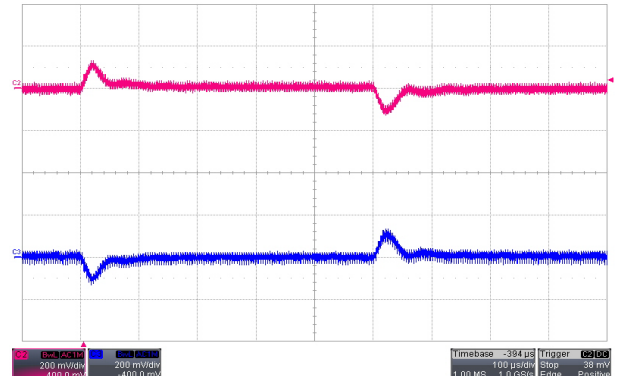
Power Dissipation versus Output Load



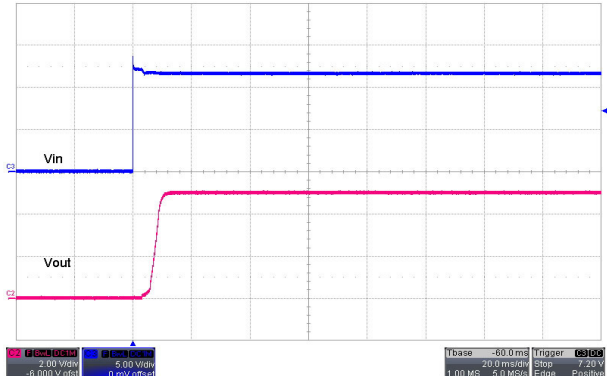
Typical Output Ripple and Noise



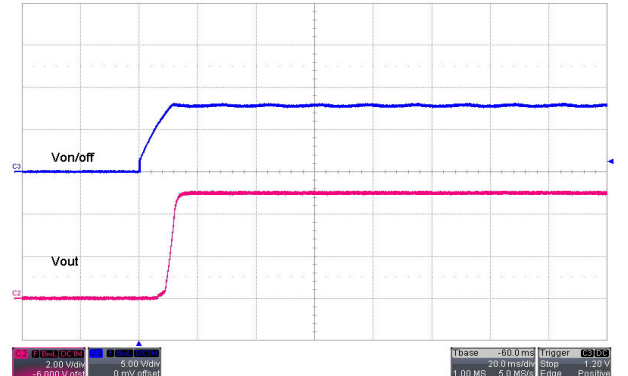
Transient Response to Dynamic Load Change (25%)



Typical Start-Up and Output Rise Characteristic



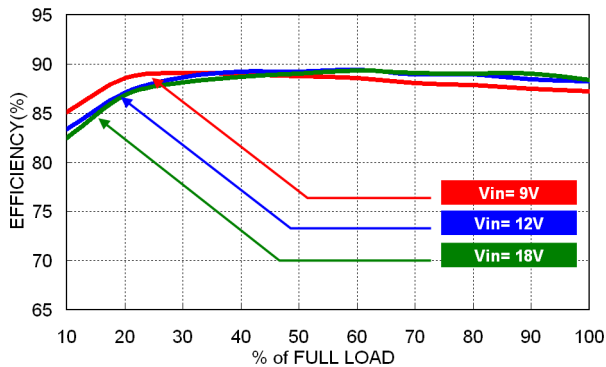
Remote on/off Voltage Start-Up Characteristic



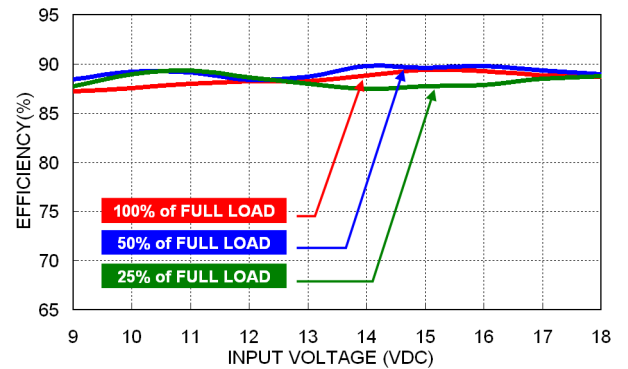
All specifications valid at nominal input voltage, full load and +25°C after warm-up time unless otherwise stated.

THM 30-1222

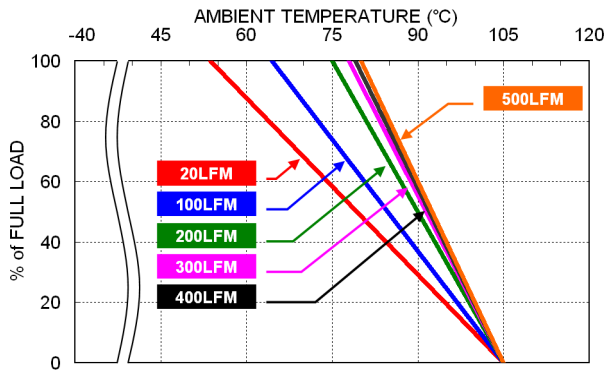
Efficiency versus Output Load



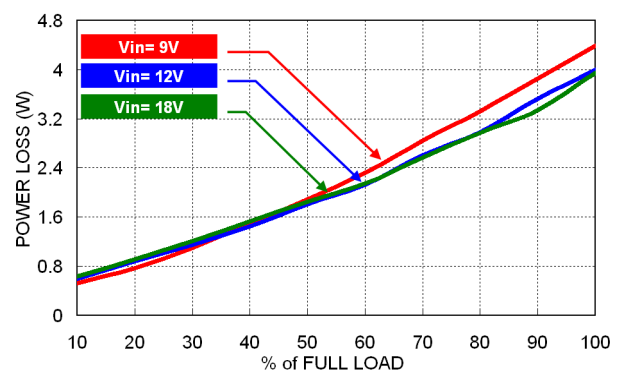
Efficiency versus Input Voltage



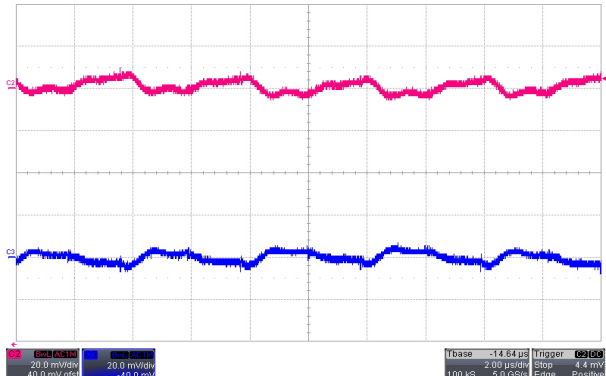
Derating Output Load versus Ambient Temperature



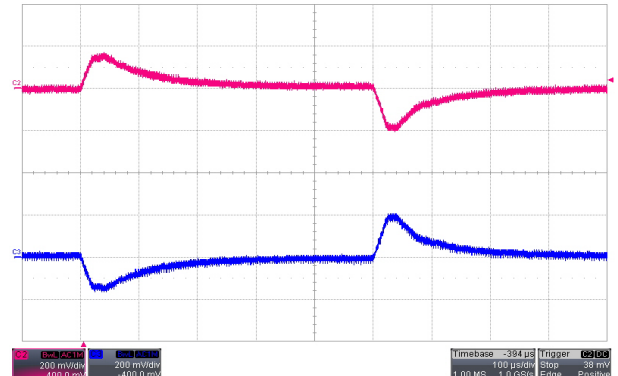
Power Dissipation versus Output Load



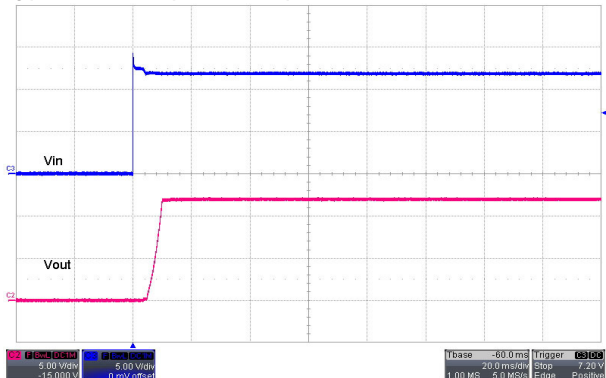
Typical Output Ripple and Noise



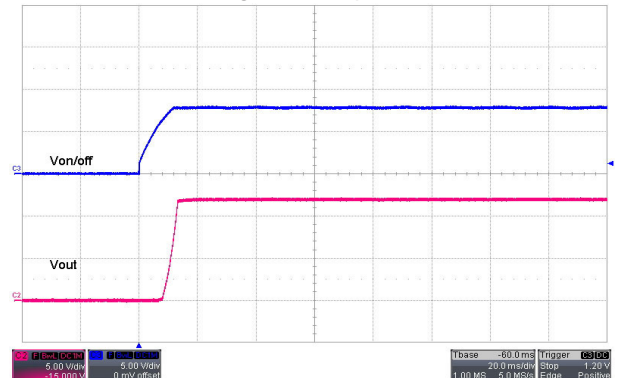
Transient Response to Dynamic Load Change (25%)



Typical Start-Up and Output Rise Characteristic



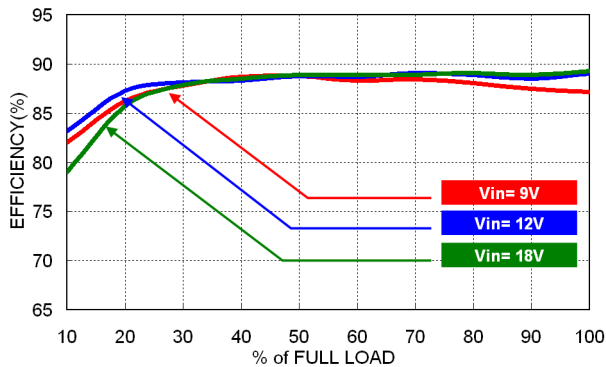
Remote on/off Voltage Start-Up Characteristic



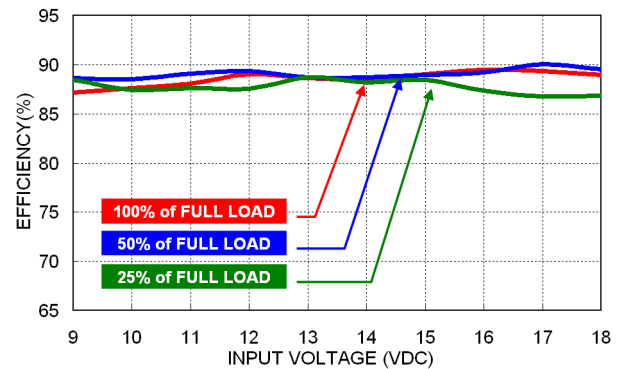
All specifications valid at nominal input voltage, full load and +25°C after warm-up time unless otherwise stated.

THM 30-1223

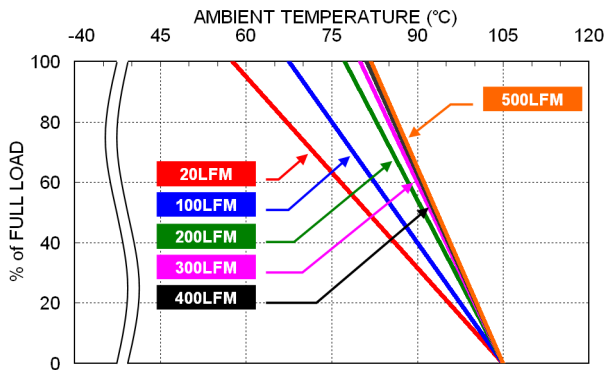
Efficiency versus Output Load



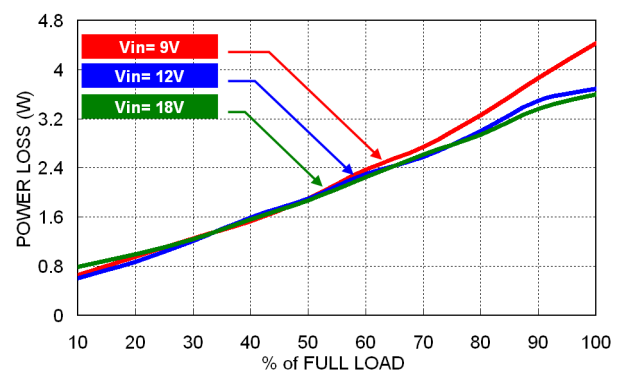
Efficiency versus Input Voltage



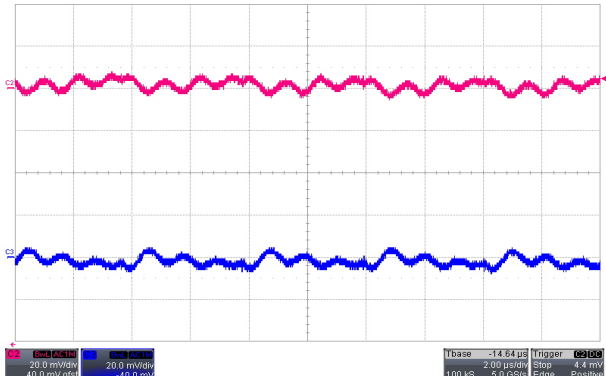
Derating Output Load versus Ambient Temperature



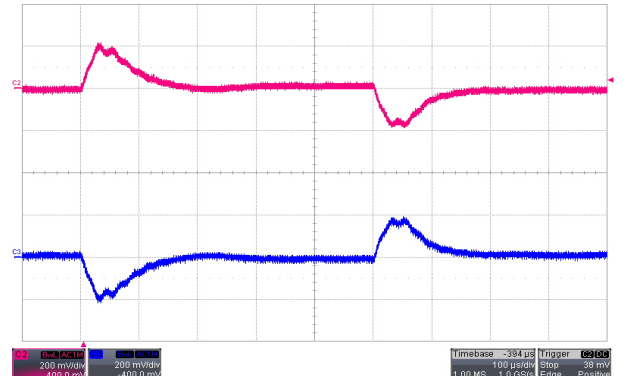
Power Dissipation versus Output Load



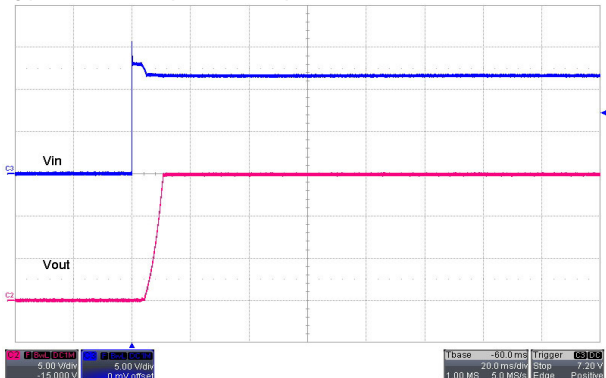
Typical Output Ripple and Noise



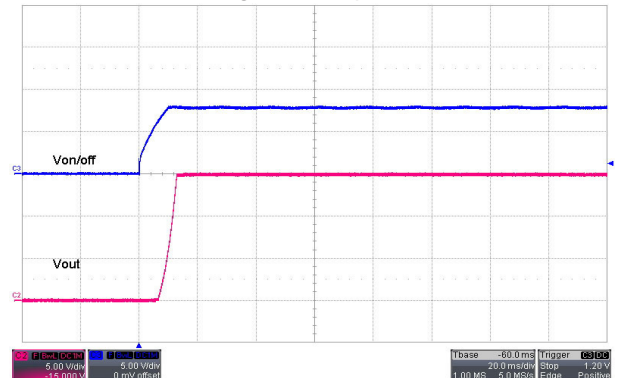
Transient Response to Dynamic Load Change (25%)



Typical Start-Up and Output Rise Characteristic



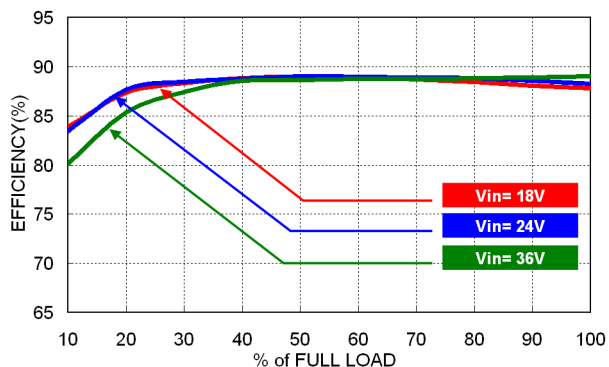
Remote on/off Voltage Start-Up Characteristic



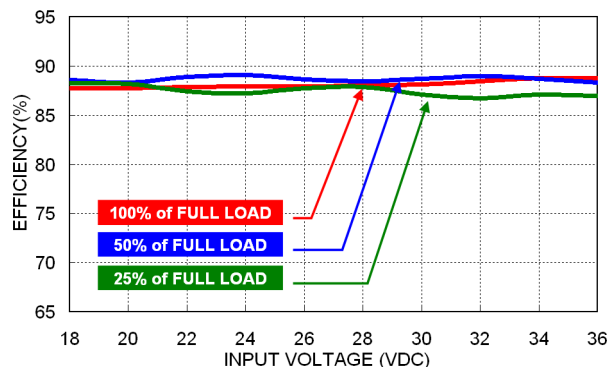
All specifications valid at nominal input voltage, full load and +25°C after warm-up time unless otherwise stated.

THM 30-2411

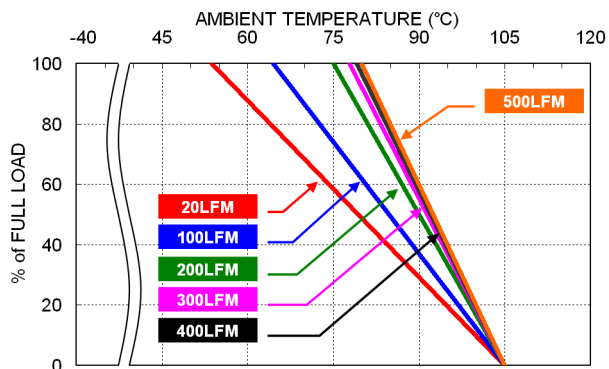
Efficiency versus Output Load



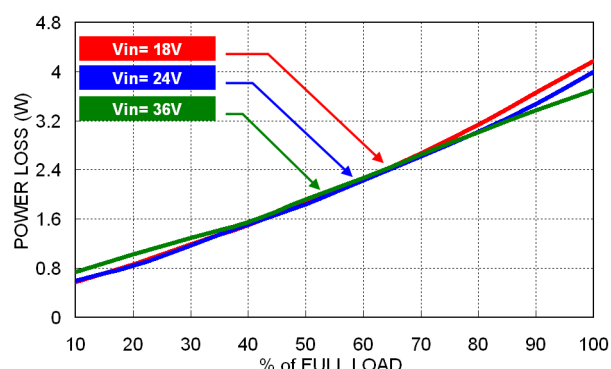
Efficiency versus Input Voltage



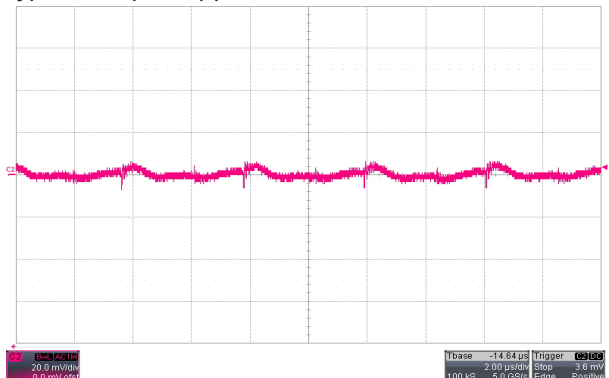
Derating Output Load versus Ambient Temperature



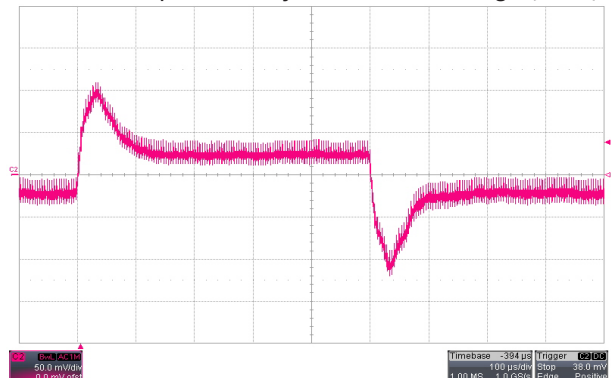
Power Dissipation versus Output Load



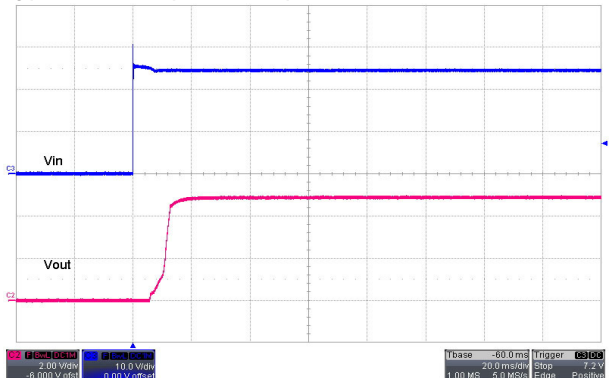
Typical Output Ripple and Noise



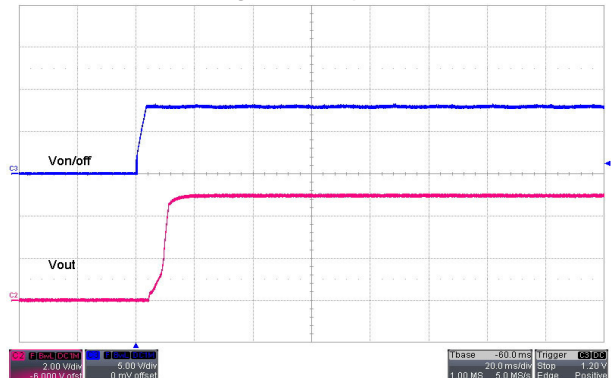
Transient Response to Dynamic Load Change (25%)



Typical Start-Up and Output Rise Characteristic



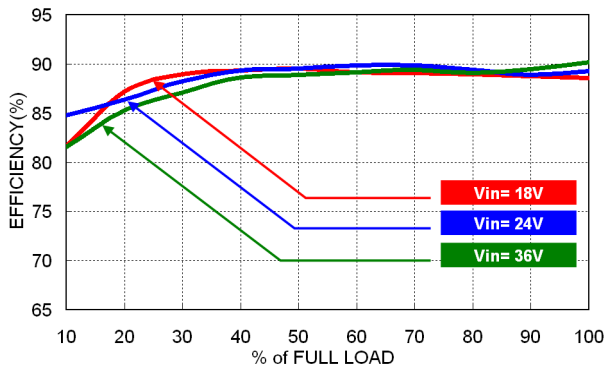
Remote on/off Voltage Start-Up Characteristic



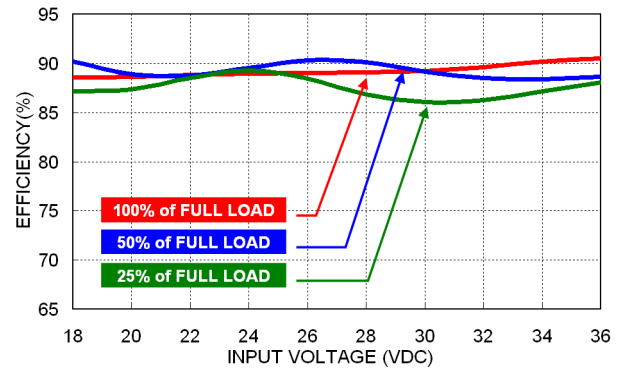
All specifications valid at nominal input voltage, full load and +25°C after warm-up time unless otherwise stated.

THM 30-2412

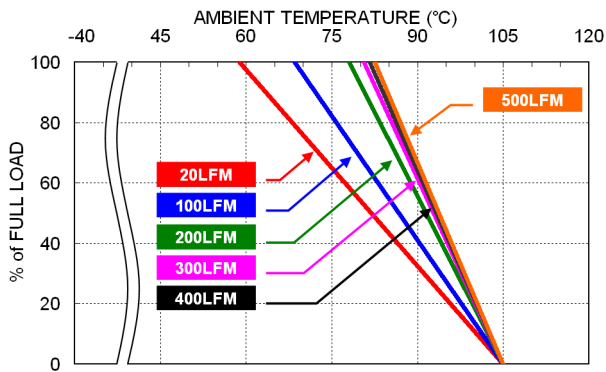
Efficiency versus Output Load



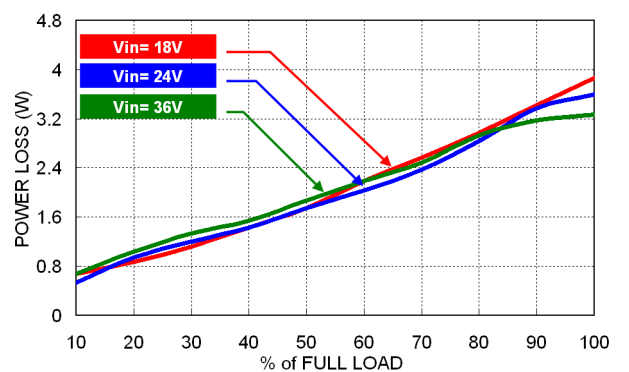
Efficiency versus Input Voltage



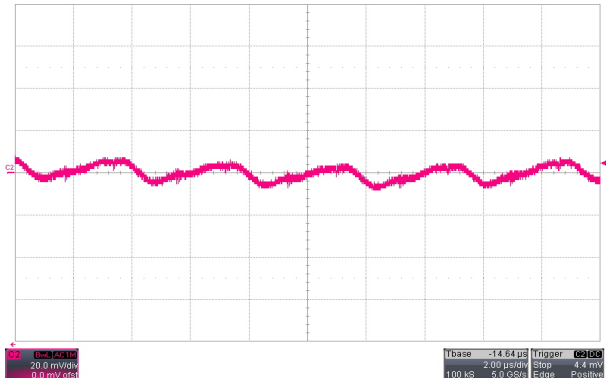
Derating Output Load versus Ambient Temperature



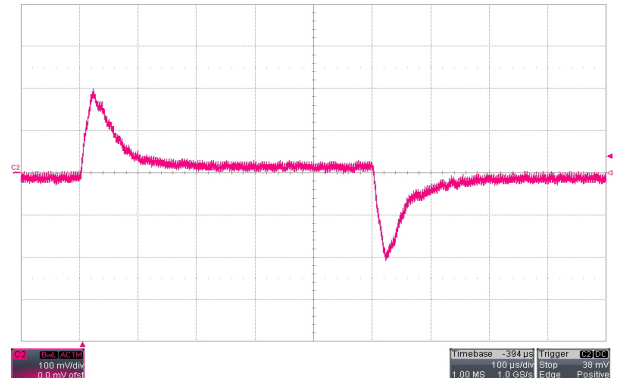
Power Dissipation versus Output Load



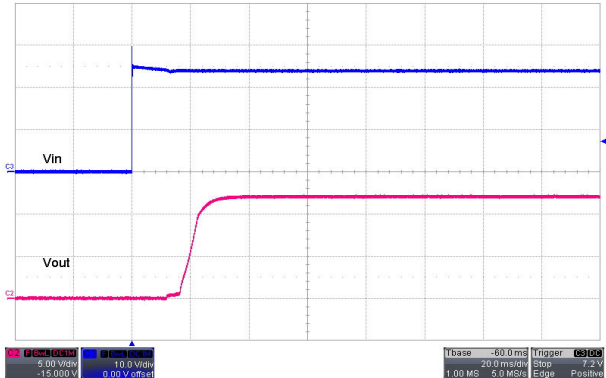
Typical Output Ripple and Noise



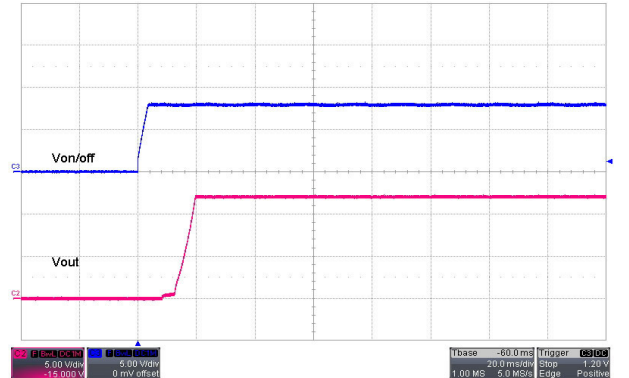
Transient Response to Dynamic Load Change (25%)



Typical Start-Up and Output Rise Characteristic



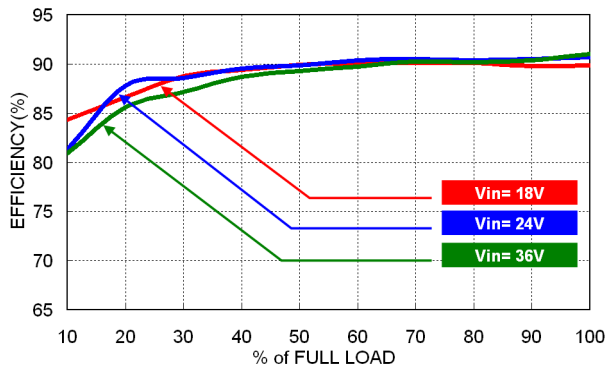
Remote on/off Voltage Start-Up Characteristic



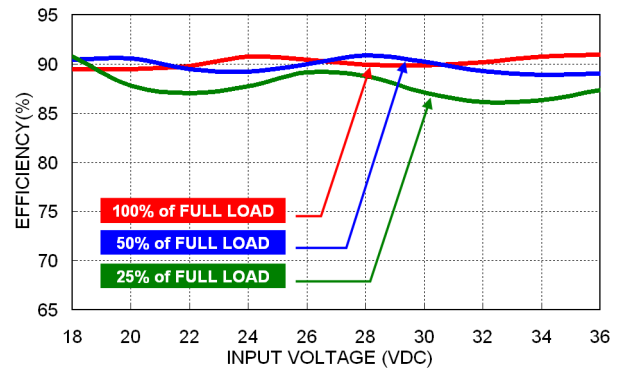
All specifications valid at nominal input voltage, full load and +25°C after warm-up time unless otherwise stated.

THM 30-2413

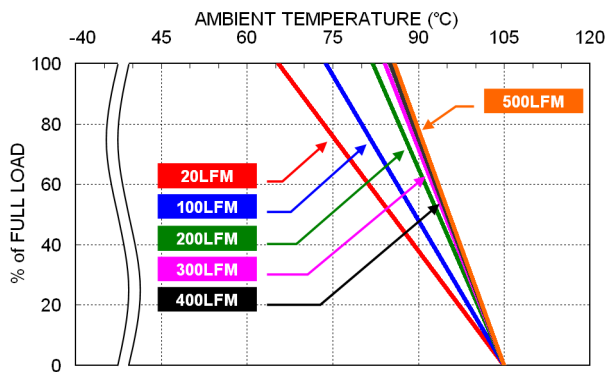
Efficiency versus Output Load



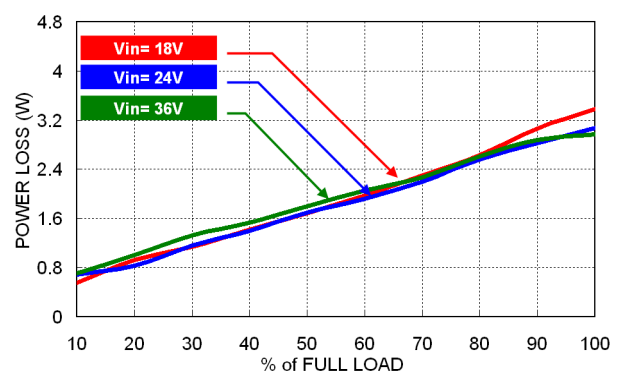
Efficiency versus Input Voltage



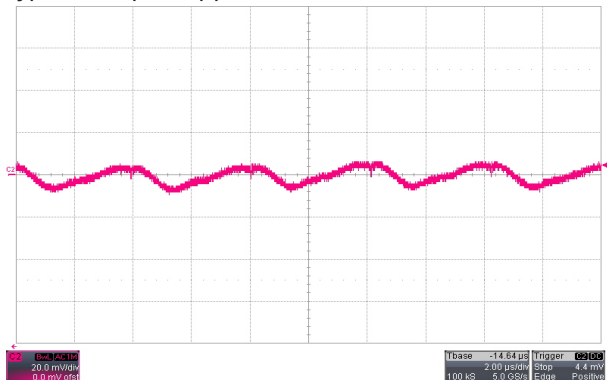
Derating Output Load versus Ambient Temperature



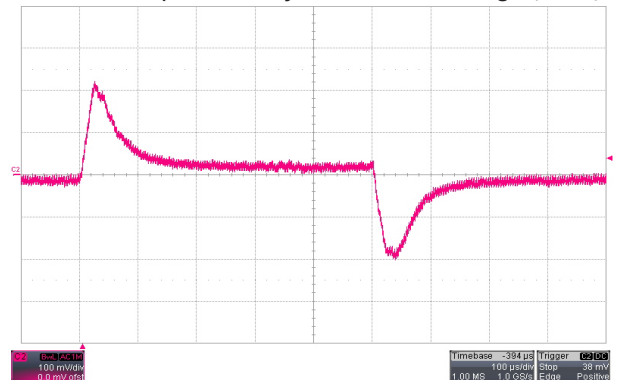
Power Dissipation versus Output Load



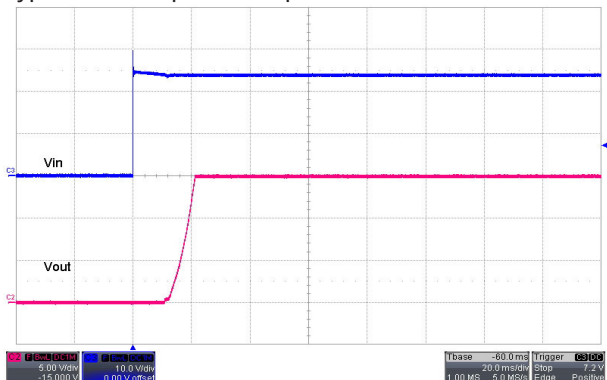
Typical Output Ripple and Noise



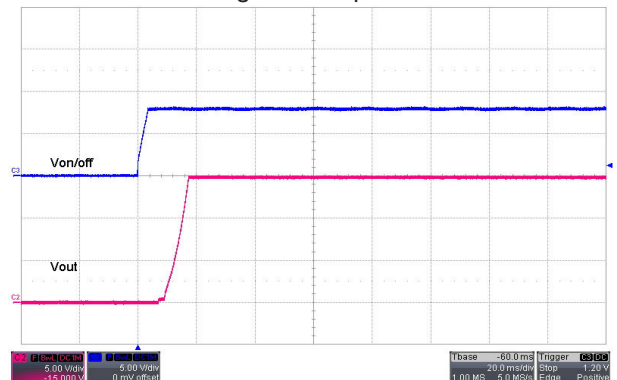
Transient Response to Dynamic Load Change (25%)



Typical Start-Up and Output Rise Characteristic



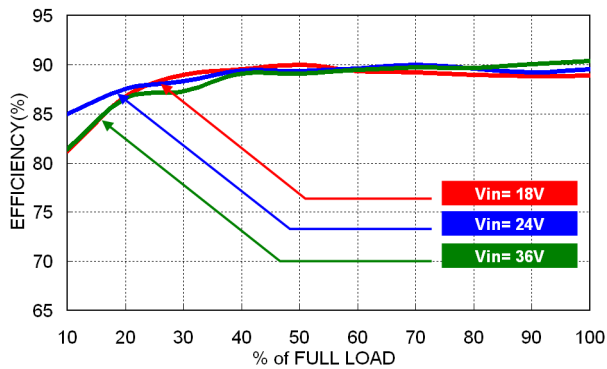
Remote on/off Voltage Start-Up Characteristic



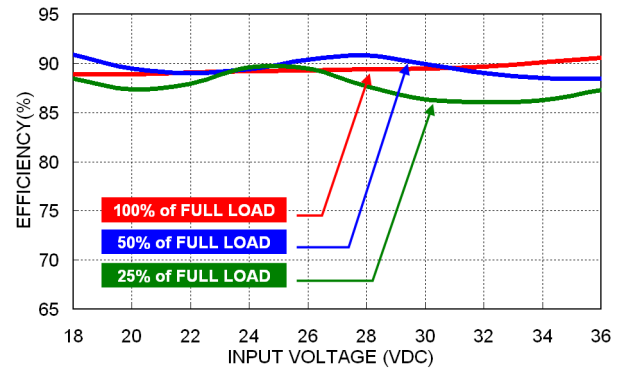
All specifications valid at nominal input voltage, full load and +25°C after warm-up time unless otherwise stated.

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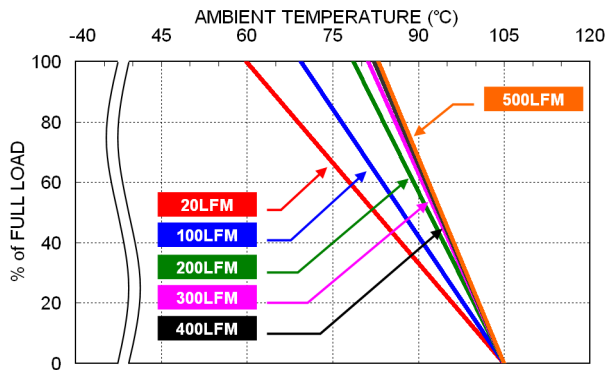
Efficiency versus Output Load



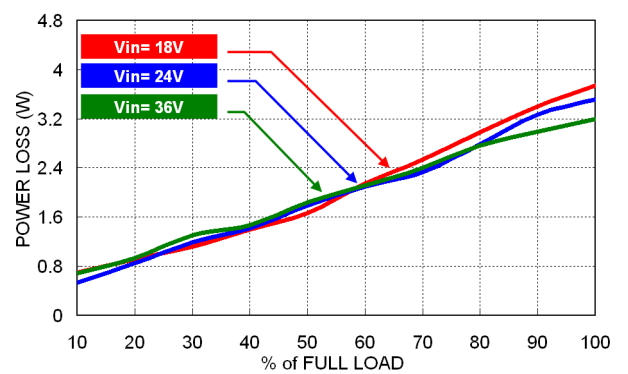
Efficiency versus Input Voltage



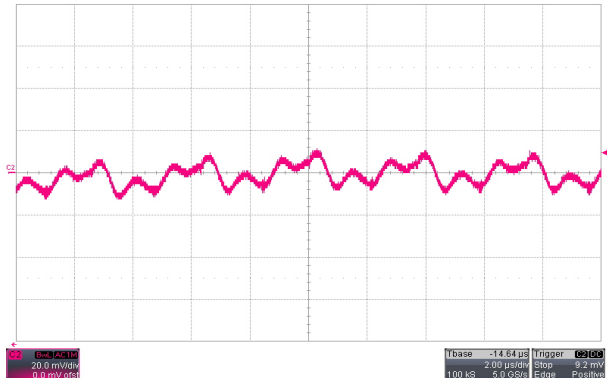
Derating Output Load versus Ambient Temperature



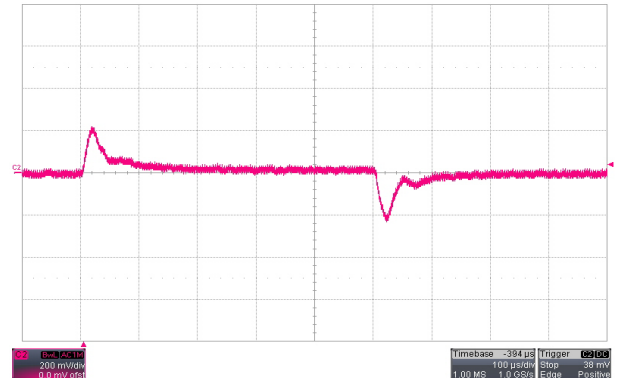
Power Dissipation versus Output Load



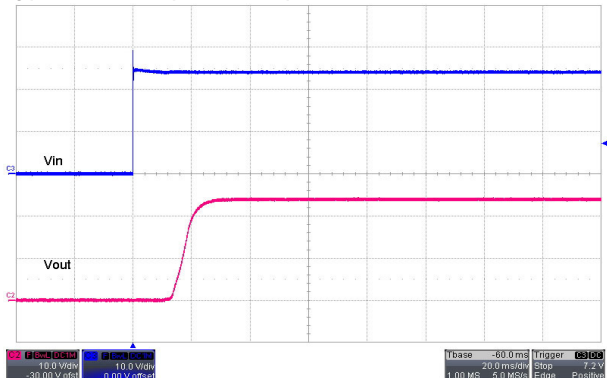
Typical Output Ripple and Noise



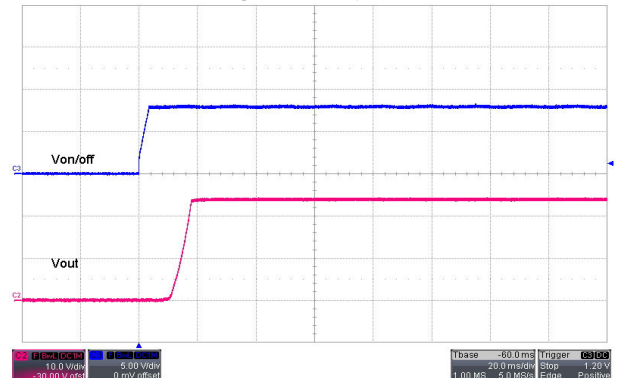
Transient Response to Dynamic Load Change (25%)



Typical Start-Up and Output Rise Characteristic



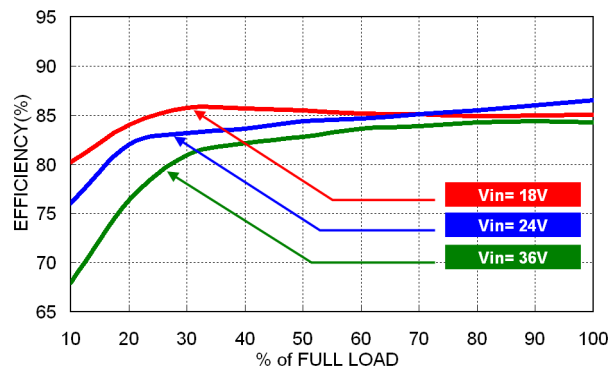
Remote on/off Voltage Start-Up Characteristic



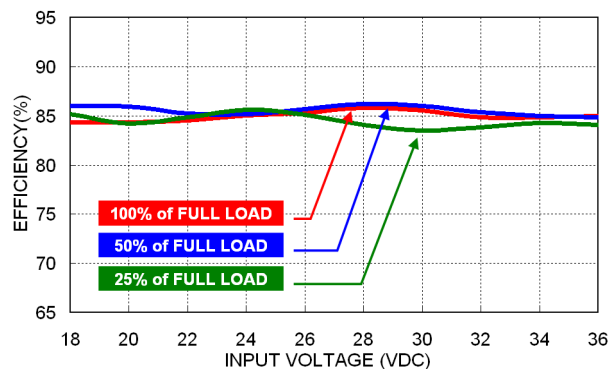
All specifications valid at nominal input voltage, full load and +25°C after warm-up time unless otherwise stated.

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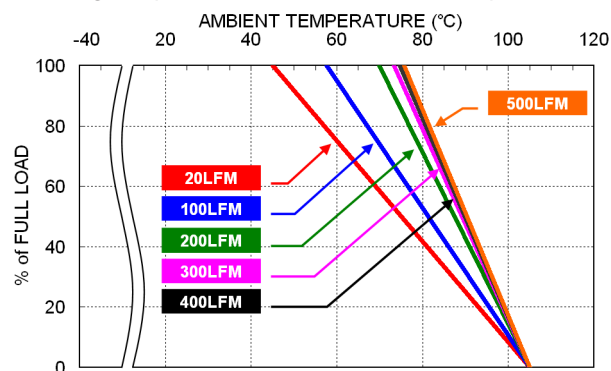
Efficiency versus Output Load



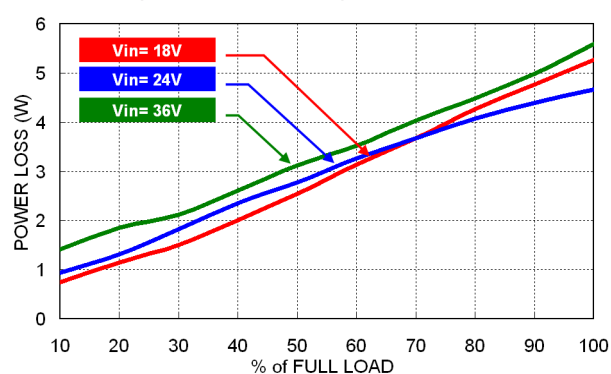
Efficiency versus Input Voltage



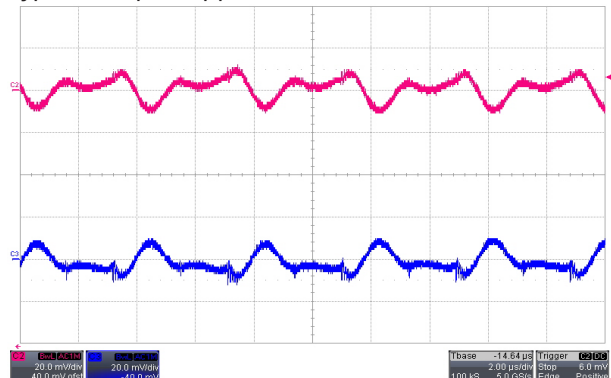
Derating Output Load versus Ambient Temperature



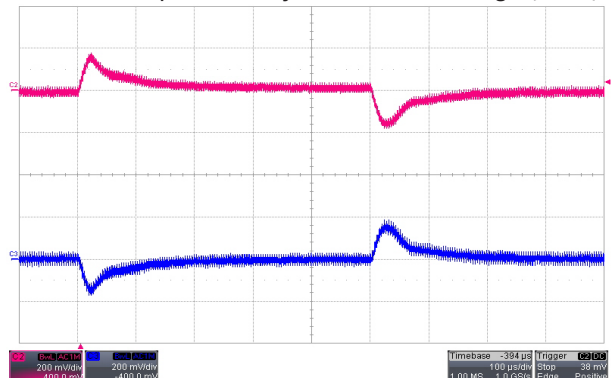
Power Dissipation versus Output Load



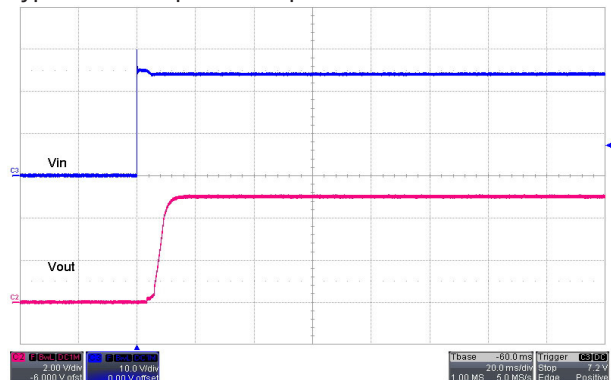
Typical Output Ripple and Noise



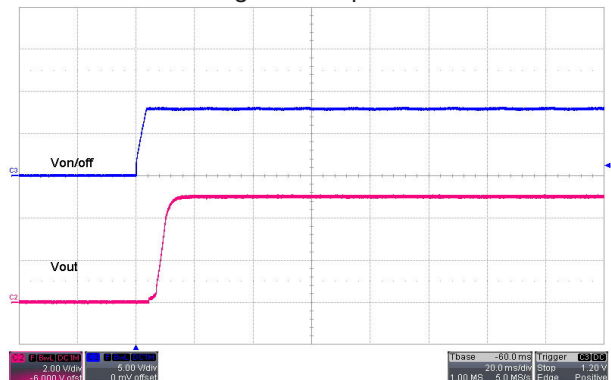
Transient Response to Dynamic Load Change (25%)



Typical Start-Up and Output Rise Characteristic



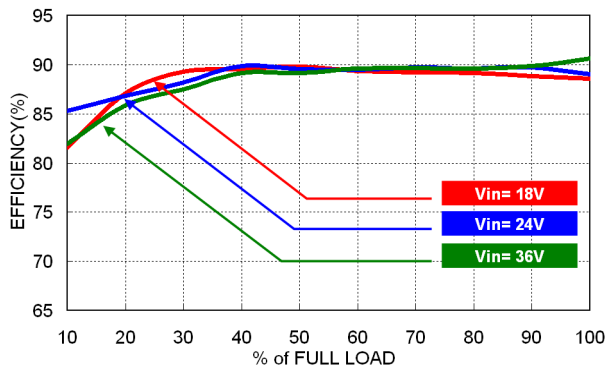
Remote on/off Voltage Start-Up Characteristic



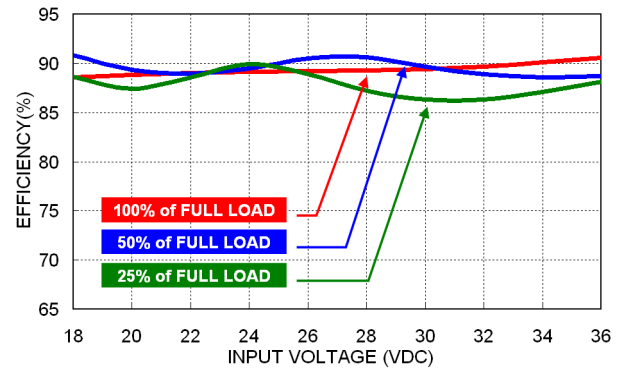
All specifications valid at nominal input voltage, full load and +25°C after warm-up time unless otherwise stated.

THM 30-2422

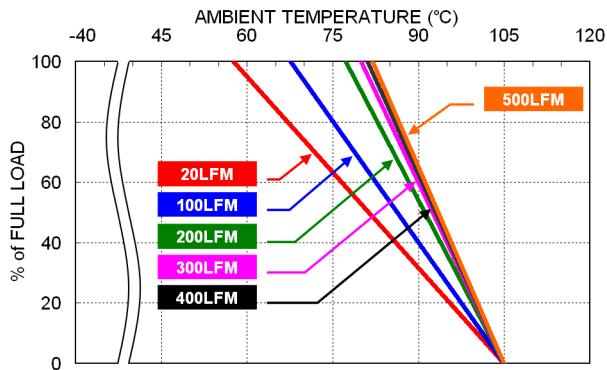
Efficiency versus Output Load



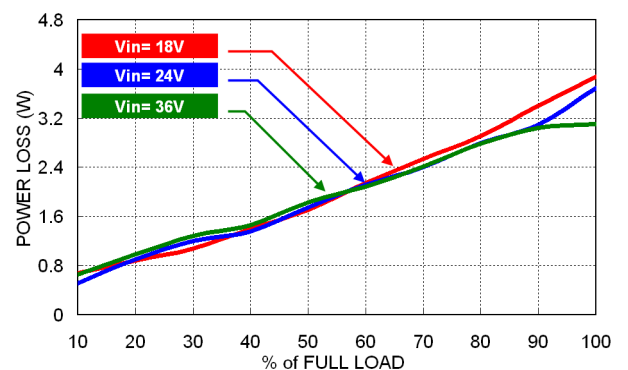
Efficiency versus Input Voltage



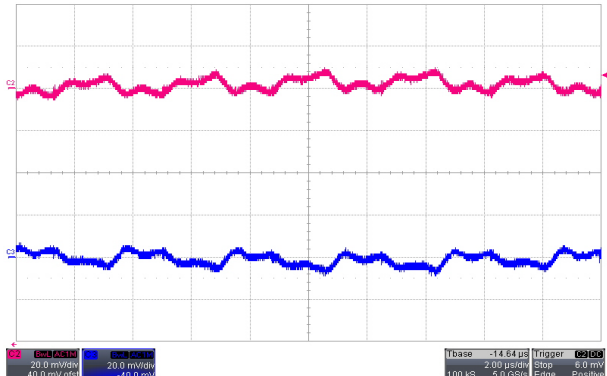
Derating Output Load versus Ambient Temperature



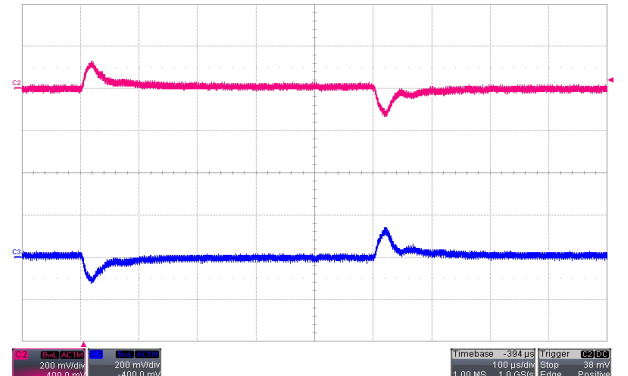
Power Dissipation versus Output Load



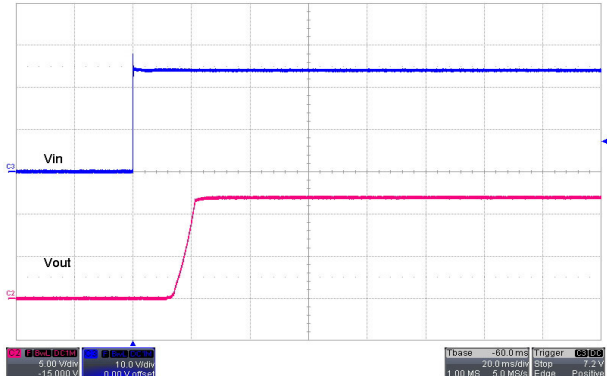
Typical Output Ripple and Noise



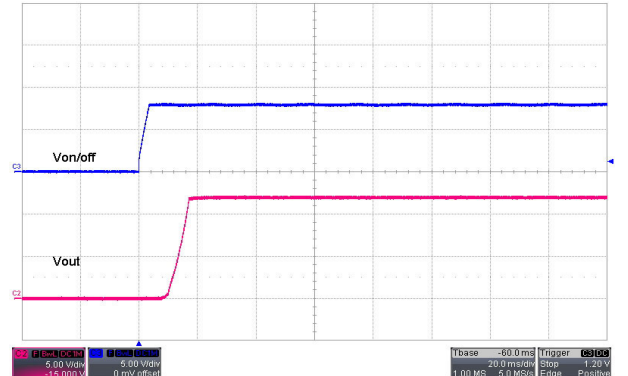
Transient Response to Dynamic Load Change (25%)



Typical Start-Up and Output Rise Characteristic



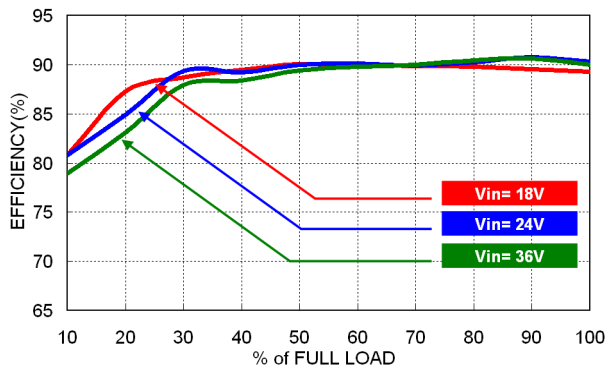
Remote on/off Voltage Start-Up Characteristic



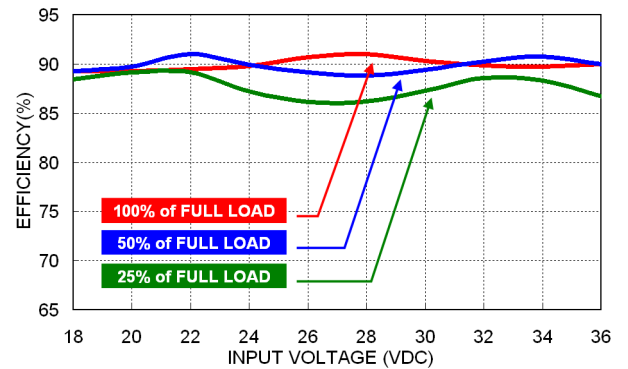
All specifications valid at nominal input voltage, full load and +25°C after warm-up time unless otherwise stated.

THM 30-2423

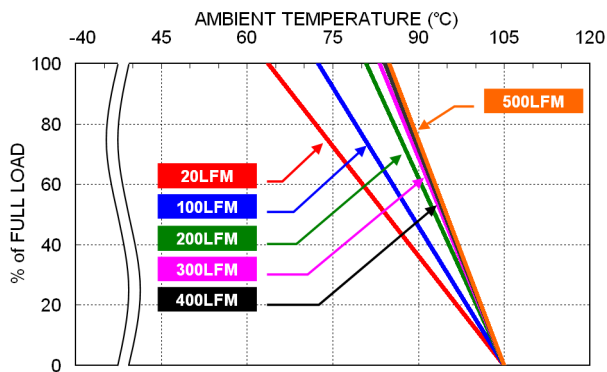
Efficiency versus Output Load



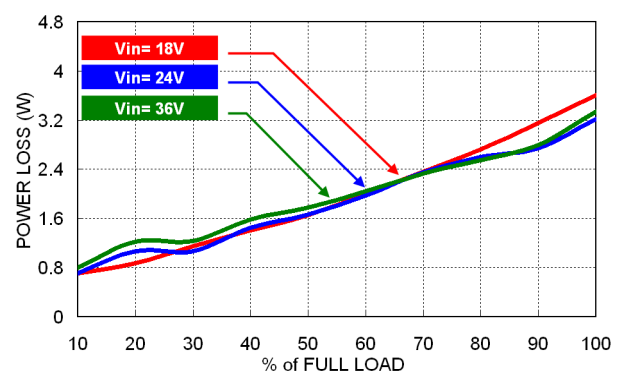
Efficiency versus Input Voltage



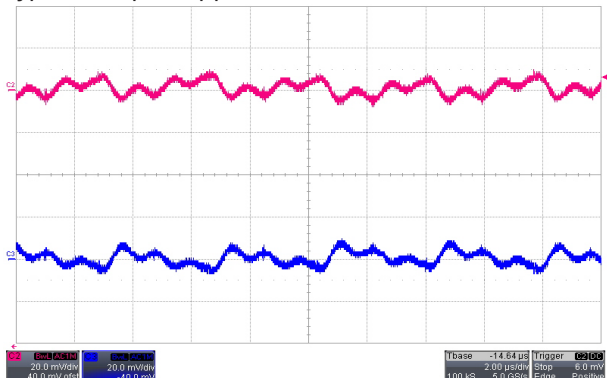
Derating Output Load versus Ambient Temperature



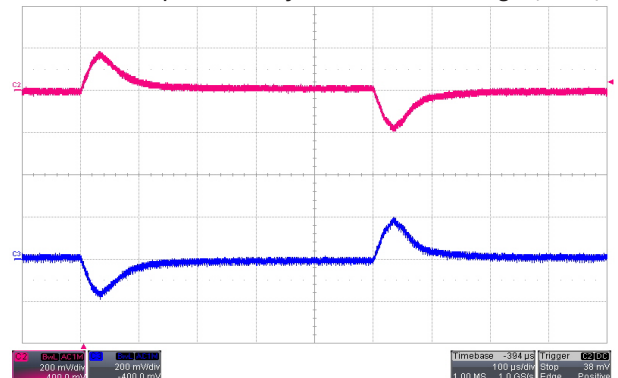
Power Dissipation versus Output Load



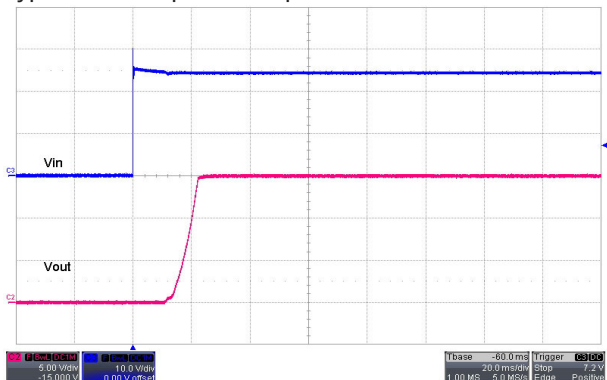
Typical Output Ripple and Noise



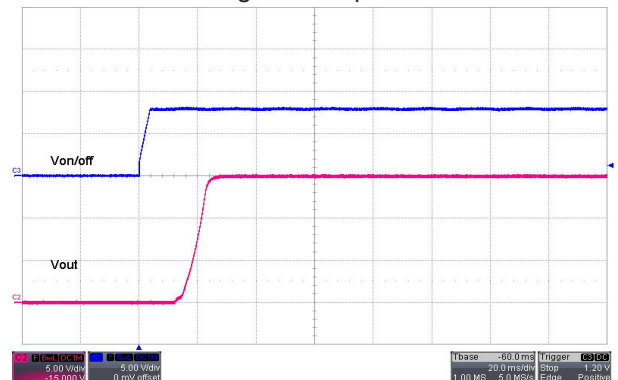
Transient Response to Dynamic Load Change (25%)



Typical Start-Up and Output Rise Characteristic



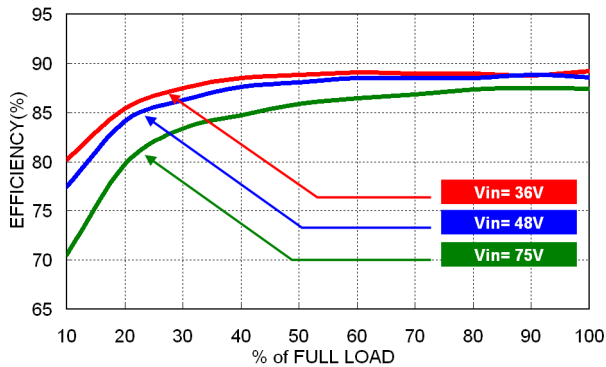
Remote on/off Voltage Start-Up Characteristic



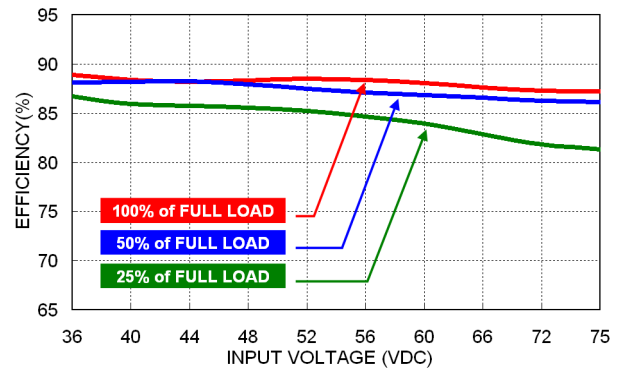
All specifications valid at nominal input voltage, full load and +25°C after warm-up time unless otherwise stated.

THM 30-4811

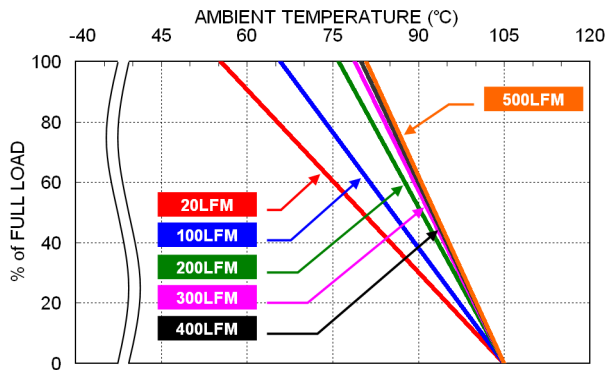
Efficiency versus Output Load



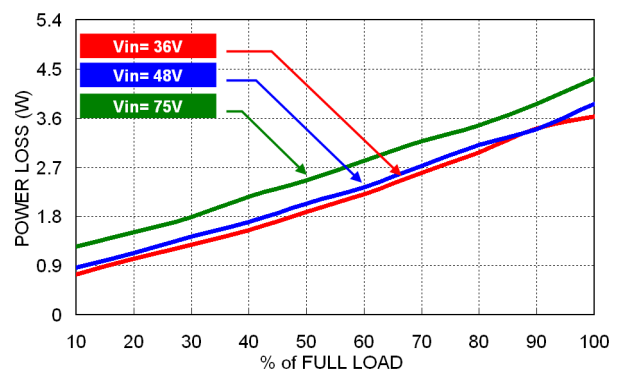
Efficiency versus Input Voltage



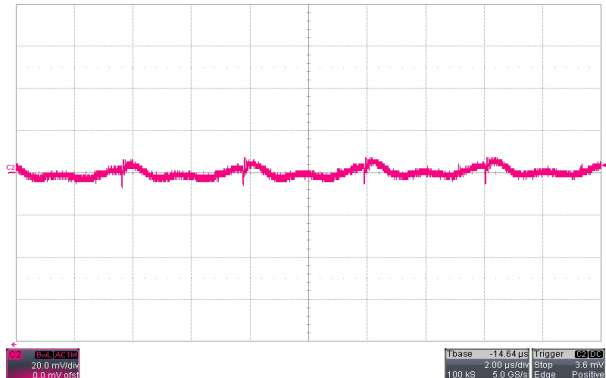
Derating Output Load versus Ambient Temperature



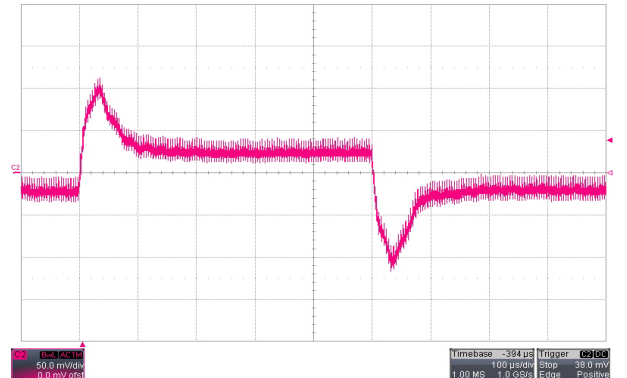
Power Dissipation versus Output Load



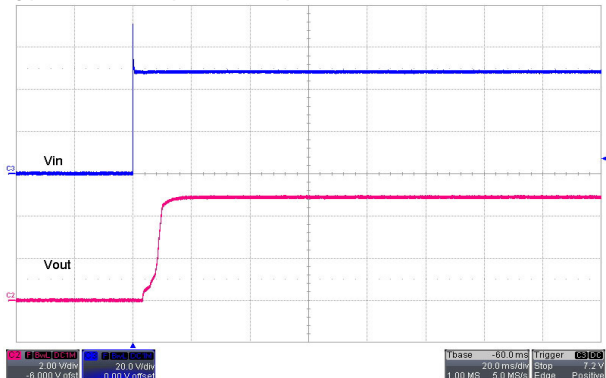
Typical Output Ripple and Noise



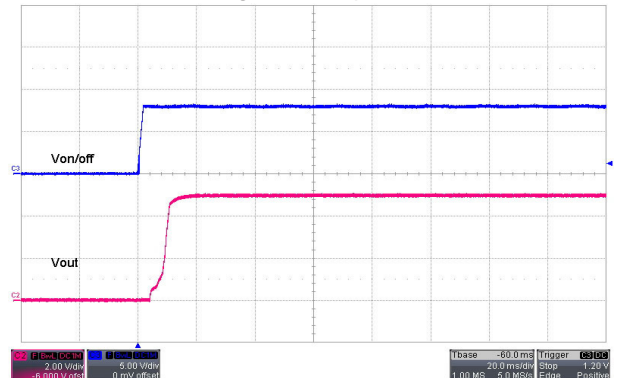
Transient Response to Dynamic Load Change (25%)



Typical Start-Up and Output Rise Characteristic



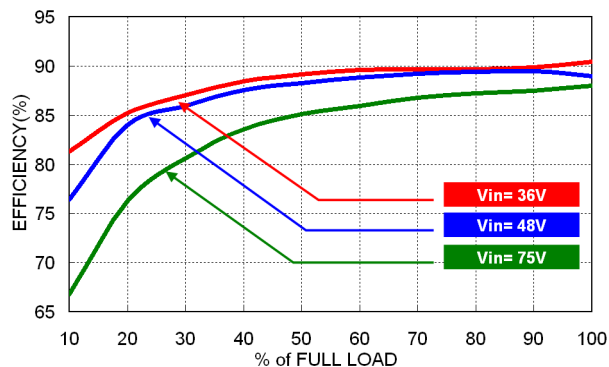
Remote on/off Voltage Start-Up Characteristic



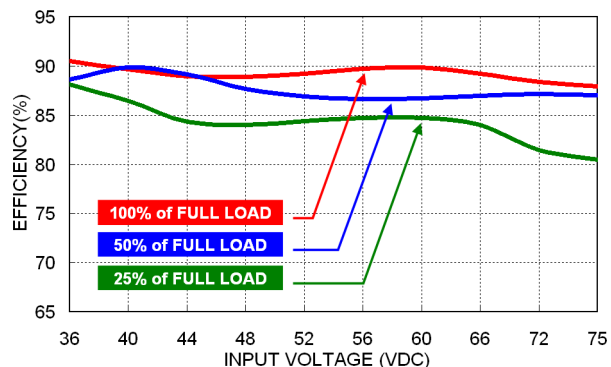
All specifications valid at nominal input voltage, full load and +25°C after warm-up time unless otherwise stated.

THM 30-4812

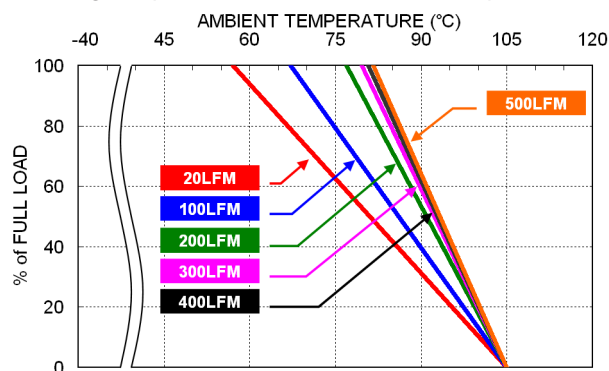
Efficiency versus Output Load



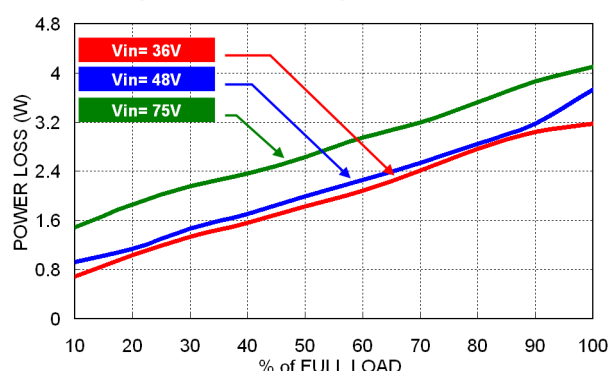
Efficiency versus Input Voltage



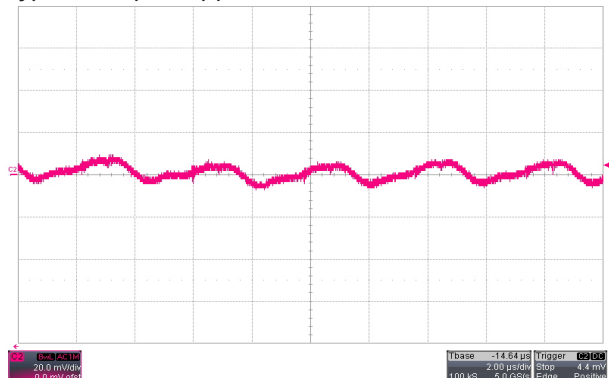
Derating Output Load versus Ambient Temperature



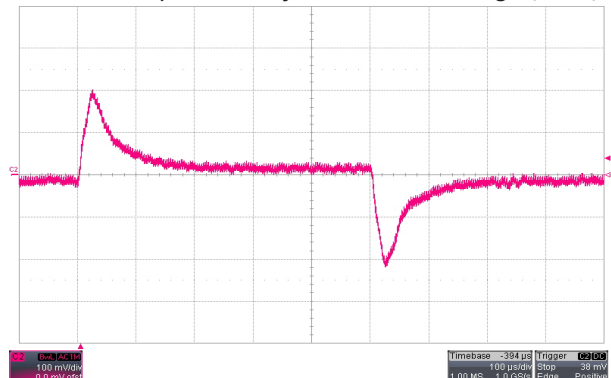
Power Dissipation versus Output Load



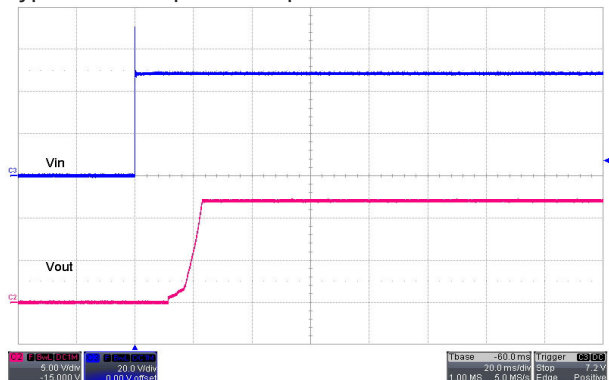
Typical Output Ripple and Noise



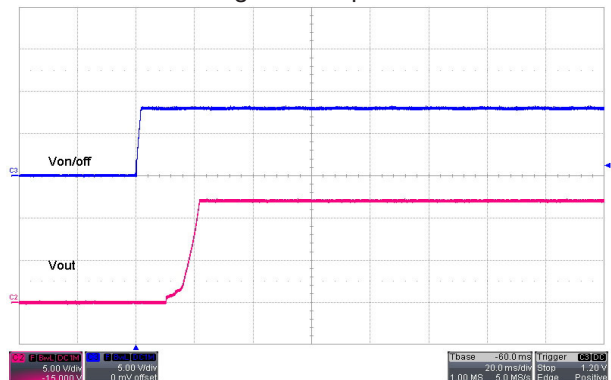
Transient Response to Dynamic Load Change (25%)



Typical Start-Up and Output Rise Characteristic



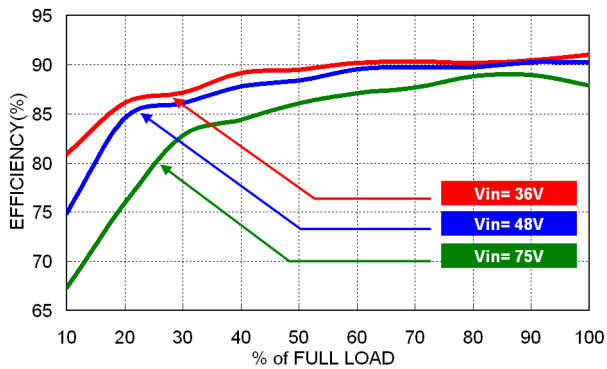
Remote on/off Voltage Start-Up Characteristic



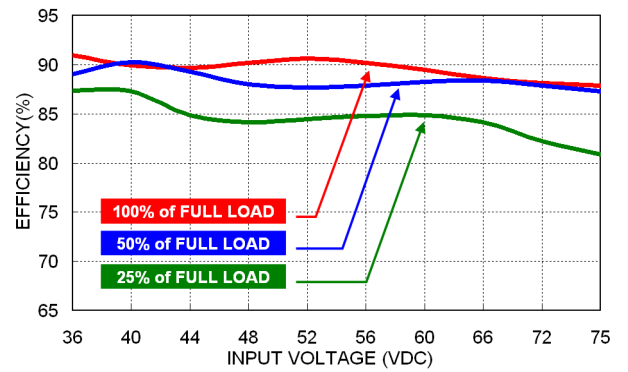
All specifications valid at nominal input voltage, full load and +25°C after warm-up time unless otherwise stated.

THM 30-4813

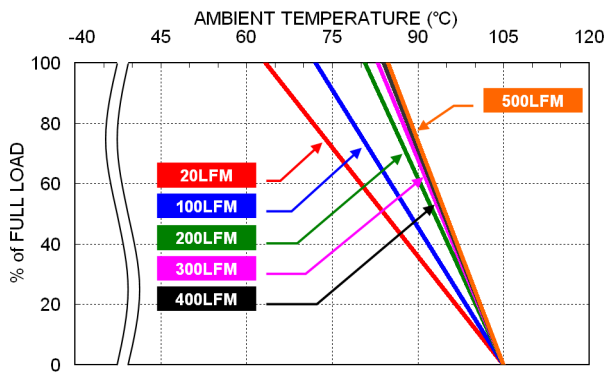
Efficiency versus Output Load



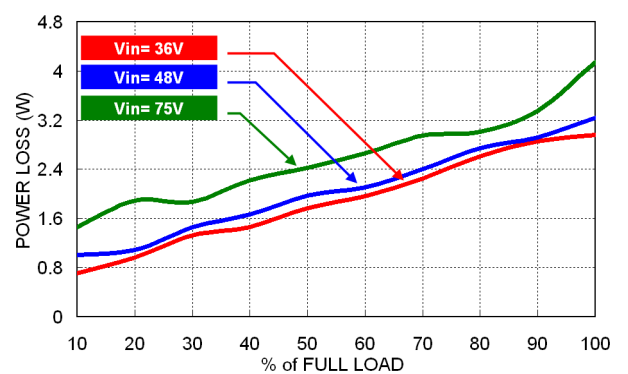
Efficiency versus Input Voltage



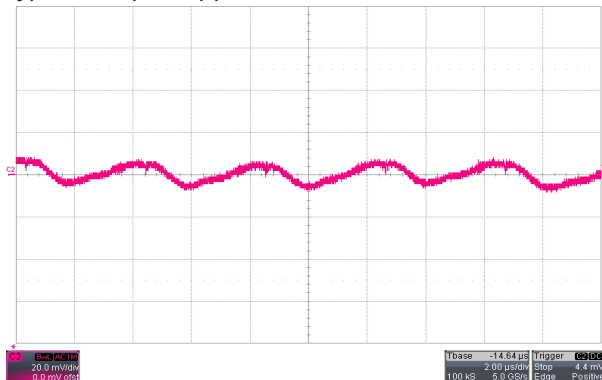
Derating Output Load versus Ambient Temperature



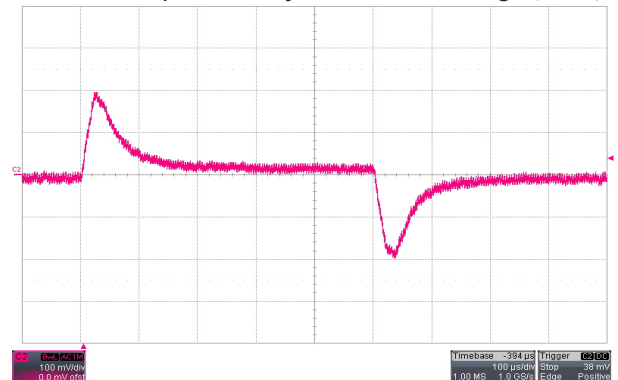
Power Dissipation versus Output Load



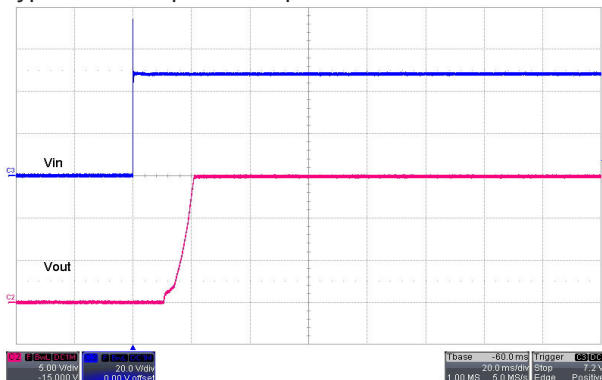
Typical Output Ripple and Noise



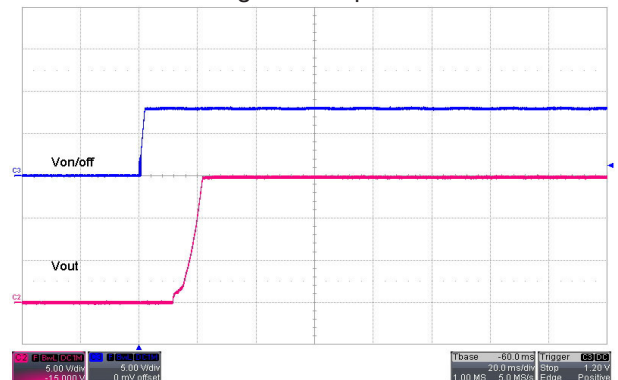
Transient Response to Dynamic Load Change (25%)



Typical Start-Up and Output Rise Characteristic



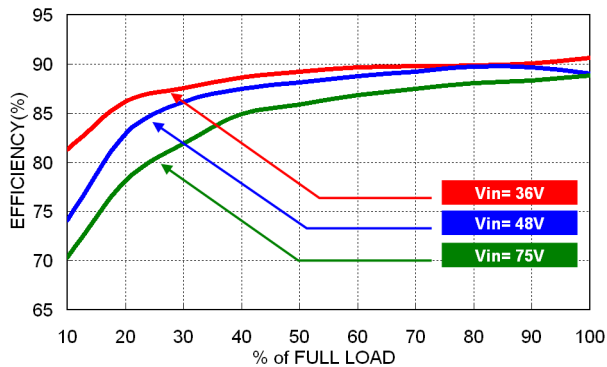
Remote on/off Voltage Start-Up Characteristic



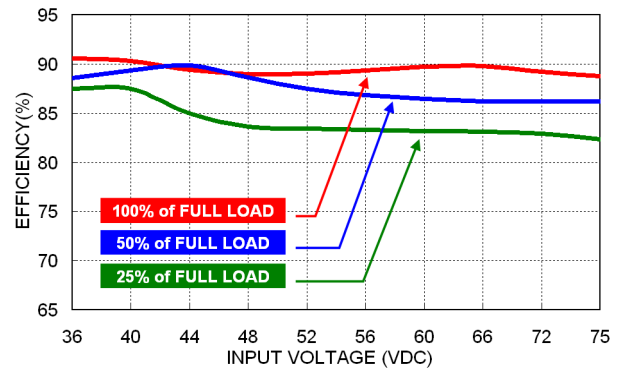
All specifications valid at nominal input voltage, full load and +25°C after warm-up time unless otherwise stated.

THM 30-4815

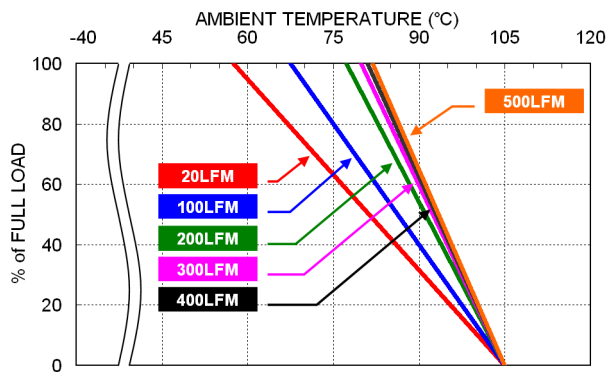
Efficiency versus Output Load



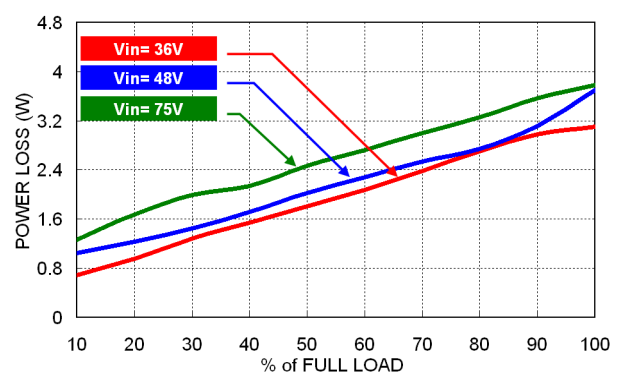
Efficiency versus Input Voltage



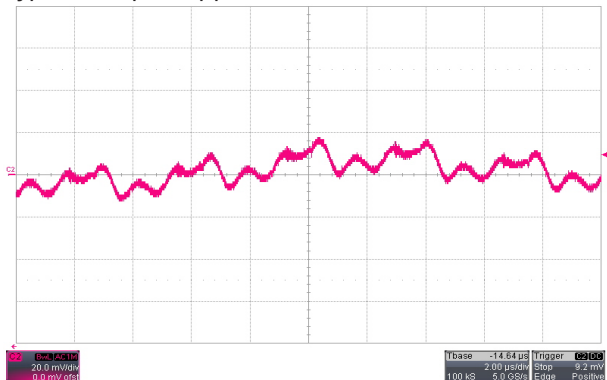
Derating Output Load versus Ambient Temperature



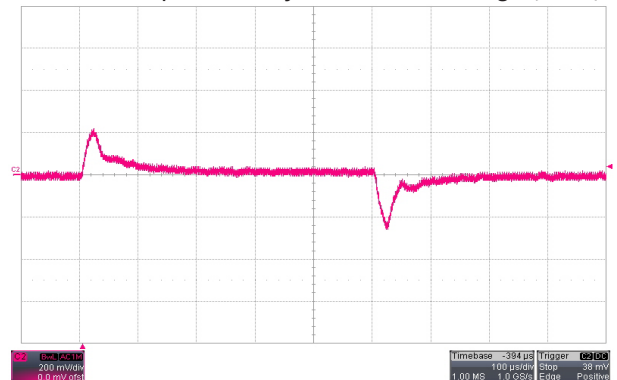
Power Dissipation versus Output Load



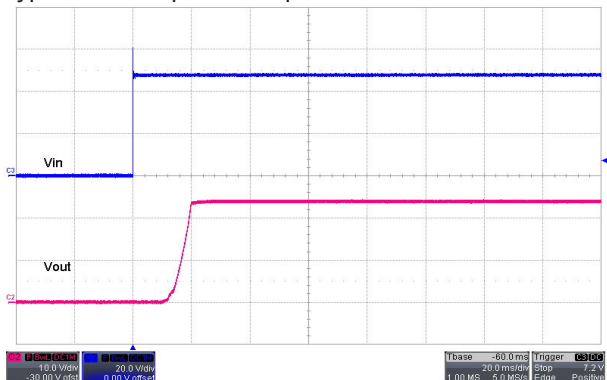
Typical Output Ripple and Noise



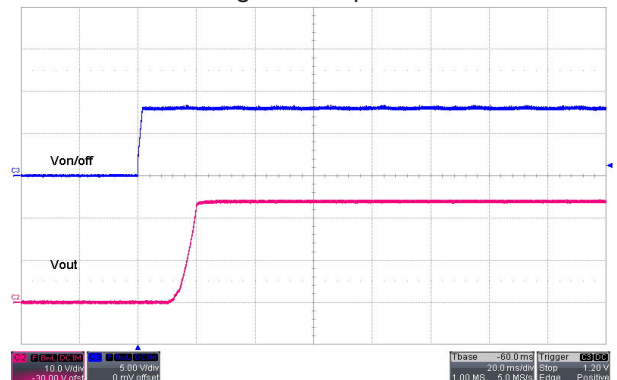
Transient Response to Dynamic Load Change (25%)



Typical Start-Up and Output Rise Characteristic



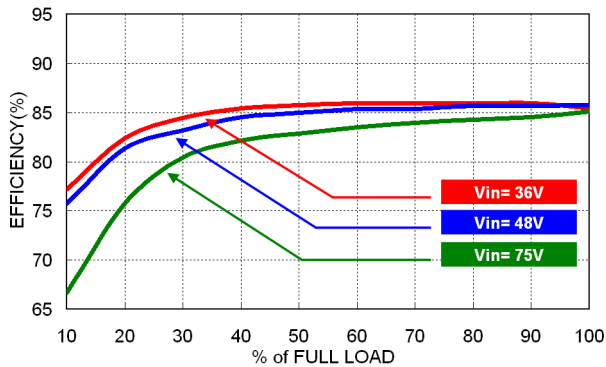
Remote on/off Voltage Start-Up Characteristic



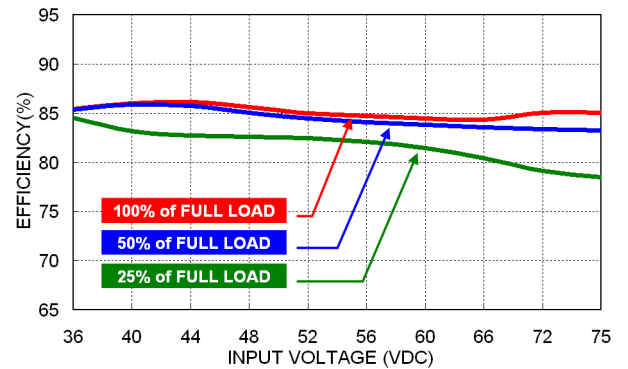
All specifications valid at nominal input voltage, full load and +25°C after warm-up time unless otherwise stated.

THM 30-4821

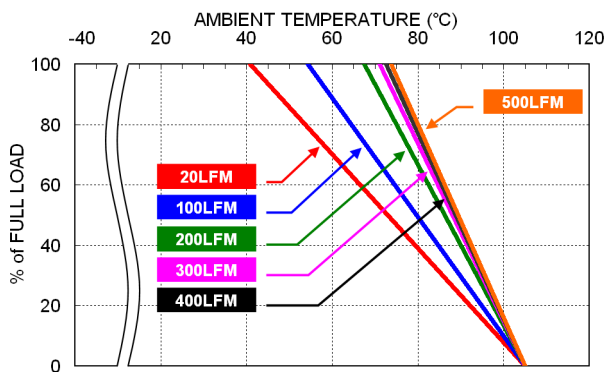
Efficiency versus Output Load



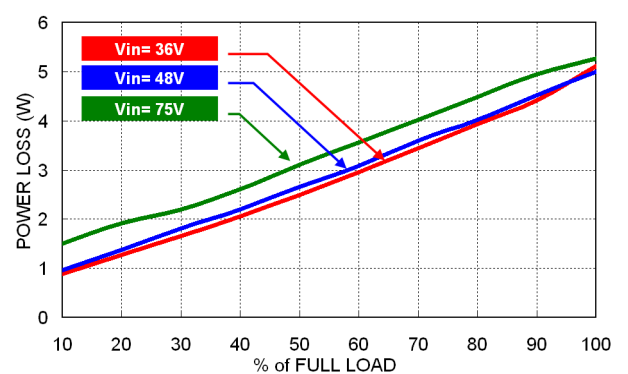
Efficiency versus Input Voltage



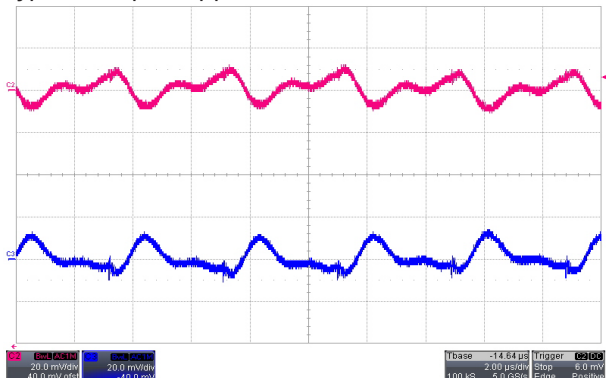
Derating Output Load versus Ambient Temperature



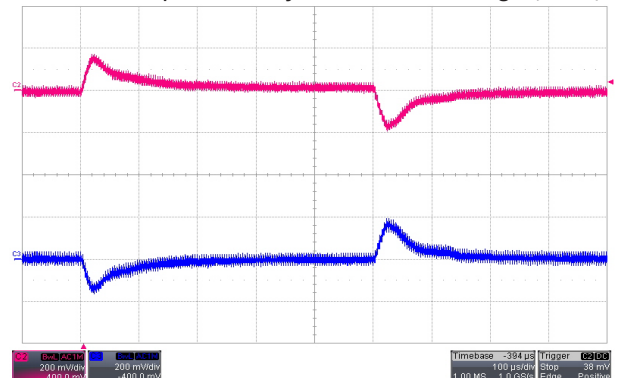
Power Dissipation versus Output Load



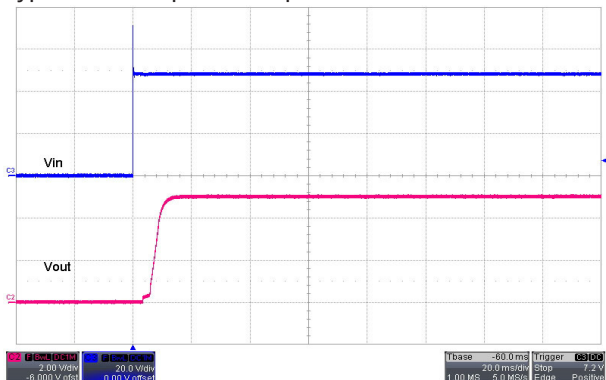
Typical Output Ripple and Noise



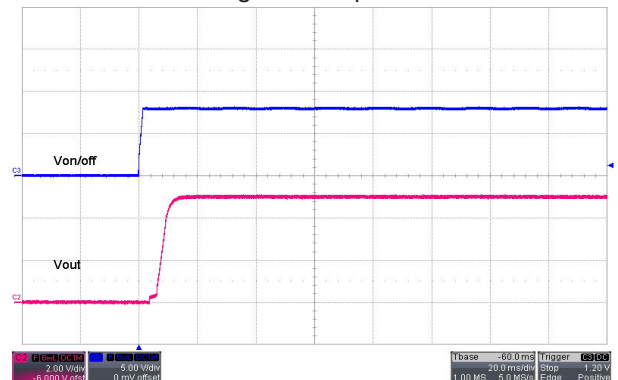
Transient Response to Dynamic Load Change (25%)



Typical Start-Up and Output Rise Characteristic



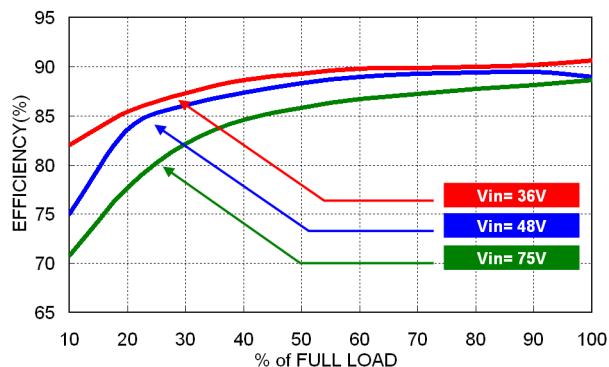
Remote on/off Voltage Start-Up Characteristic



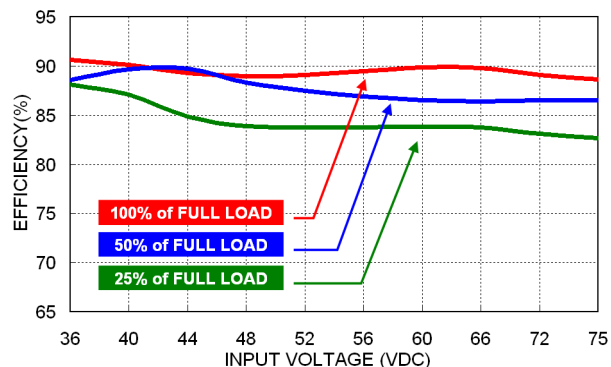
All specifications valid at nominal input voltage, full load and +25°C after warm-up time unless otherwise stated.

THM 30-4822

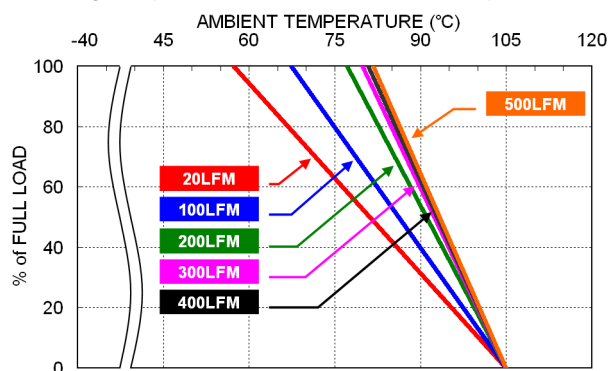
Efficiency versus Output Load



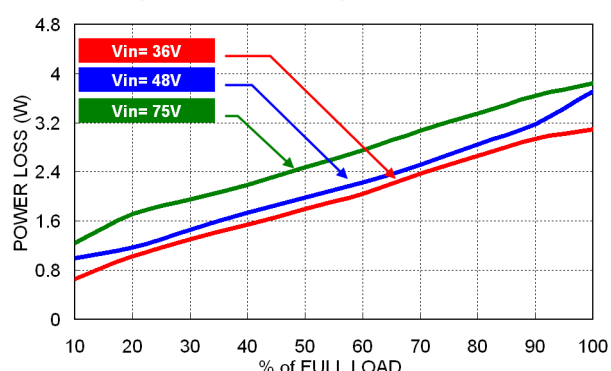
Efficiency versus Input Voltage



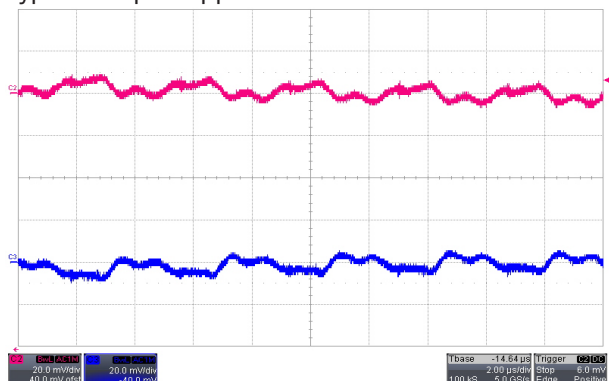
Derating Output Load versus Ambient Temperature



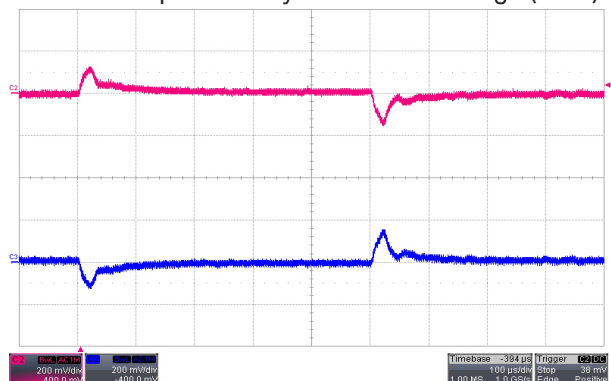
Power Dissipation versus Output Load



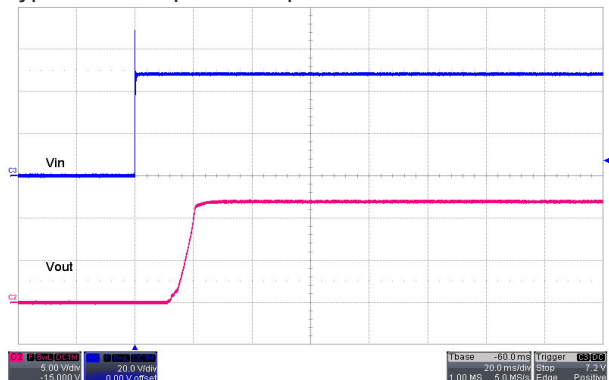
Typical Output Ripple and Noise



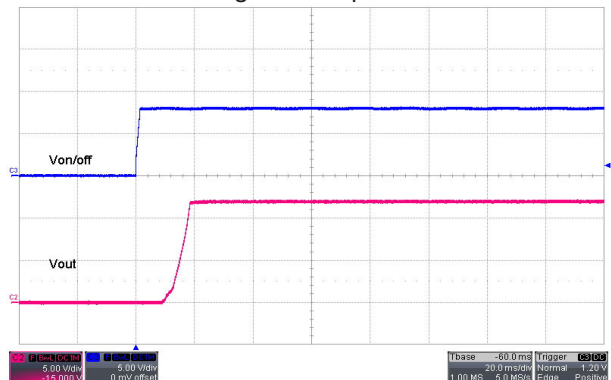
Transient Response to Dynamic Load Change (25%)



Typical Start-Up and Output Rise Characteristic



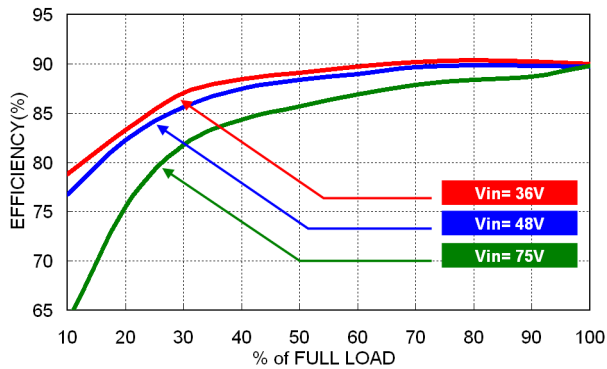
Remote on/off Voltage Start-Up Characteristic



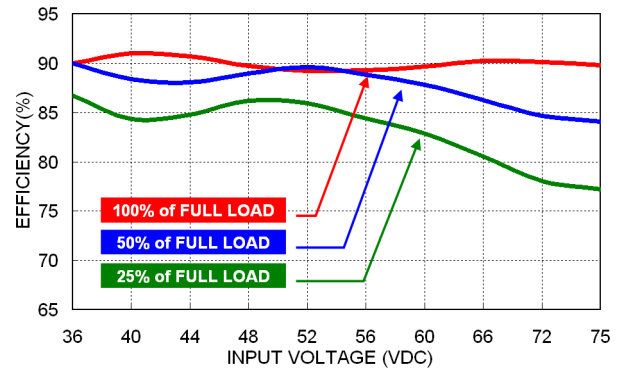
All specifications valid at nominal input voltage, full load and +25°C after warm-up time unless otherwise stated.

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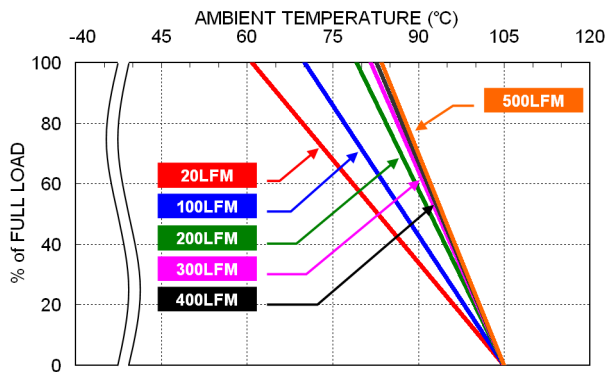
Efficiency versus Output Load



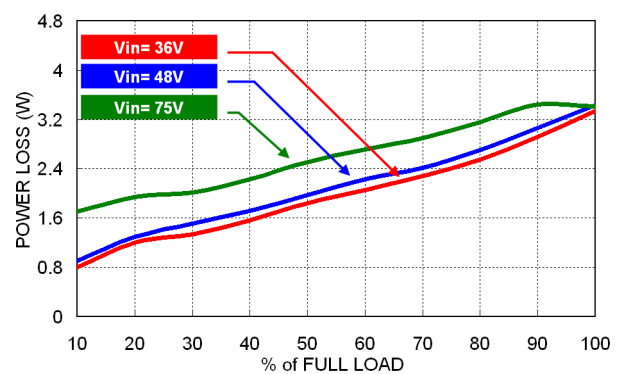
Efficiency versus Input Voltage



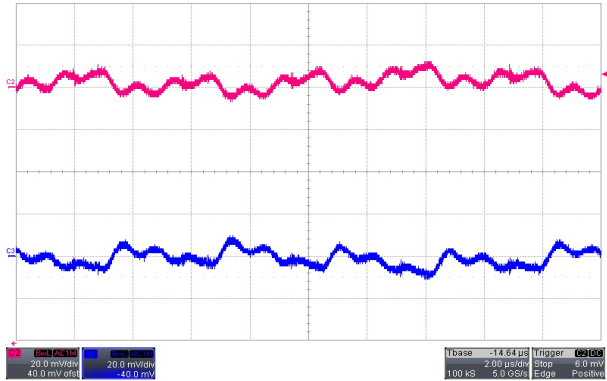
Derating Output Load versus Ambient Temperature



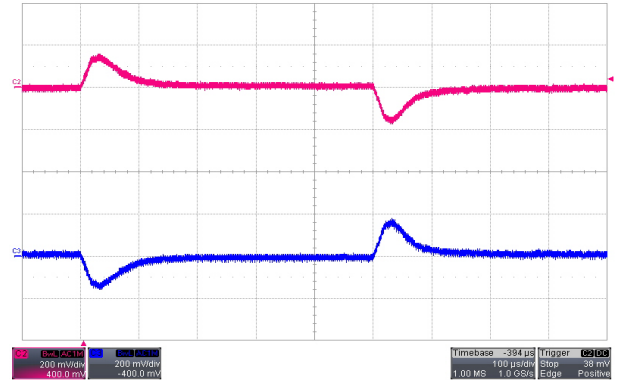
Power Dissipation versus Output Load



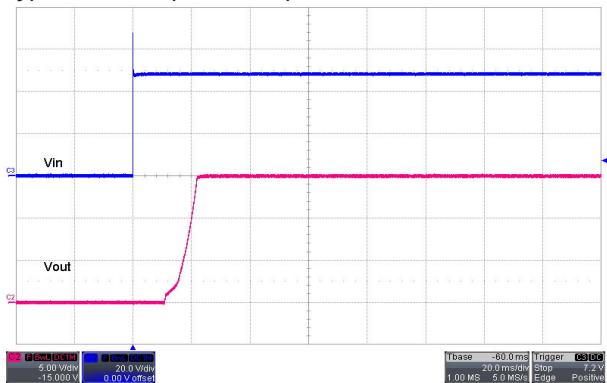
Typical Output Ripple and Noise



Transient Response to Dynamic Load Change (25%)



Typical Start-Up and Output Rise Characteristic



Remote on/off Voltage Start-Up Characteristic

