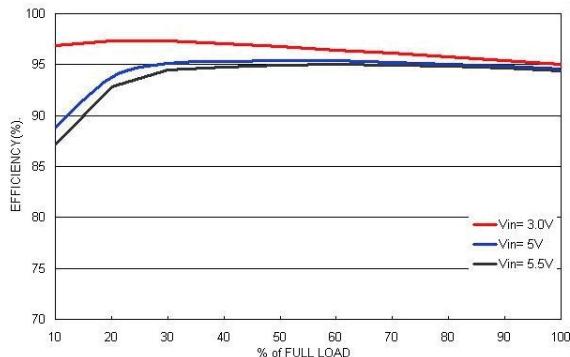


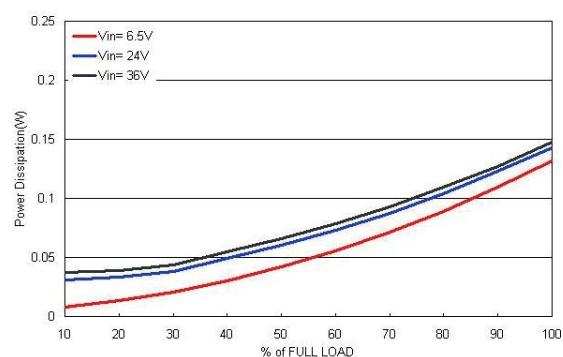
Characteristic Curves

TSRN 1-0525SM (positive Output voltage)

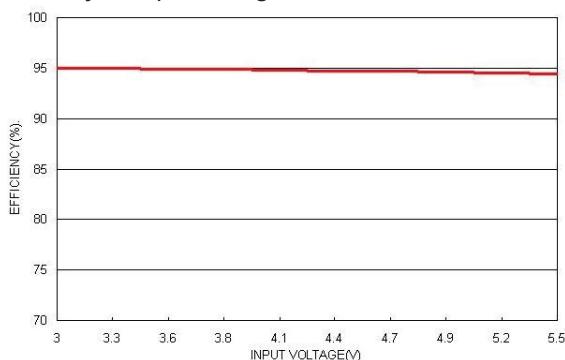
Efficiency vs Output Load



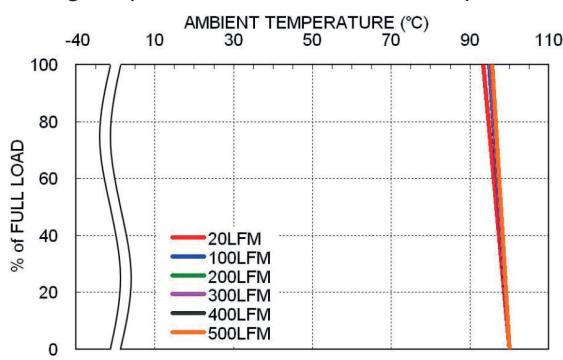
Power Dissipation vs Output Load



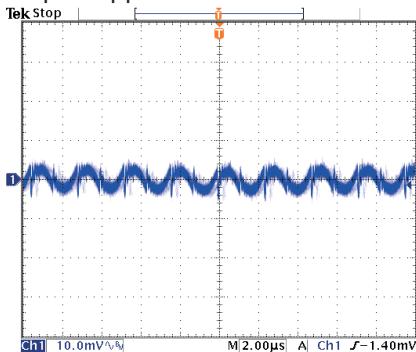
Efficiency vs Input Voltage



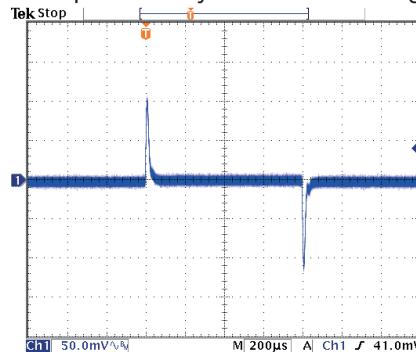
Derating Output Load versus Ambient Temperature



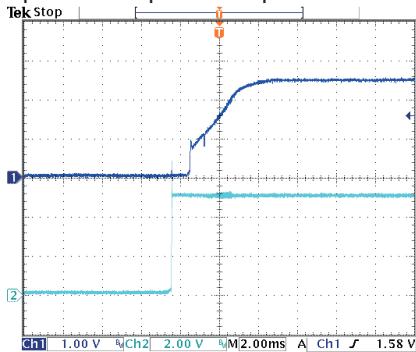
Typical Output Ripple and Noise



Transient Response to Dynamic Load Change (50%)

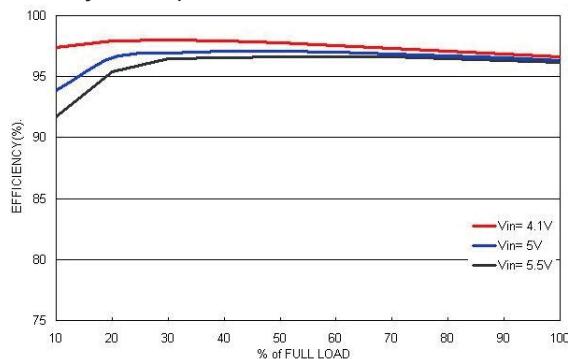


Typical Input Start-Up and Output Rise Characteristic

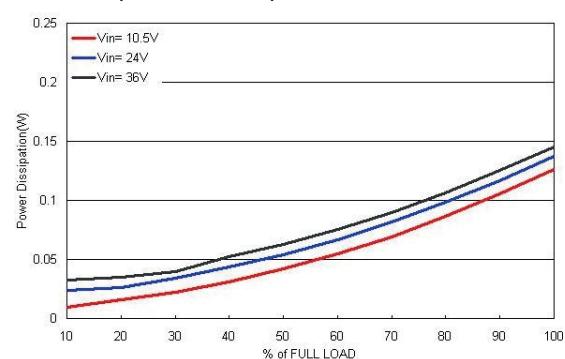


TSRN 1-0525SM, Trim-Up to 3.63 Vout (positive Output voltage)

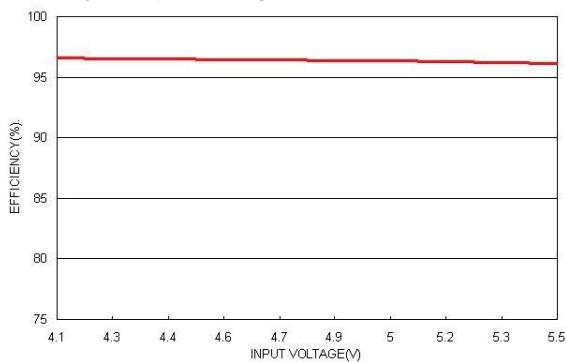
Efficiency vs Output Load



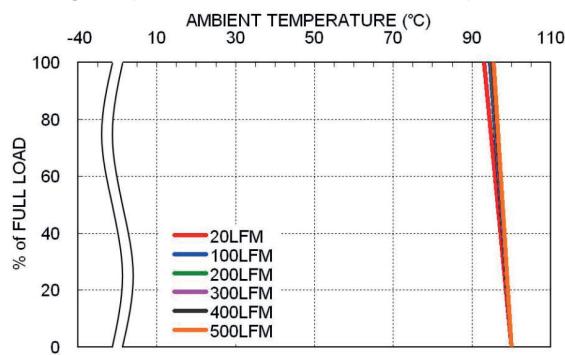
Power Dissipation vs Output Load

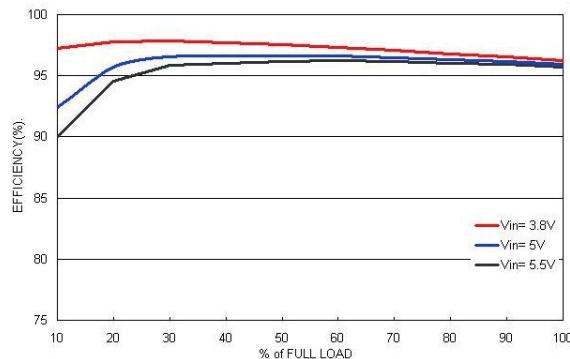
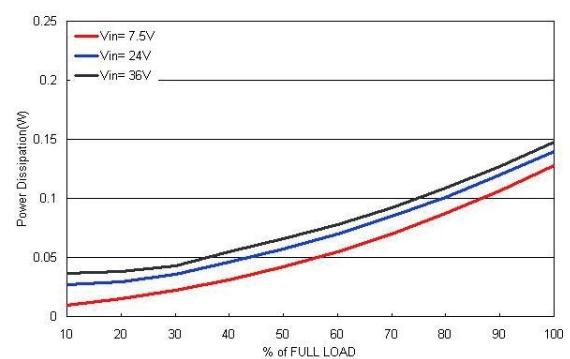
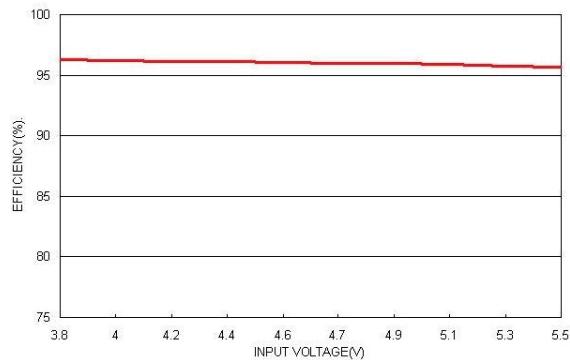
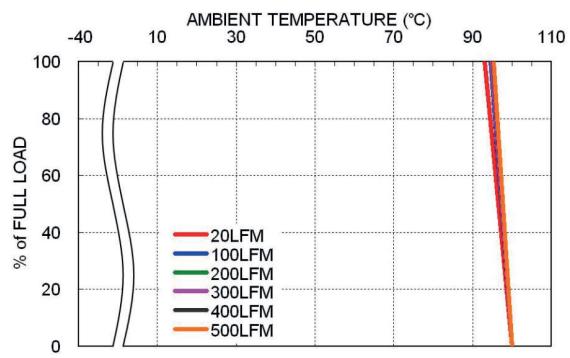


Efficiency vs Input Voltage



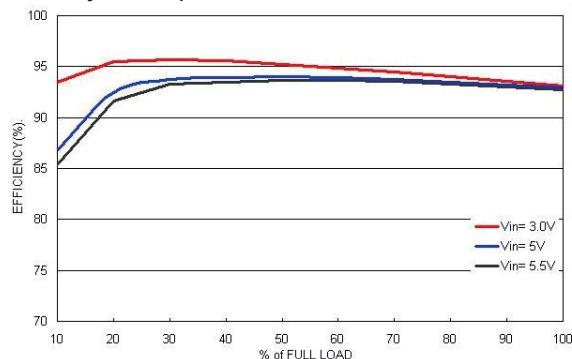
Derating Output Load versus Ambient Temperature



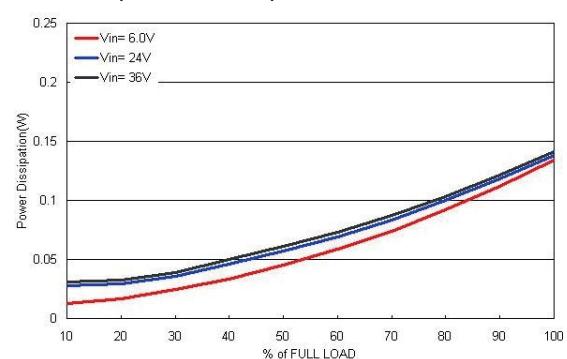
TSRN 1-0525SM, Trim-Up to 3.3 Vout (positive Output voltage)
Efficiency vs Output Load

Power Dissipation vs Output Load

Efficiency vs Input Voltage

Derating Output Load versus Ambient Temperature


TSRN 1-0525SM, Trim-Down to 1.8 Vout (positive Output voltage)

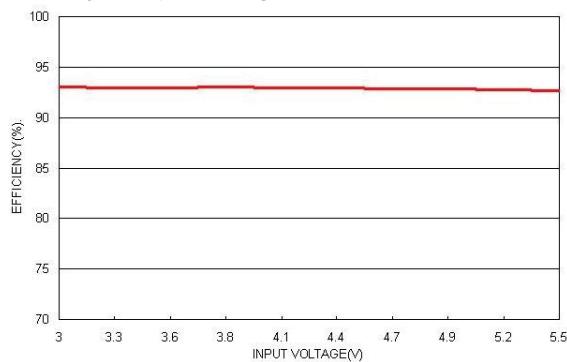
Efficiency vs Output Load



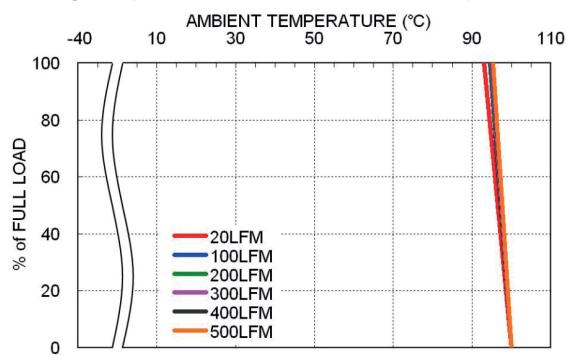
Power Dissipation vs Output Load



Efficiency vs Input Voltage

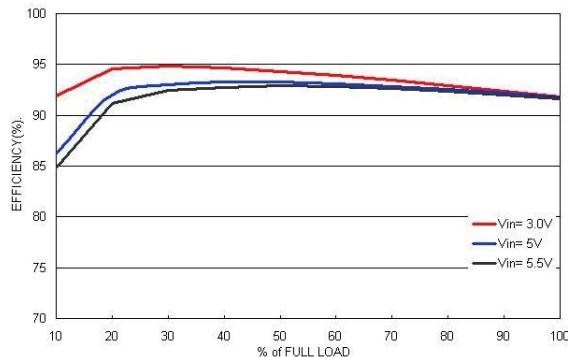


Derating Output Load versus Ambient Temperature

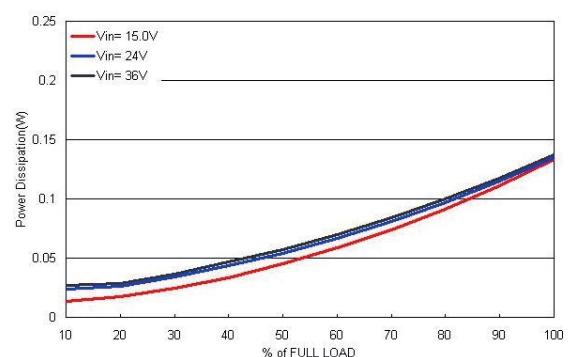


TSRN 1-0525SM, Trim-Down to 1.5 Vout (positive Output voltage)

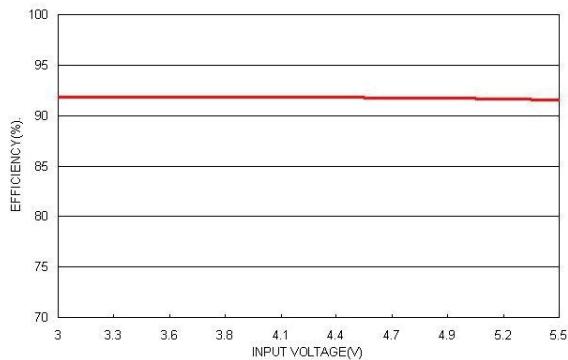
Efficiency vs Output Load



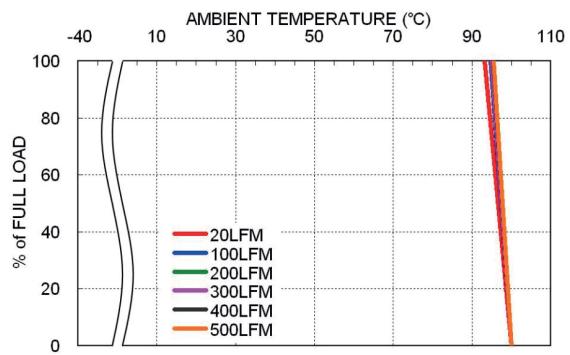
Power Dissipation vs Output Load



Efficiency vs Input Voltage

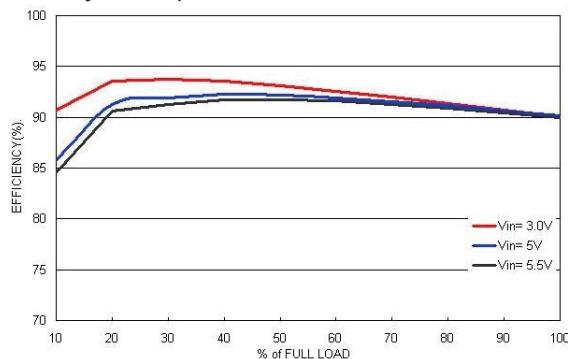


Derating Output Load versus Ambient Temperature

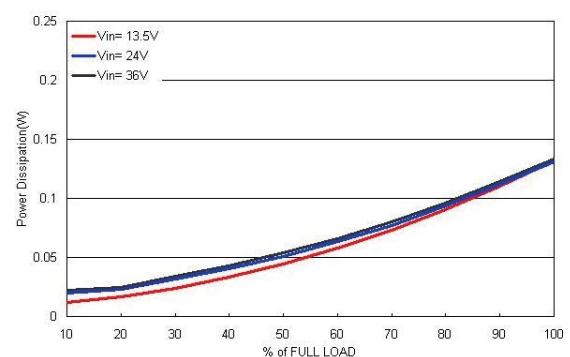


TSRN 1-0525SM, Trim-Down to 1.2 Vout (positive Output voltage)

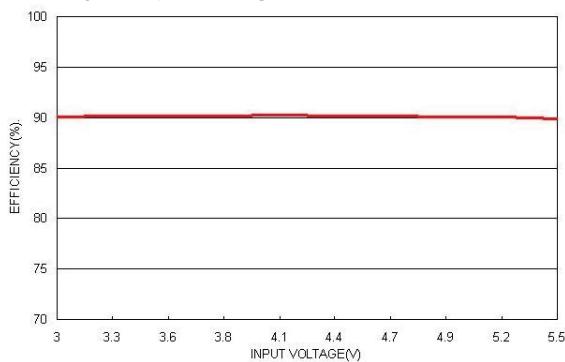
Efficiency vs Output Load



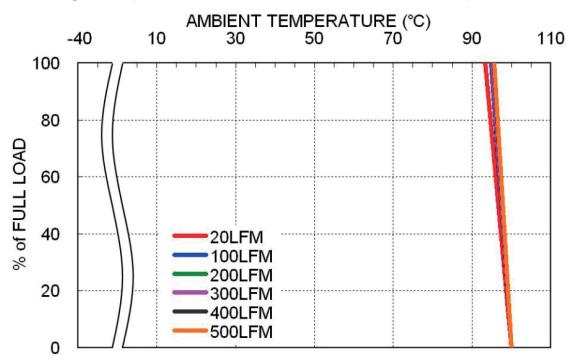
Power Dissipation vs Output Load

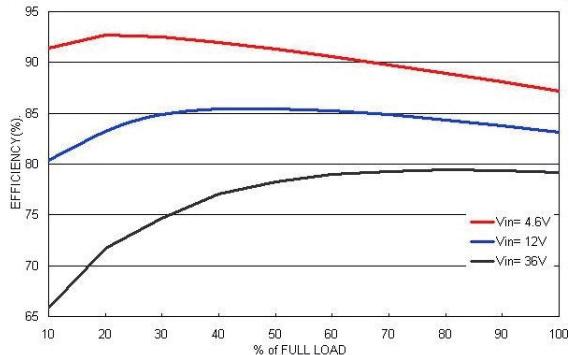
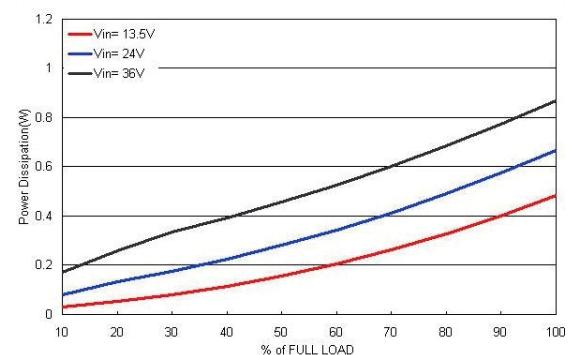
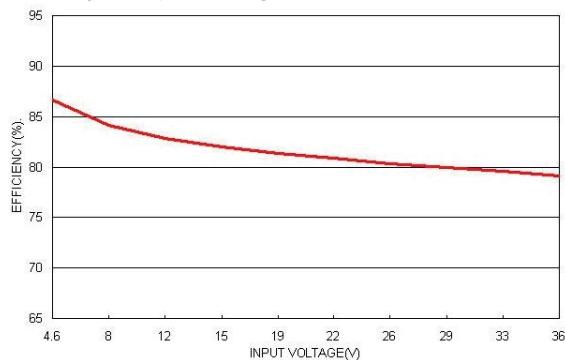
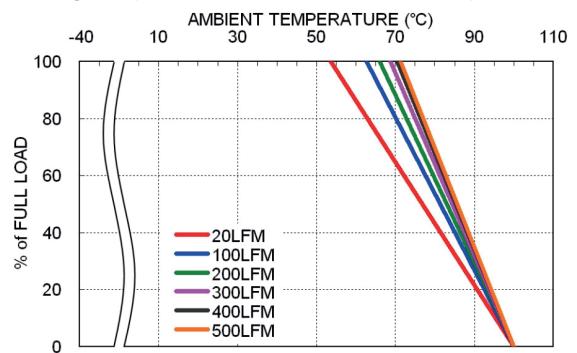
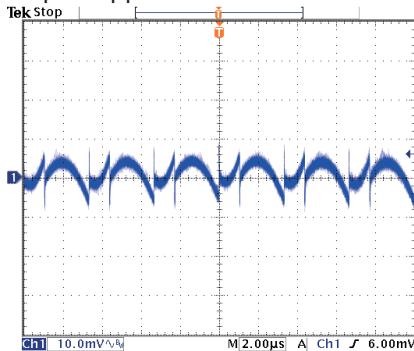
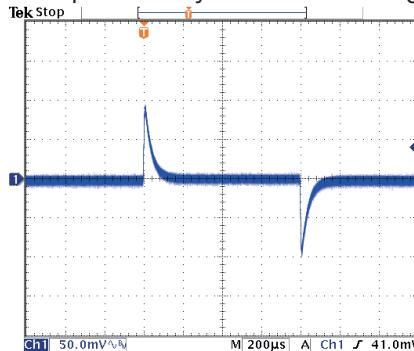
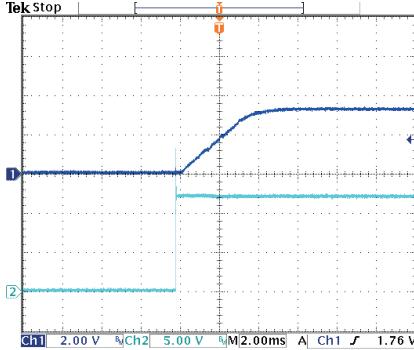


Efficiency vs Input Voltage



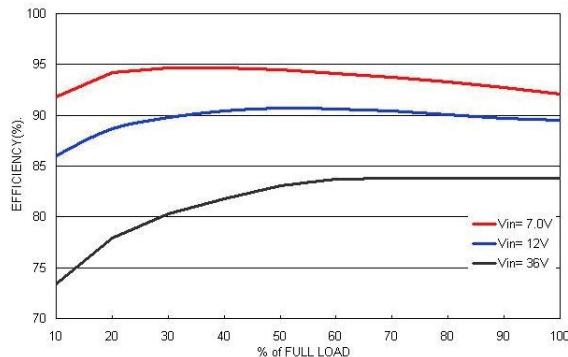
Derating Output Load versus Ambient Temperature



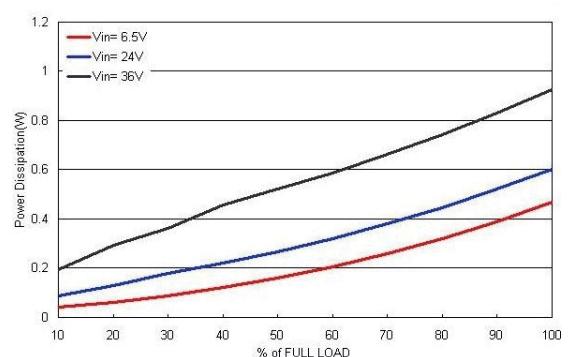
TSRN 1-2433SM (positive Output voltage)
Efficiency vs Output Load

Power Dissipation vs Output Load

Efficiency vs Input Voltage

Derating Output Load versus Ambient Temperature

Typical Output Ripple and Noise

Transient Response to Dynamic Load Change (50%)

Typical Input Start-Up and Output Rise Characteristic


TSRN 1-2433SM, Trim-Up to 5.5 Vout (positive Output voltage)

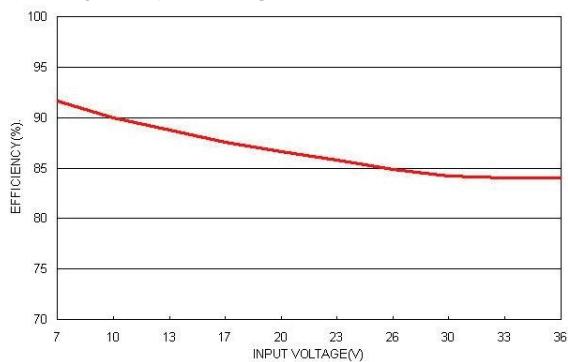
Efficiency vs Output Load



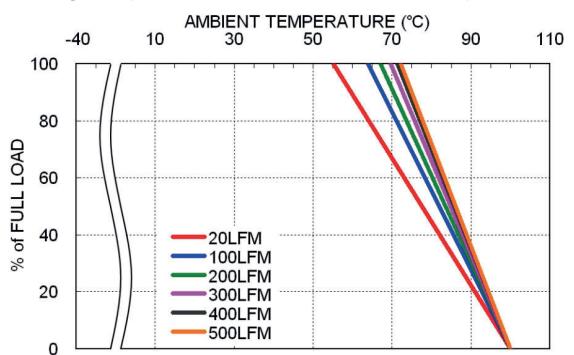
Power Dissipation vs Output Load



Efficiency vs Input Voltage

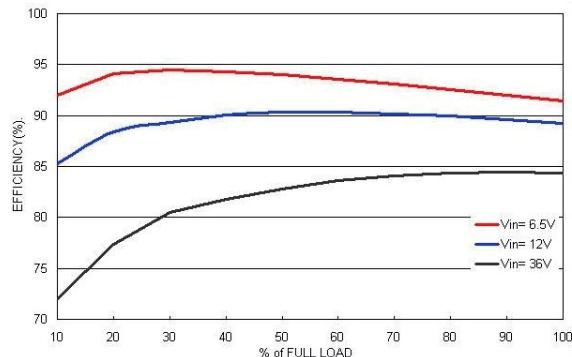


Derating Output Load versus Ambient Temperature

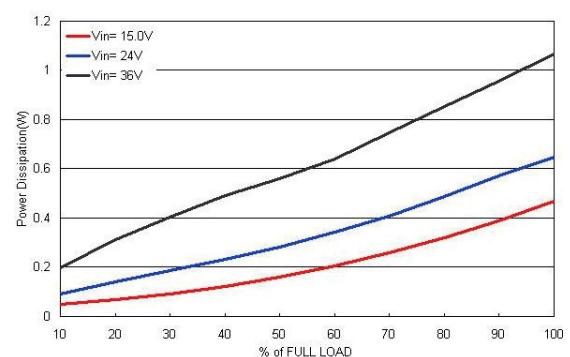


TSRN 1-2433SM, Trim-Up to 5.0 Vout (positive Output voltage)

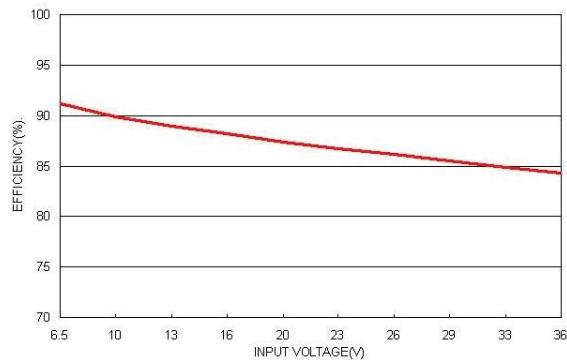
Efficiency vs Output Load



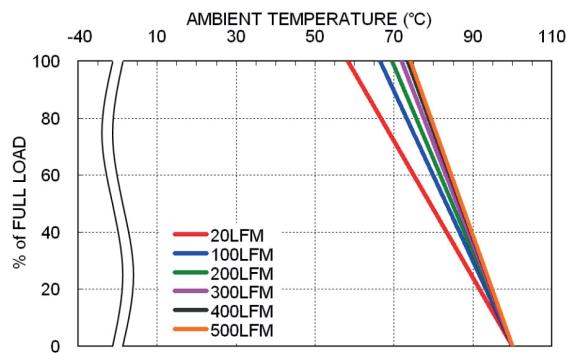
Power Dissipation vs Output Load

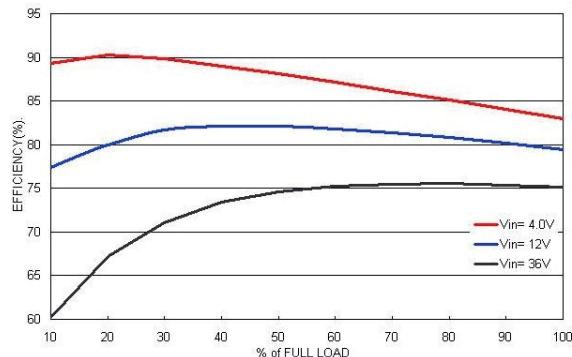
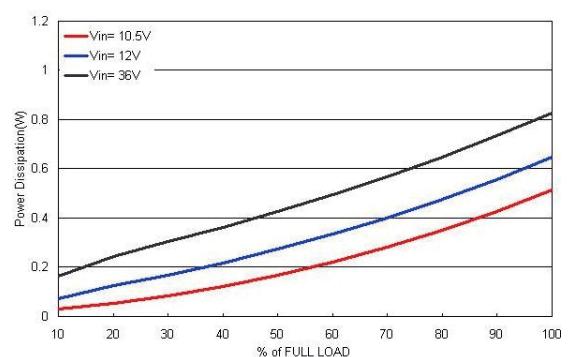
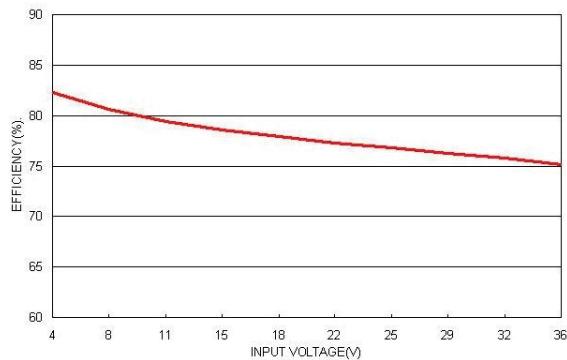
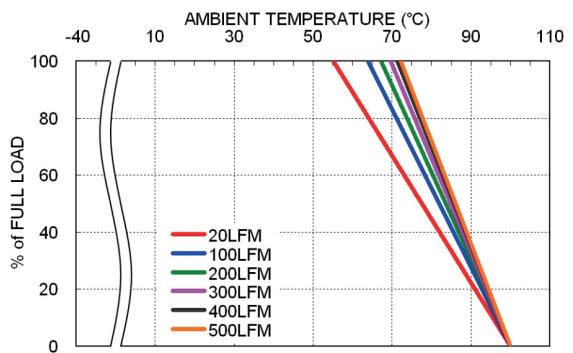


Efficiency vs Input Voltage



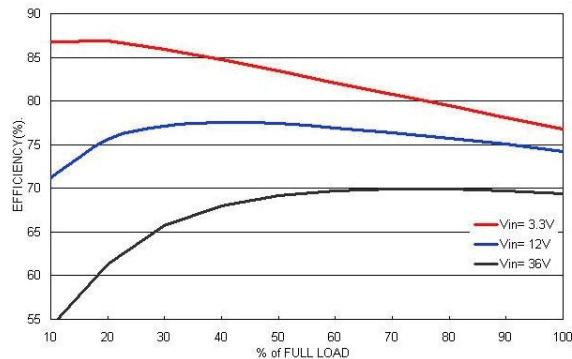
Derating Output Load versus Ambient Temperature



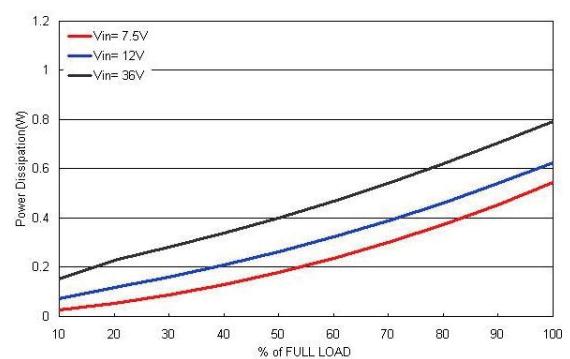
TSRN 1-2433SM, Trim-Down to 2.5 Vout (positive Output voltage)
Efficiency vs Output Load

Power Dissipation vs Output Load

Efficiency vs Input Voltage

Derating Output Load versus Ambient Temperature


TSRN 1-2433SM, Trim-Down to 1.8 Vout (positive Output voltage)

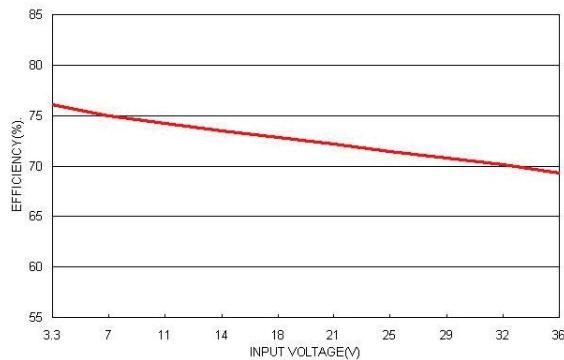
Efficiency vs Output Load



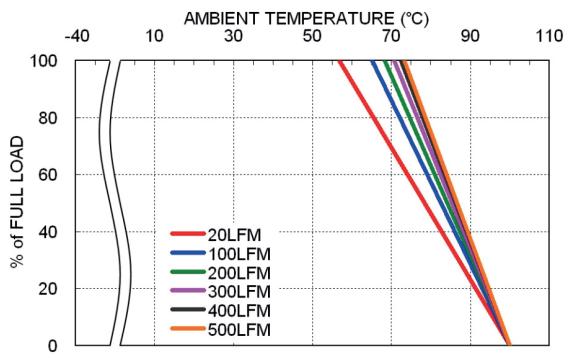
Power Dissipation vs Output Load



Efficiency vs Input Voltage

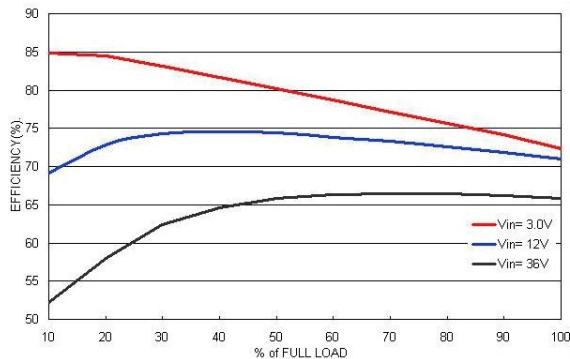


Derating Output Load versus Ambient Temperature

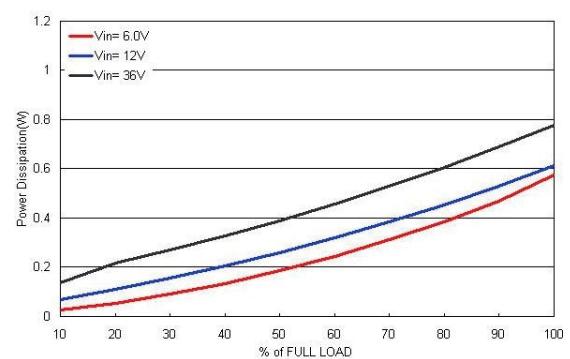


TSRN 1-2433SM, Trim-Down to 1.5 Vout (positive Output voltage)

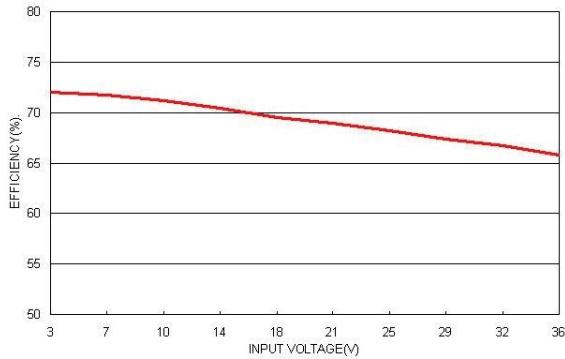
Efficiency vs Output Load



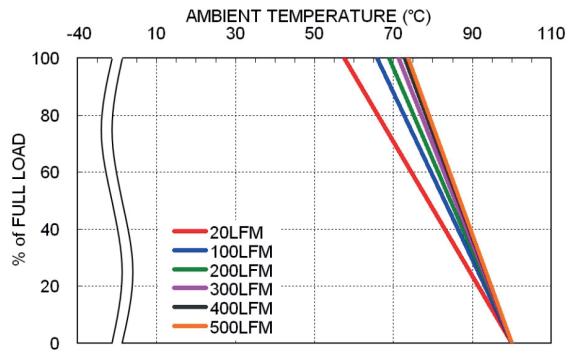
Power Dissipation vs Output Load

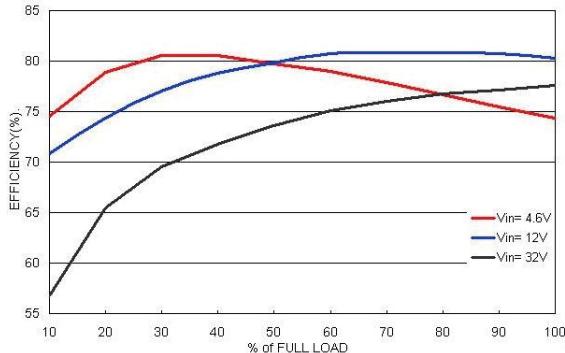
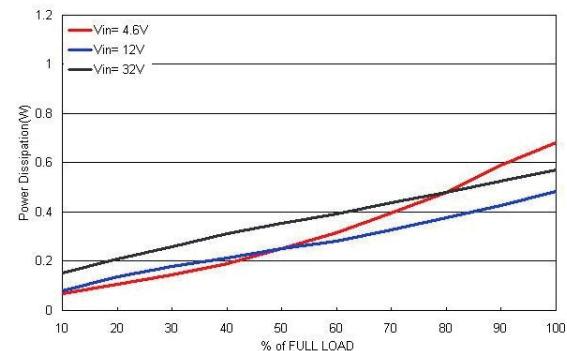
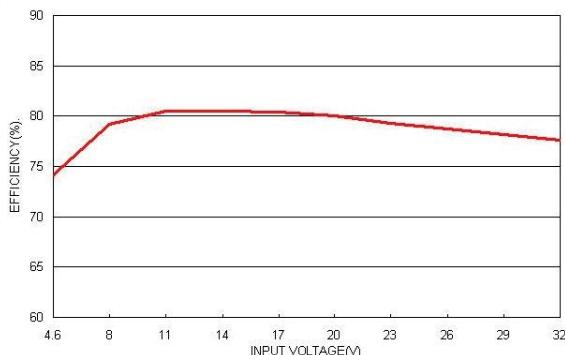
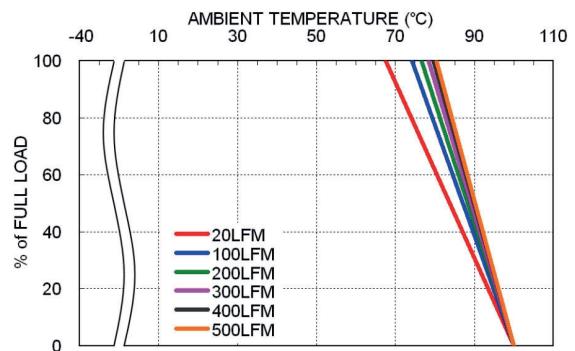
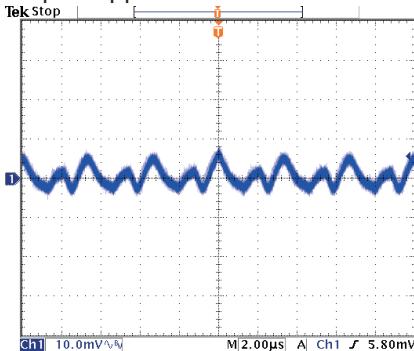
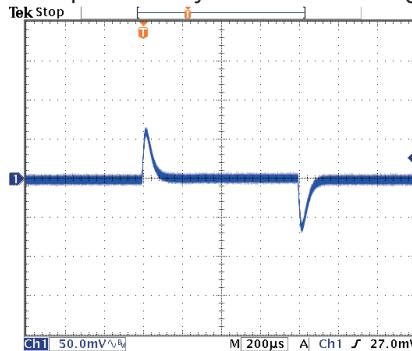
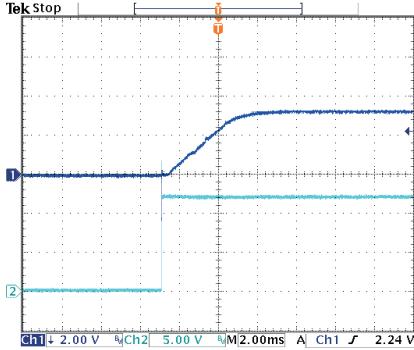


Efficiency vs Input Voltage



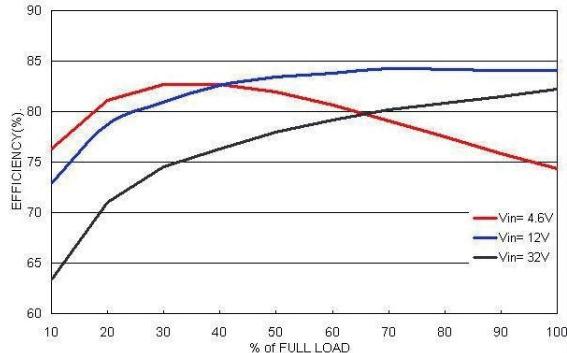
Derating Output Load versus Ambient Temperature



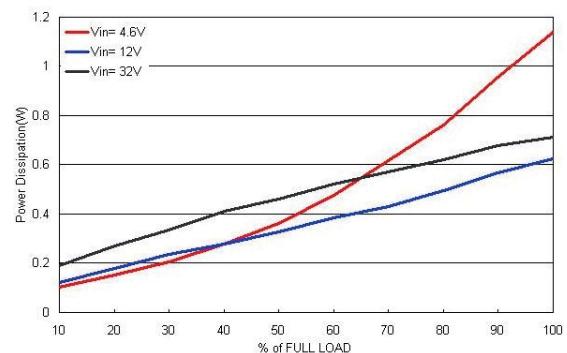
TSRN 1-2433SM (negative Output voltage)
Efficiency vs Output Load

Power Dissipation vs Output Load

Efficiency vs Input Voltage

Derating Output Load versus Ambient Temperature

Typical Output Ripple and Noise

Transient Response to Dynamic Load Change (50%)

Typical Input Start-Up and Output Rise Characteristic


TSRN 1-2433SM, Trim-Up to 5.5 Vout (negative Output voltage)

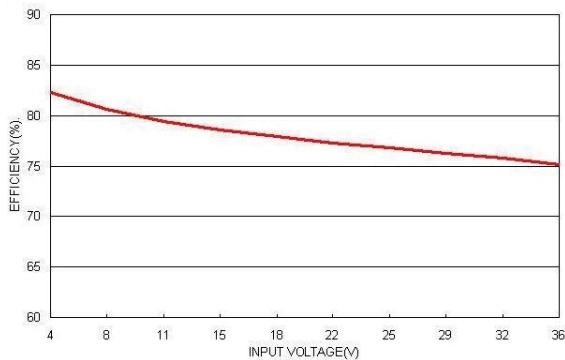
Efficiency vs Output Load



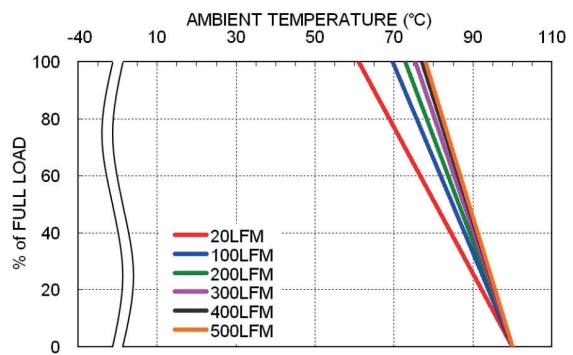
Power Dissipation vs Output Load



Efficiency vs Input Voltage

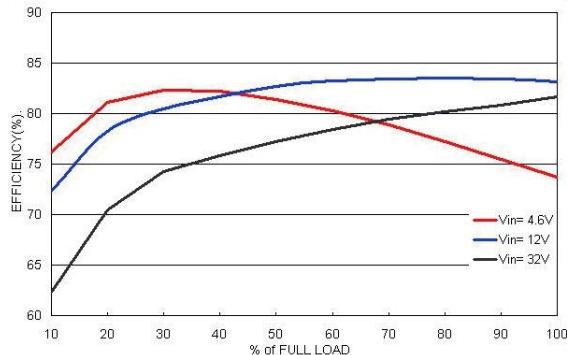


Derating Output Load versus Ambient Temperature

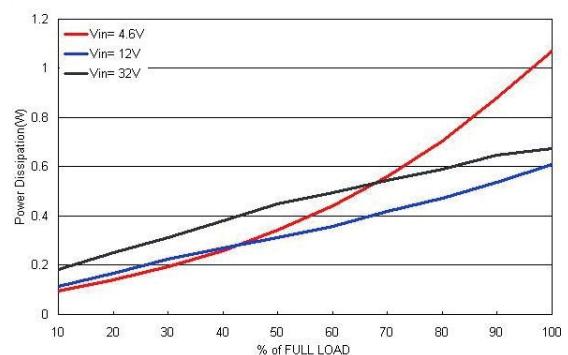


TSRN 1-2433SM, Trim-Up to 5.0 Vout (negative Output voltage)

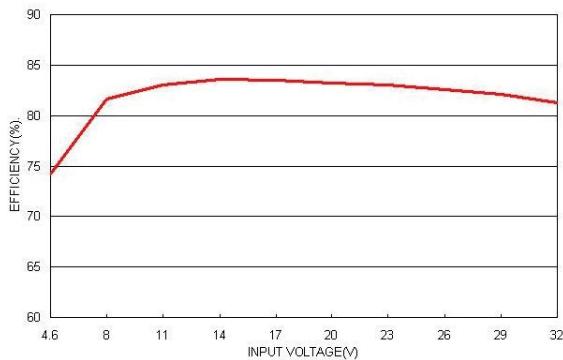
Efficiency vs Output Load



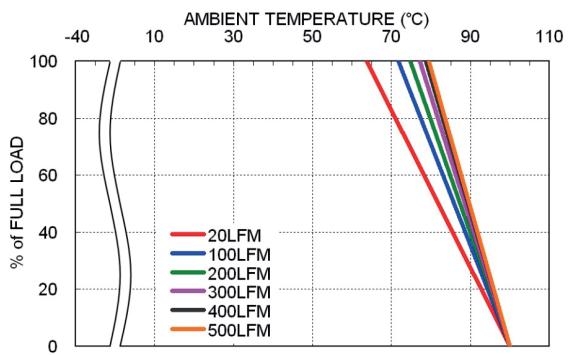
Power Dissipation vs Output Load



Efficiency vs Input Voltage

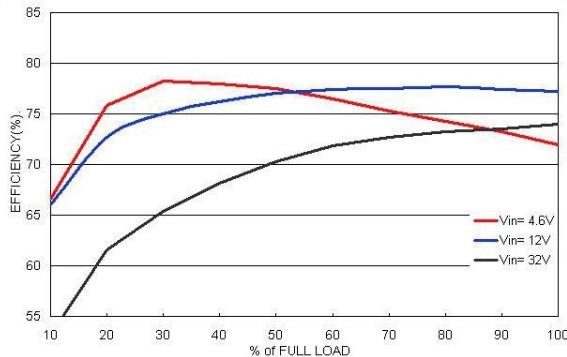


Derating Output Load versus Ambient Temperature

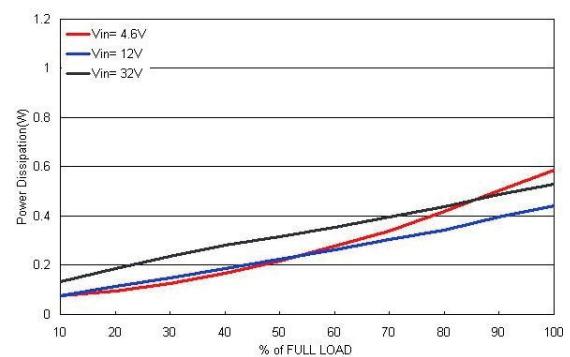


TSRN 1-2433SM, Trim-Down to 2.5 Vout (negative Output voltage)

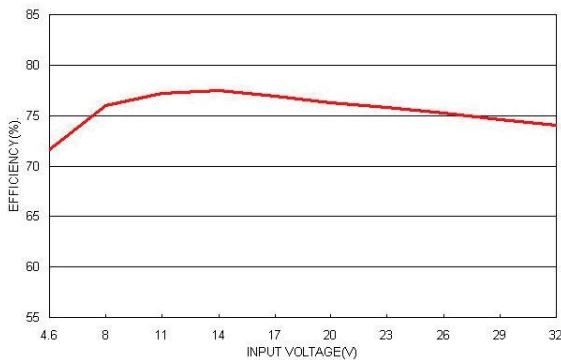
Efficiency vs Output Load



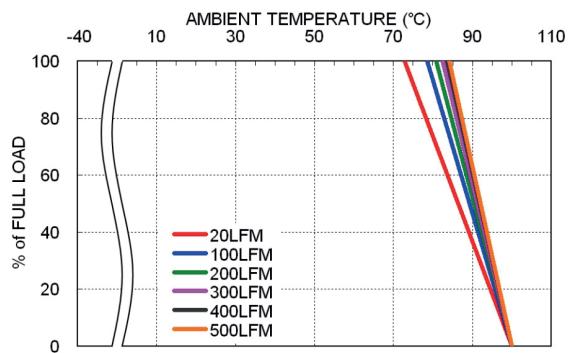
Power Dissipation vs Output Load



Efficiency vs Input Voltage

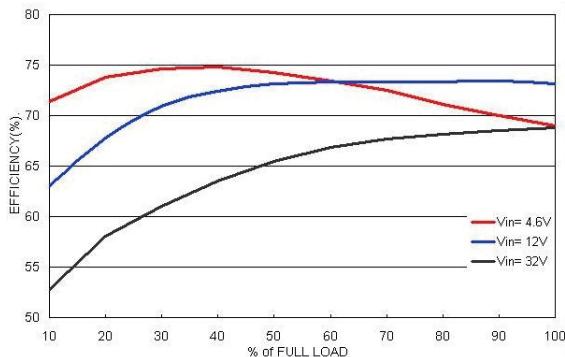


Derating Output Load versus Ambient Temperature

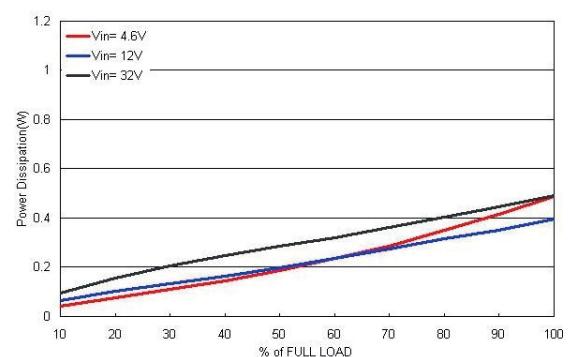


TSRN 1-2433SM, Trim-Down to 1.8 Vout (negative Output voltage)

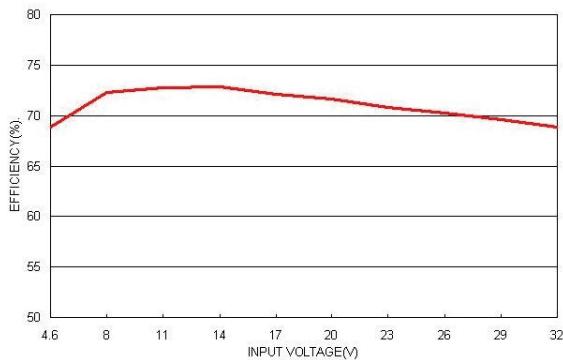
Efficiency vs Output Load



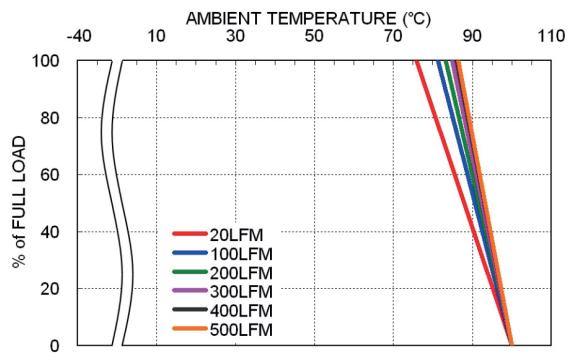
Power Dissipation vs Output Load



Efficiency vs Input Voltage

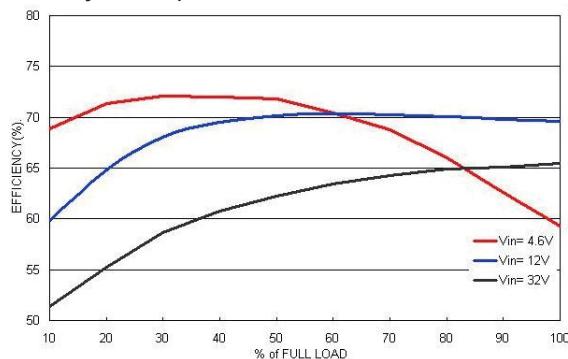


Derating Output Load versus Ambient Temperature

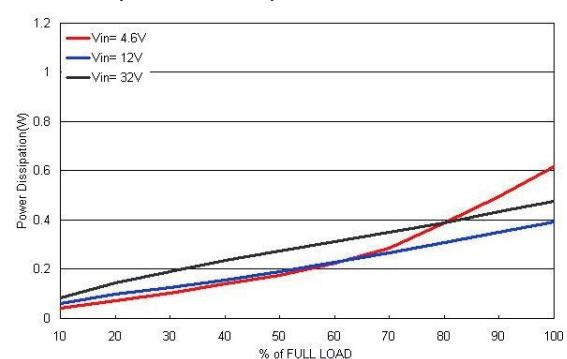


TSRN 1-2433SM, Trim-Down to 1.5 Vout (negative Output voltage)

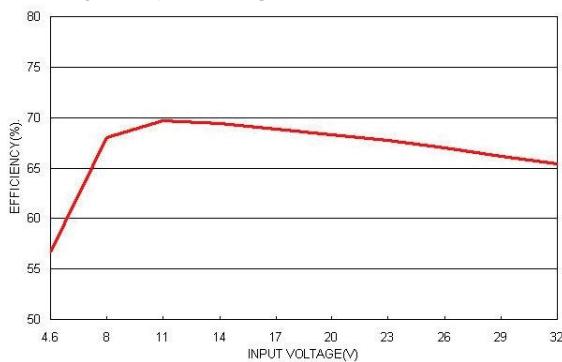
Efficiency vs Output Load



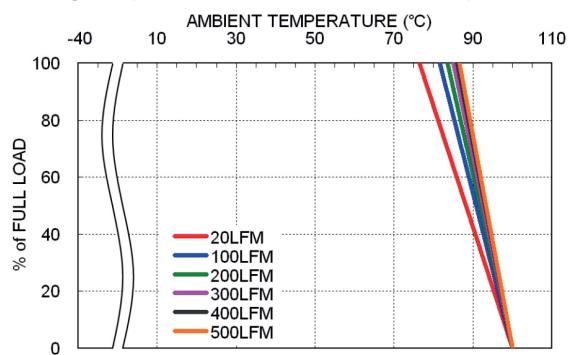
Power Dissipation vs Output Load

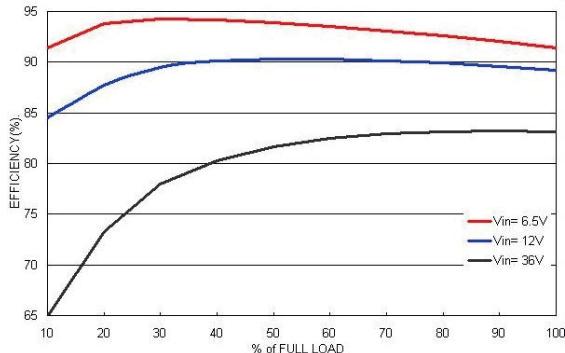
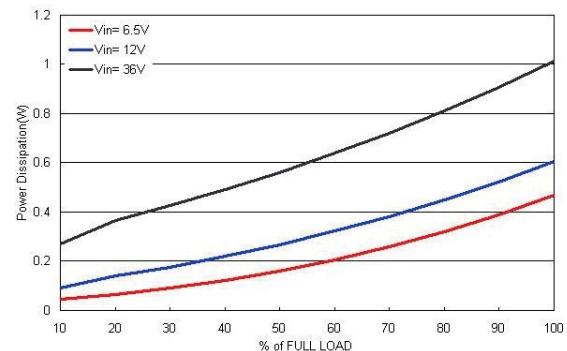
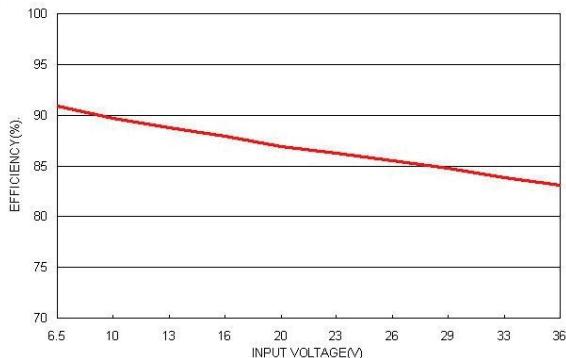
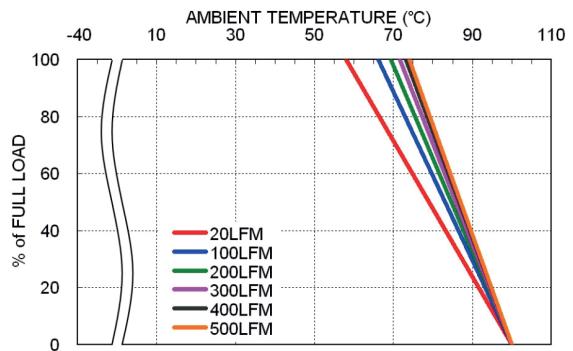
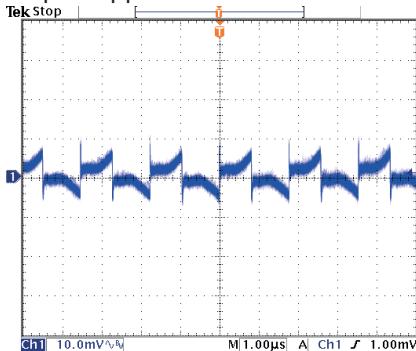
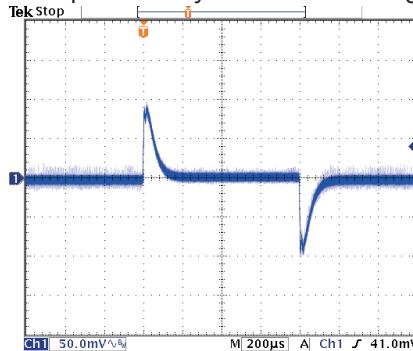
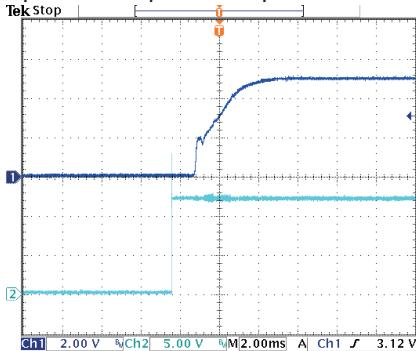


Efficiency vs Input Voltage



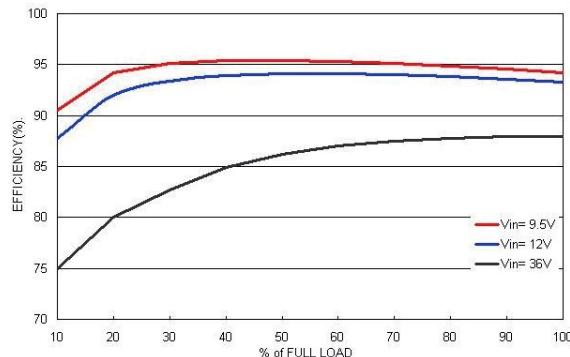
Derating Output Load versus Ambient Temperature



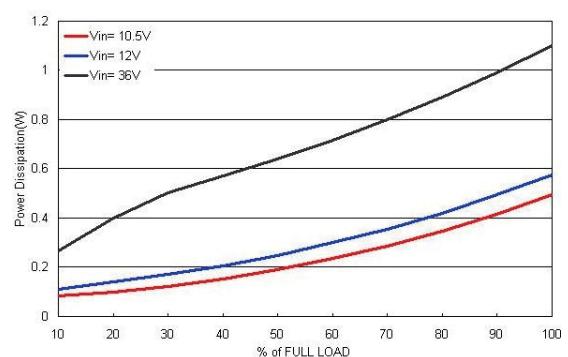
TSRN 1-2450SM (positive Output voltage)
Efficiency vs Output Load

Power Dissipation vs Output Load

Efficiency vs Input Voltage

Derating Output Load versus Ambient Temperature

Typical Output Ripple and Noise

Transient Response to Dynamic Load Change (50%)

Typical Input Start-Up and Output Rise Characteristic


TSRN 1-2450SM, Trim-Up to 8.0 Vout (positive Output voltage)

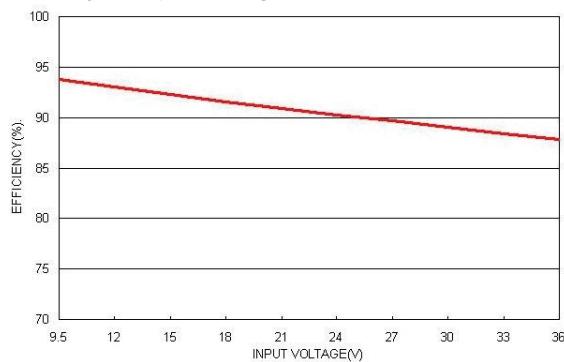
Efficiency vs Output Load



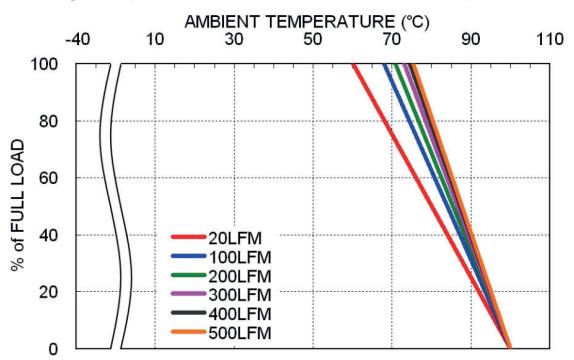
Power Dissipation vs Output Load

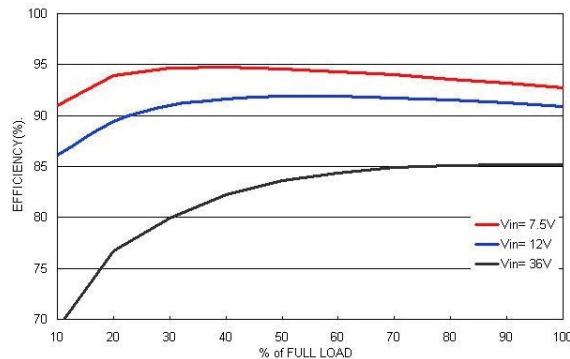
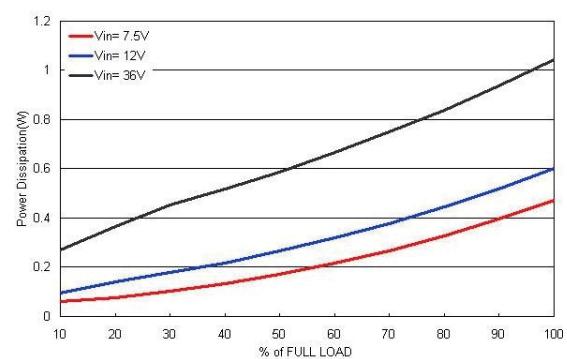
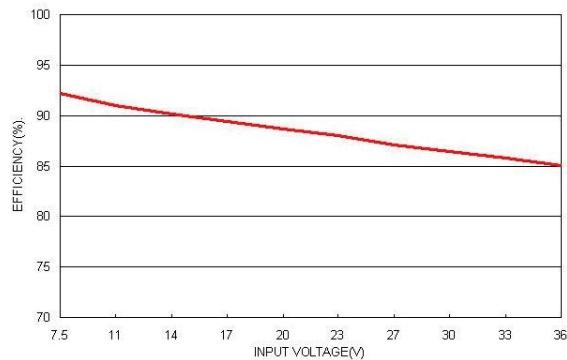
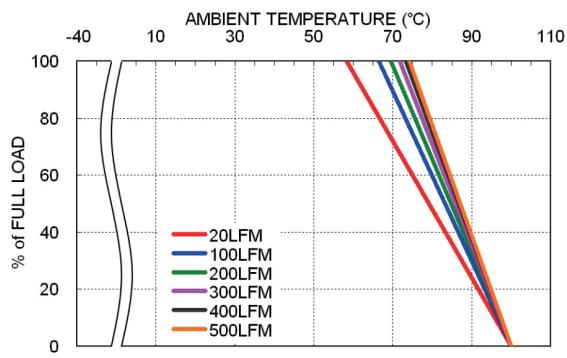


Efficiency vs Input Voltage



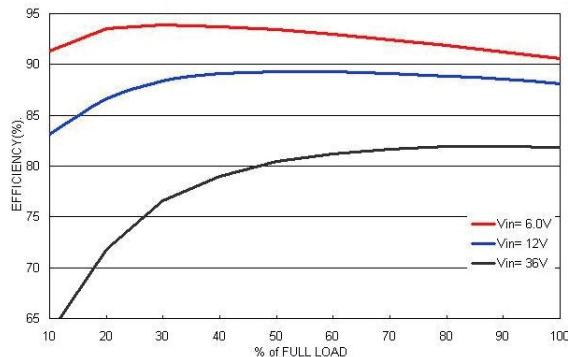
Derating Output Load versus Ambient Temperature



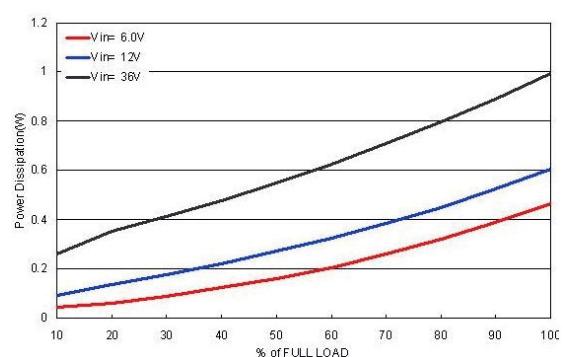
TSRN 1-2450SM, Trim-Up to 6.0 Vout (positive Output voltage)
Efficiency vs Output Load

Power Dissipation vs Output Load

Efficiency vs Input Voltage

Derating Output Load versus Ambient Temperature


TSRN 1-2450SM, Trim-Down to 4.5 Vout (positive Output voltage)

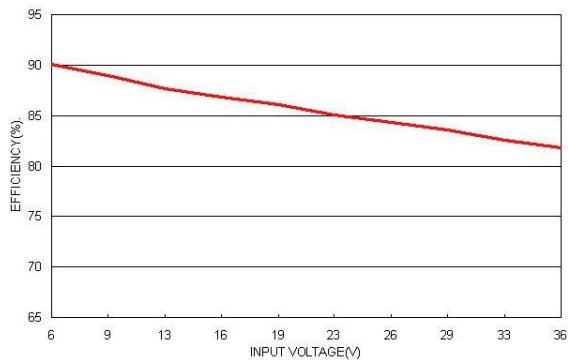
Efficiency vs Output Load



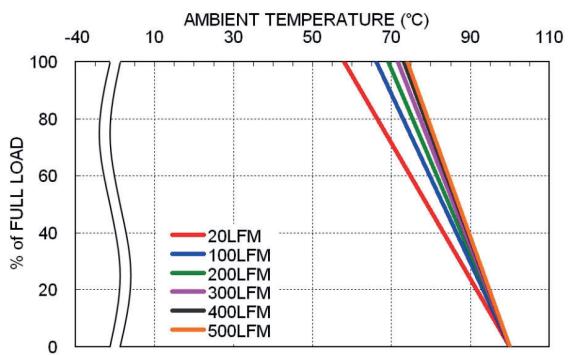
Power Dissipation vs Output Load

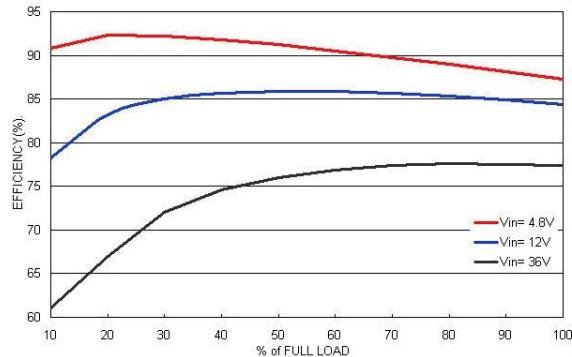
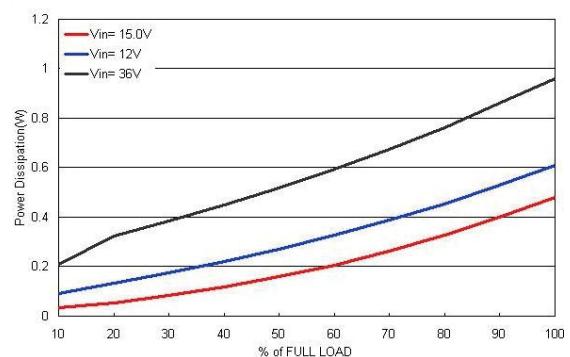
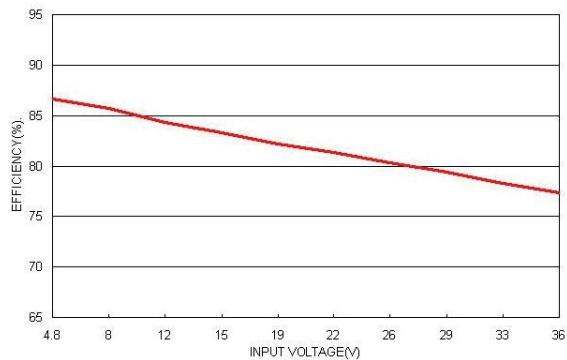
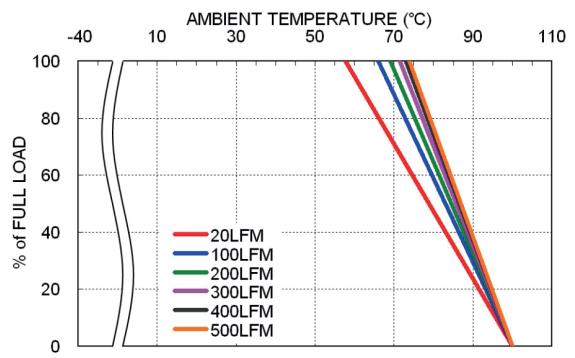


Efficiency vs Input Voltage



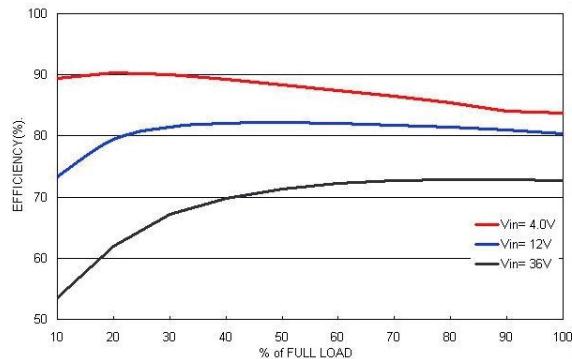
Derating Output Load versus Ambient Temperature



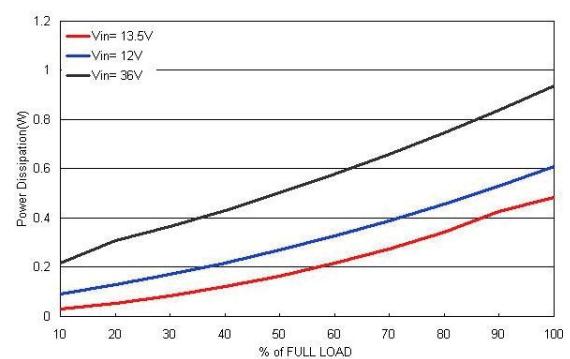
TSRN 1-2450SM, Trim-Down to 3.3 Vout (positive Output voltage)
Efficiency vs Output Load

Power Dissipation vs Output Load

Efficiency vs Input Voltage

Derating Output Load versus Ambient Temperature


TSRN 1-2450SM, Trim-Down to 2.5 Vout (positive Output voltage)

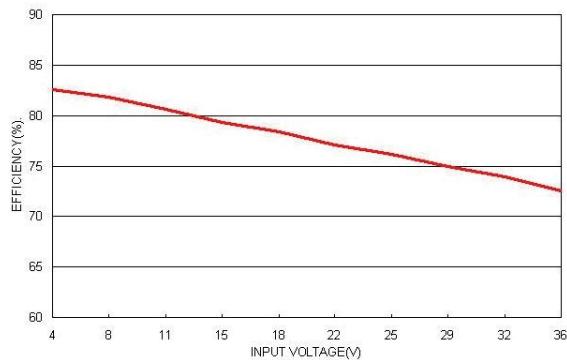
Efficiency vs Output Load



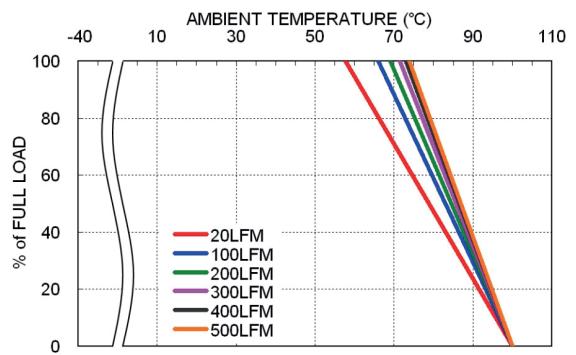
Power Dissipation vs Output Load

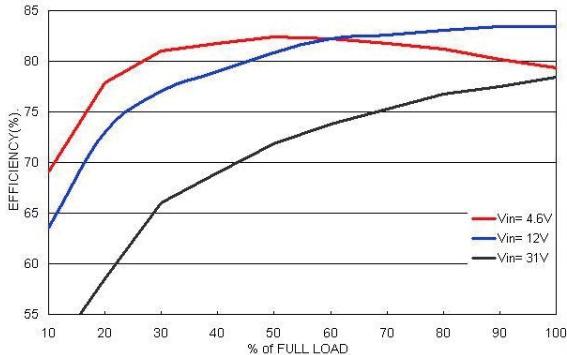
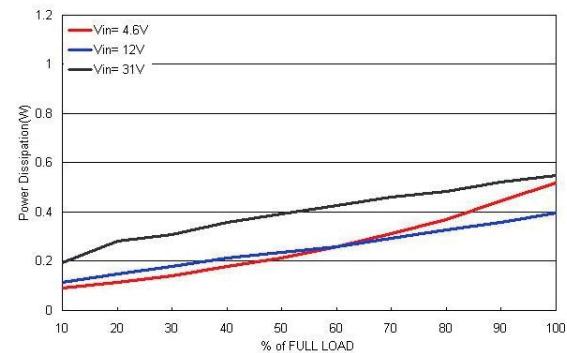
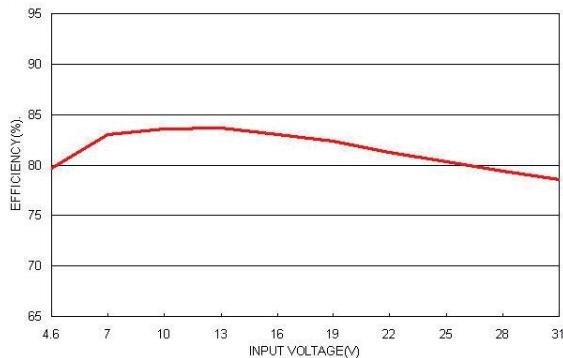
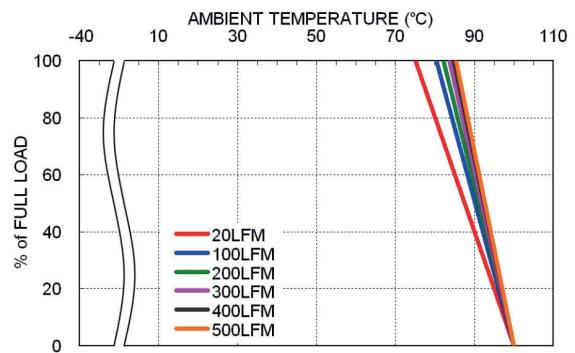
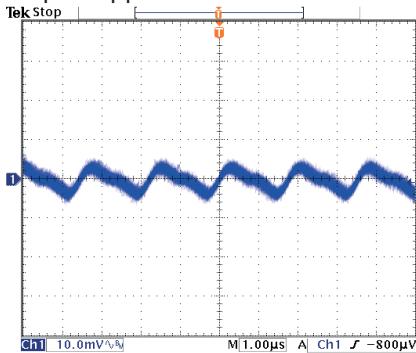
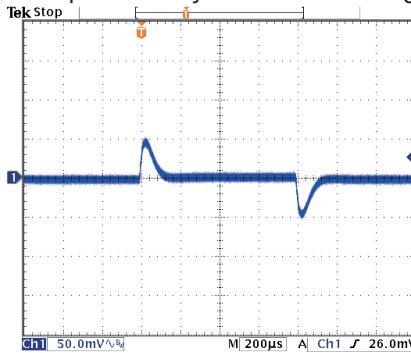
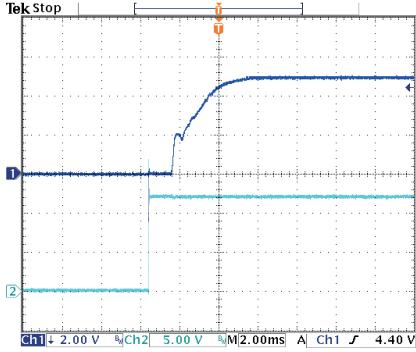


Efficiency vs Input Voltage



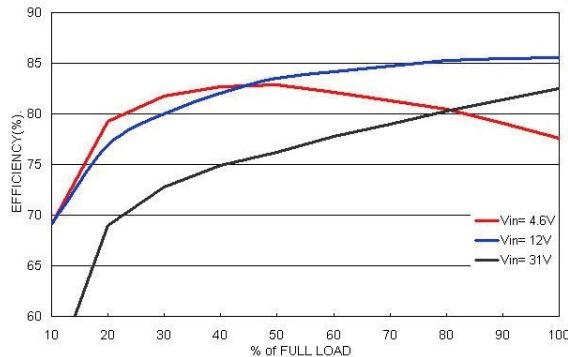
Derating Output Load versus Ambient Temperature



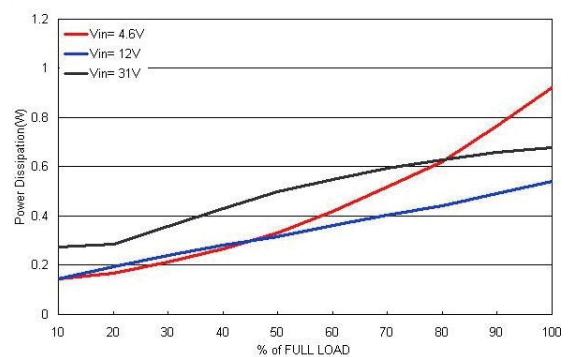
TSRN 1-2450SM (negative Output voltage)
Efficiency vs Output Load

Power Dissipation vs Output Load

Efficiency vs Input Voltage

Derating Output Load versus Ambient Temperature

Typical Output Ripple and Noise

Transient Response to Dynamic Load Change (50%)

Typical Input Start-Up and Output Rise Characteristic


TSRN 1-2450SM, Trim-Up to 8.0 Vout (negative Output voltage)

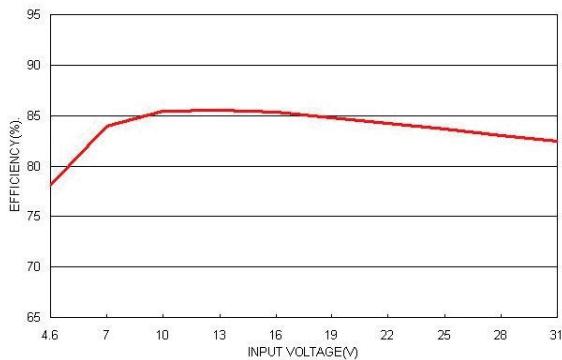
Efficiency vs Output Load



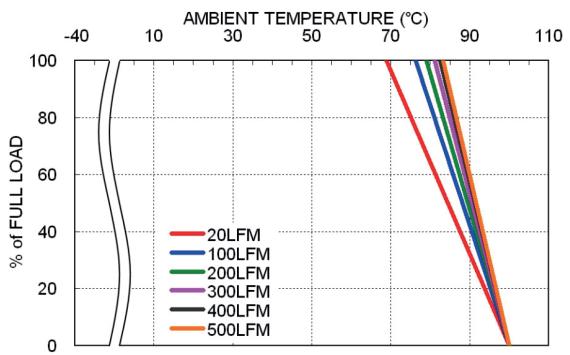
Power Dissipation vs Output Load



Efficiency vs Input Voltage

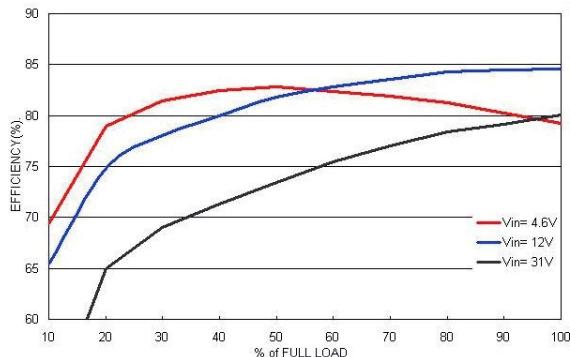


Derating Output Load versus Ambient Temperature

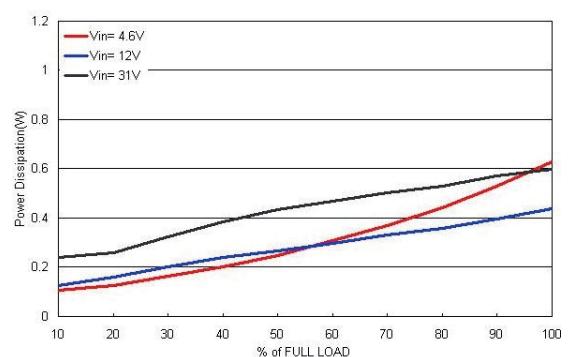


TSRN 1-2450SM, Trim-Up to 6.0 Vout (negative Output voltage)

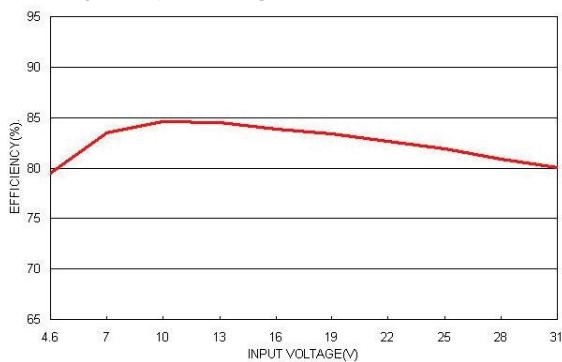
Efficiency vs Output Load



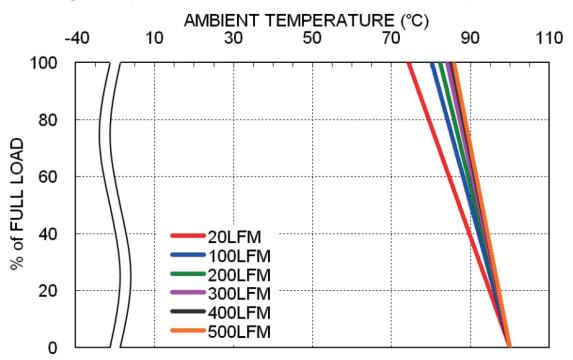
Power Dissipation vs Output Load



Efficiency vs Input Voltage

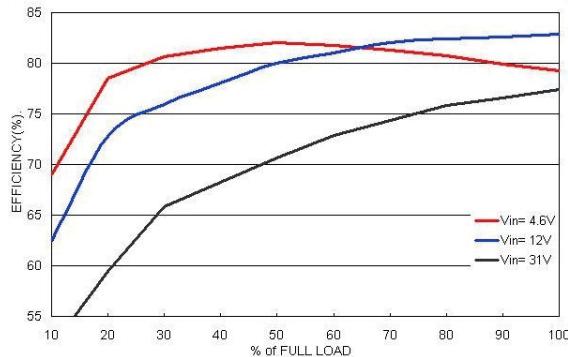


Derating Output Load versus Ambient Temperature

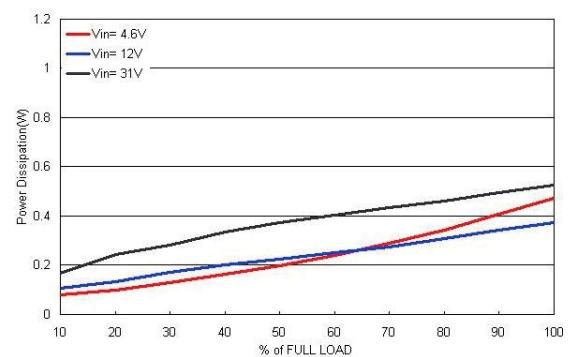


TSRN 1-2450SM, Trim-Down to 4.5 Vout (negative Output voltage)

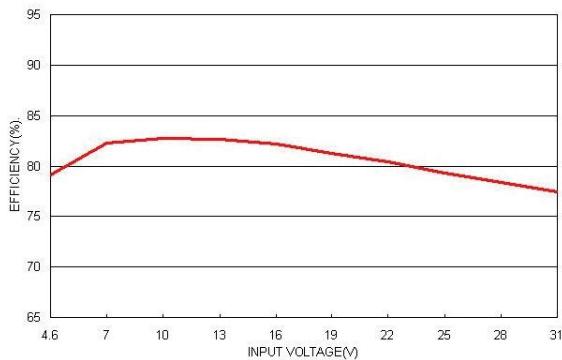
Efficiency vs Output Load



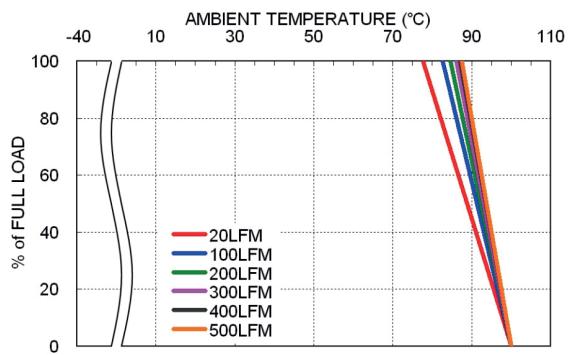
Power Dissipation vs Output Load



Efficiency vs Input Voltage

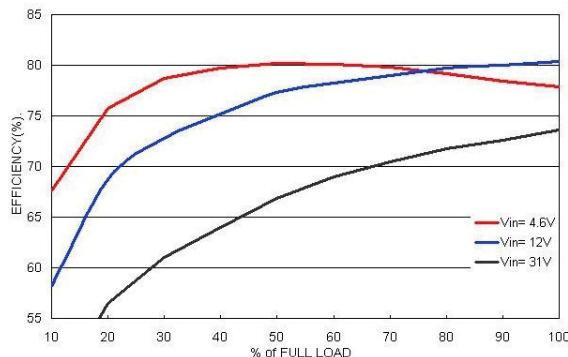


Derating Output Load versus Ambient Temperature

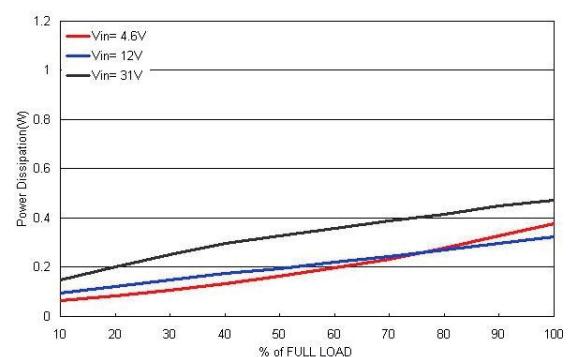


TSRN 1-2450SM, Trim-Down to 3.3 Vout (negative Output voltage)

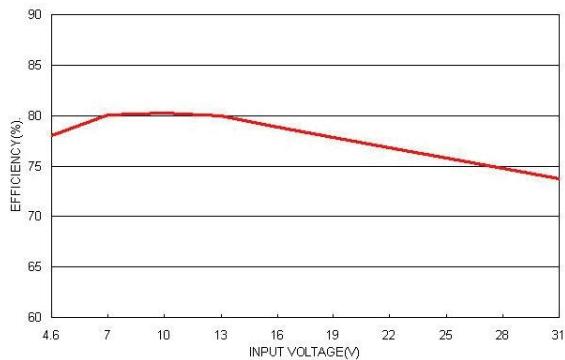
Efficiency vs Output Load



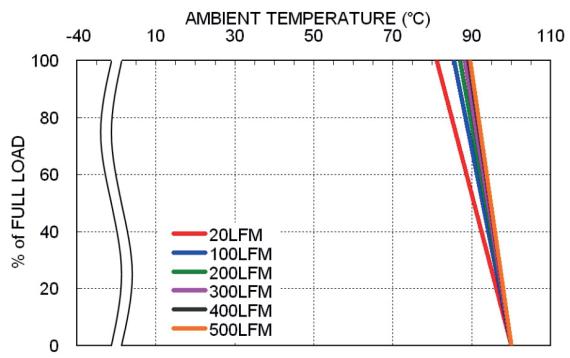
Power Dissipation vs Output Load



Efficiency vs Input Voltage

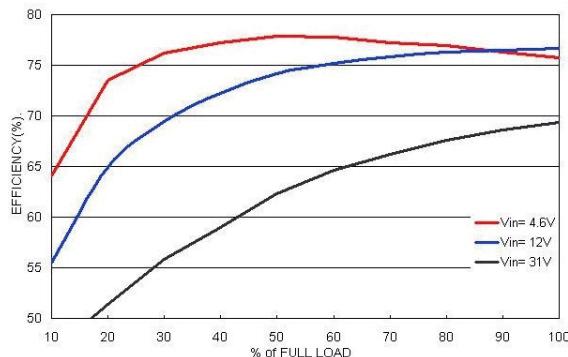


Derating Output Load versus Ambient Temperature

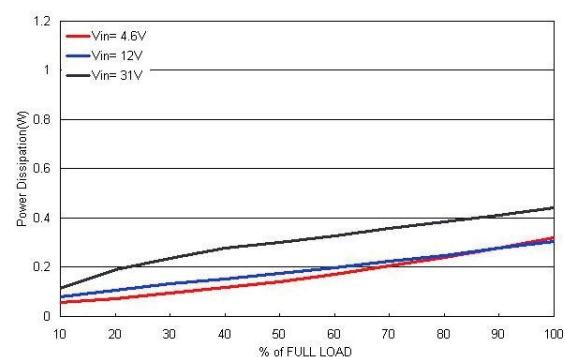


TSRN 1-2450SM, Trim-Down to 2.5 Vout (negative Output voltage)

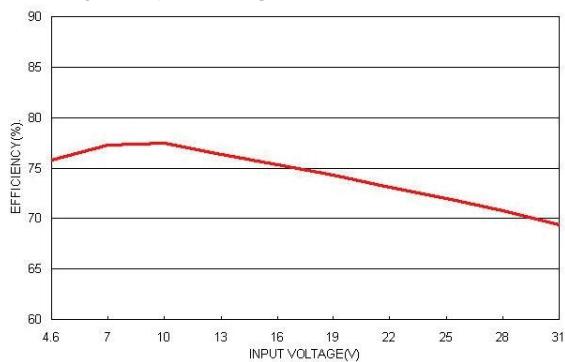
Efficiency vs Output Load



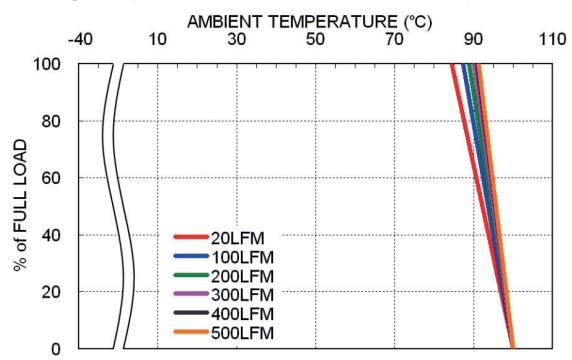
Power Dissipation vs Output Load

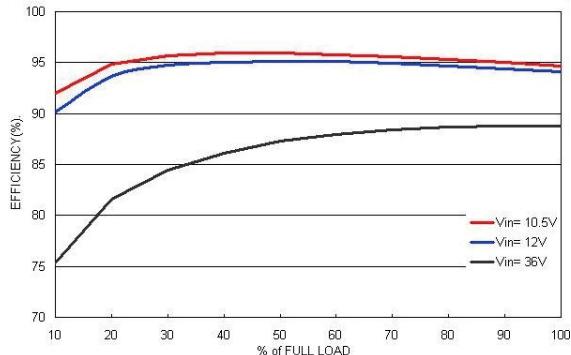
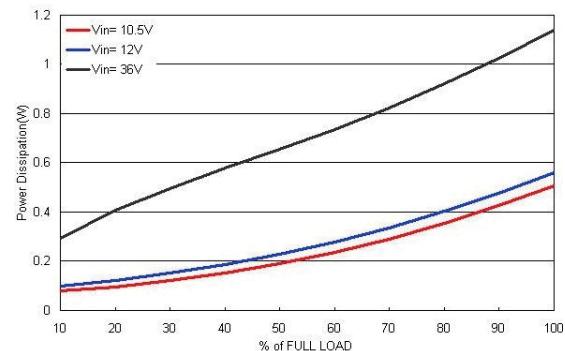
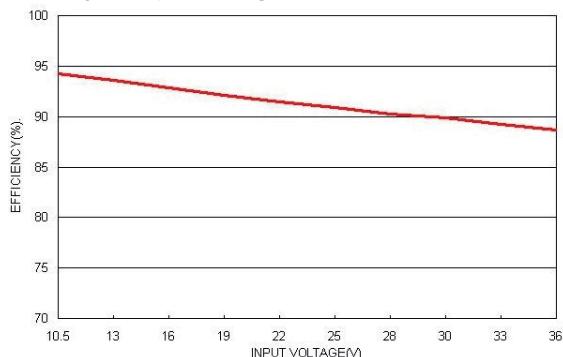
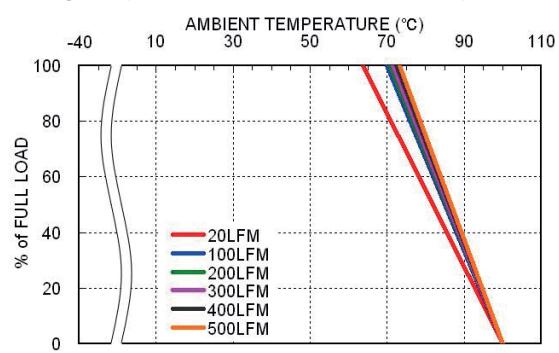
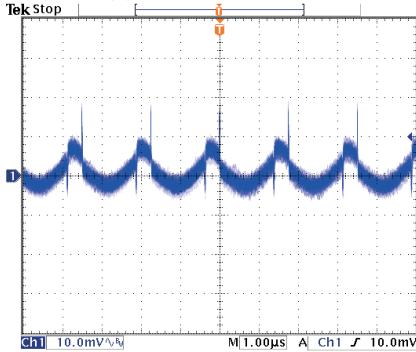
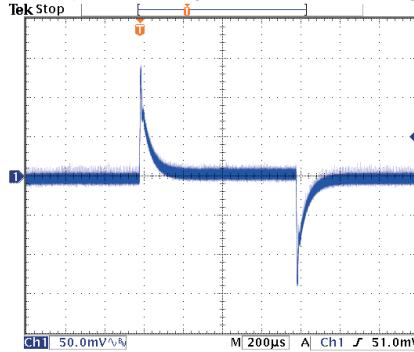
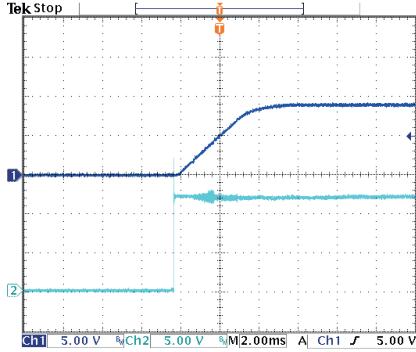


Efficiency vs Input Voltage



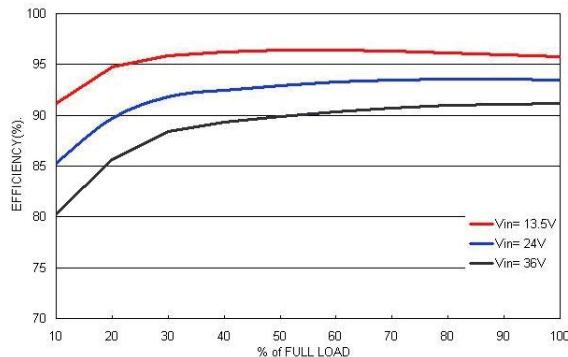
Derating Output Load versus Ambient Temperature



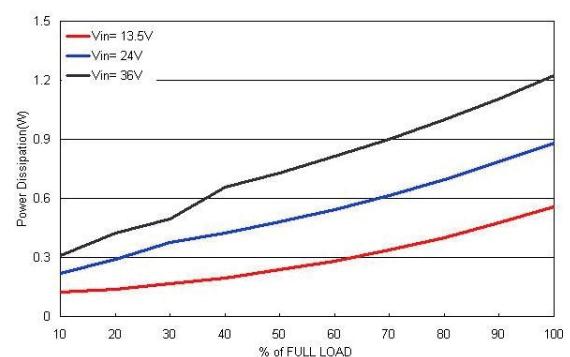
TSRN 1-2490SM (positive Output voltage)
Efficiency vs Output Load

Power Dissipation vs Output Load

Efficiency vs Input Voltage

Derating Output Load versus Ambient Temperature

Typical Output Ripple and Noise

Transient Response to Dynamic Load Change (50%)

Typical Input Start-Up and Output Rise Characteristic


TSRN 1-2490SM, Trim-Up to 12.6 Vout (positive Output voltage)

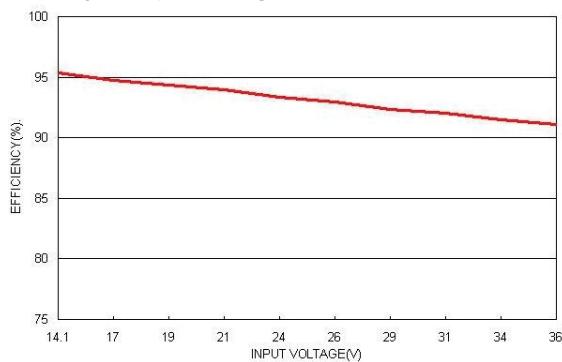
Efficiency vs Output Load



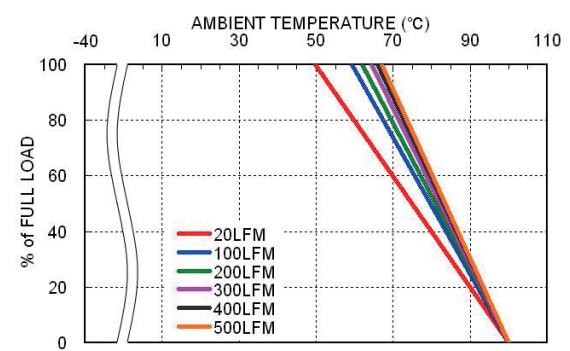
Power Dissipation vs Output Load

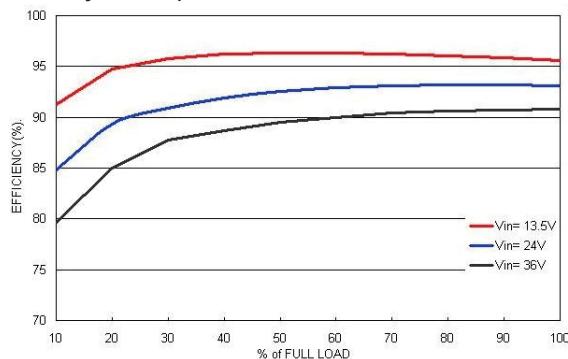
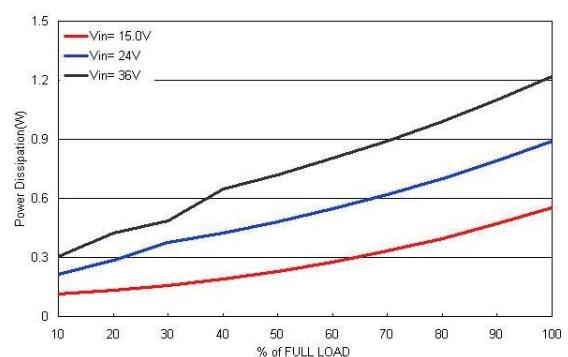
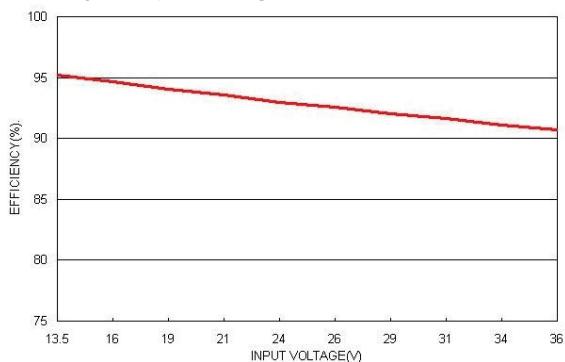
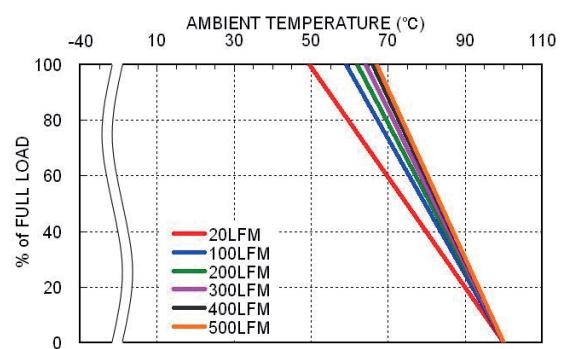


Efficiency vs Input Voltage



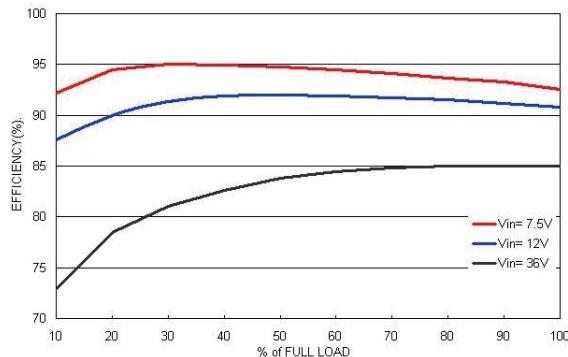
Derating Output Load versus Ambient Temperature



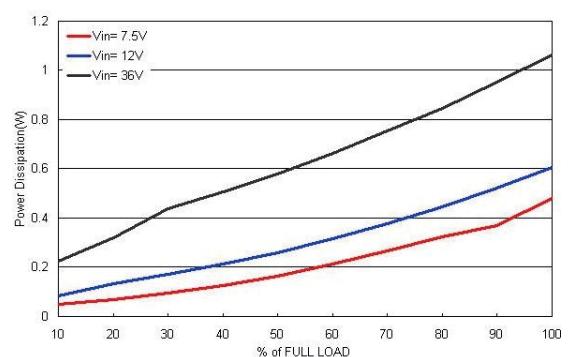
TSRN 1-2490SM, Trim-Up to 12 Vout (positive Output voltage)
Efficiency vs Output Load

Power Dissipation vs Output Load

Efficiency vs Input Voltage

Derating Output Load versus Ambient Temperature


TSRN 1-2490SM, Trim-Down to 6.0 Vout (positive Output voltage)

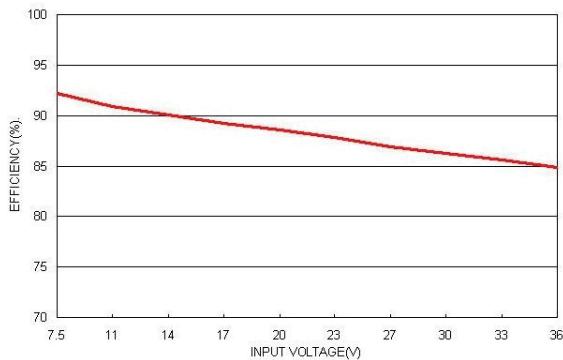
Efficiency vs Output Load



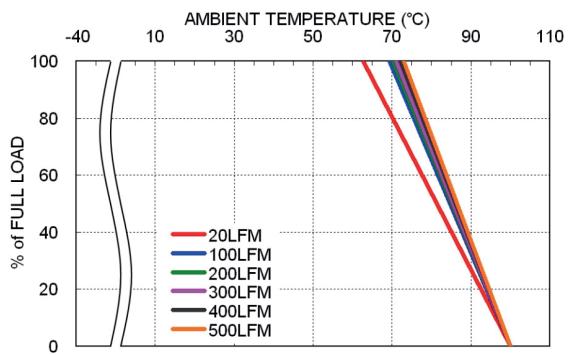
Power Dissipation vs Output Load

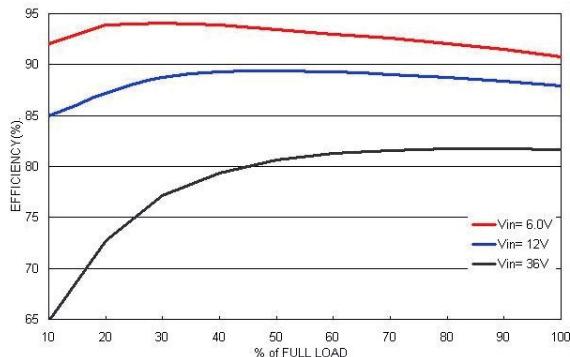
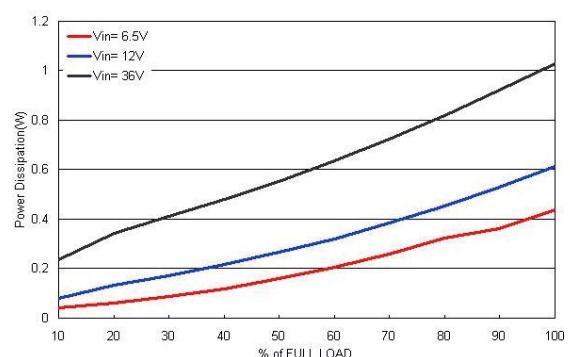
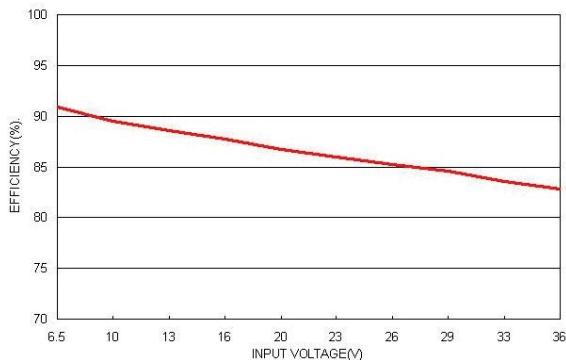
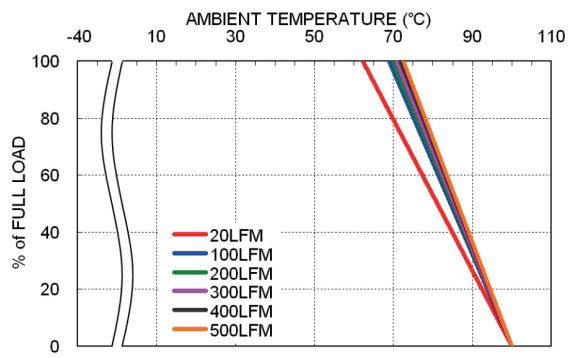


Efficiency vs Input Voltage



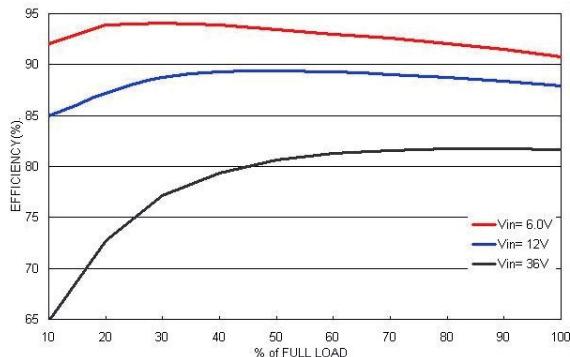
Derating Output Load versus Ambient Temperature



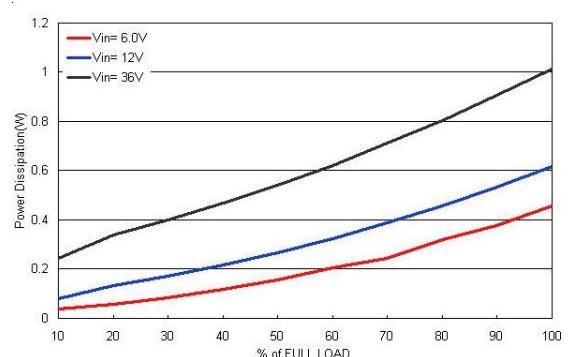
TSRN 1-2490SM, Trim-Down to 5.0 Vout (positive Output voltage)
Efficiency vs Output Load

Power Dissipation vs Output Load

Efficiency vs Input Voltage

Derating Output Load versus Ambient Temperature


TSRN 1-2490SM, Trim-Down to 4.5 Vout (positive Output voltage)

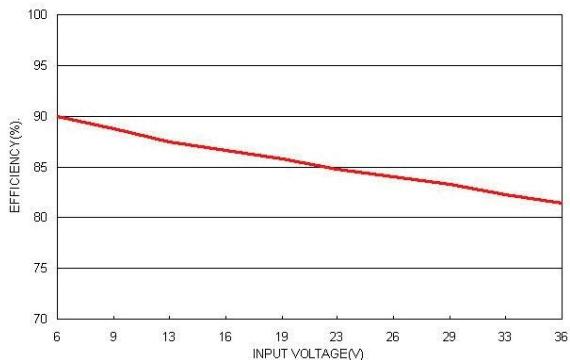
Efficiency vs Output Load



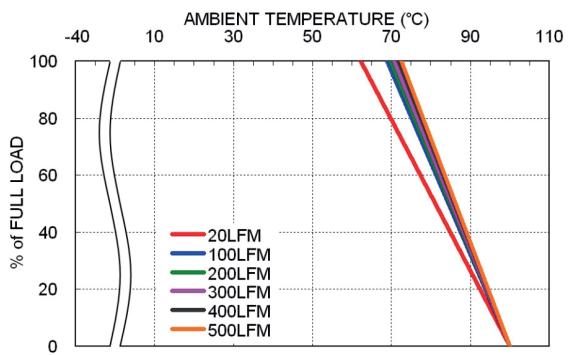
Power Dissipation vs Output Load

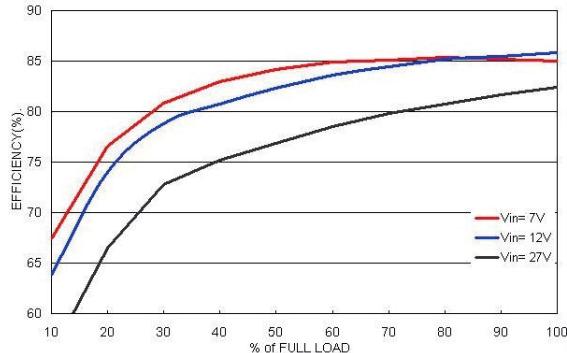
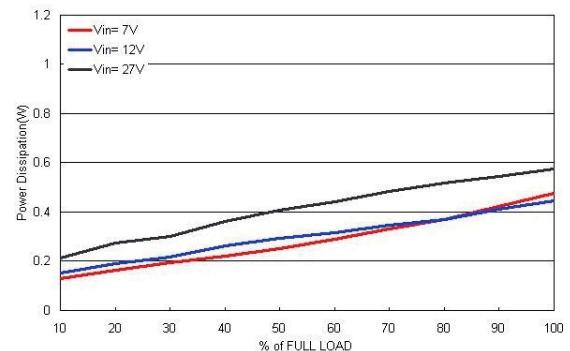
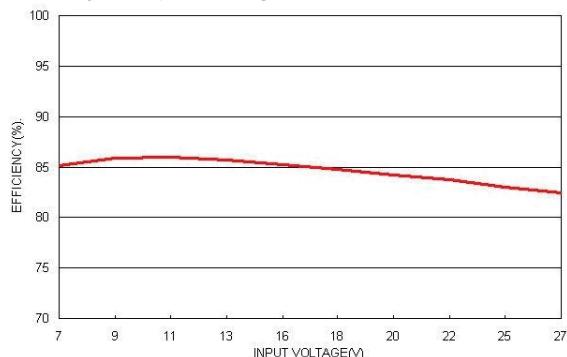
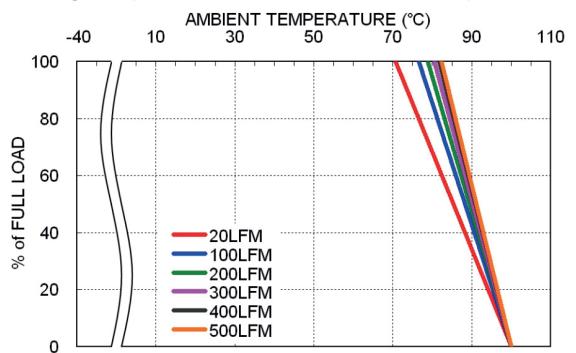
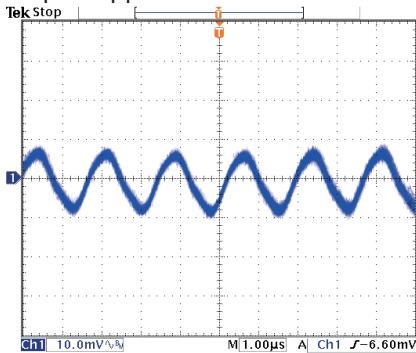
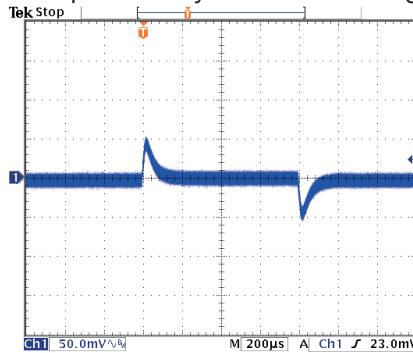
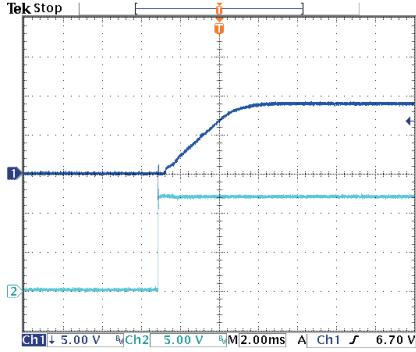


Efficiency vs Input Voltage



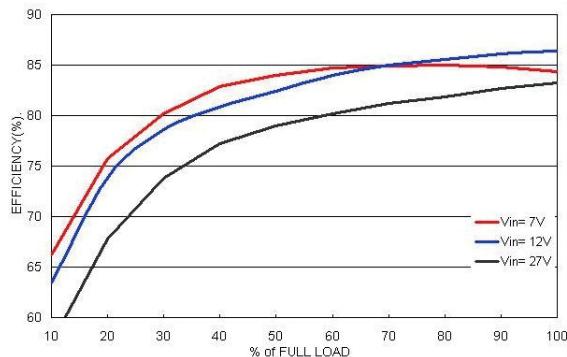
Derating Output Load versus Ambient Temperature



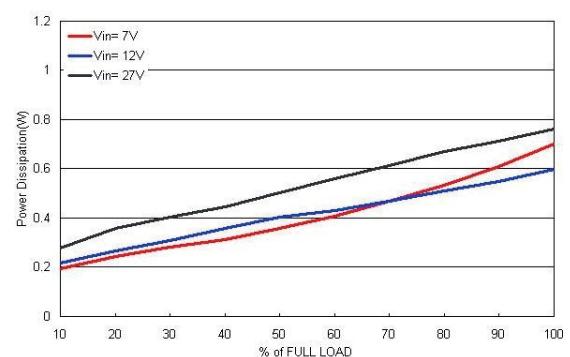
TSRN 1-2490SM (negative Output voltage)
Efficiency vs Output Load

Power Dissipation vs Output Load

Efficiency vs Input Voltage

Derating Output Load versus Ambient Temperature

Typical Output Ripple and Noise

Transient Response to Dynamic Load Change (50%)

Typical Input Start-Up and Output Rise Characteristic


TSRN 1-2490SM, Trim-Up to 12.6 Vout (negative Output voltage)

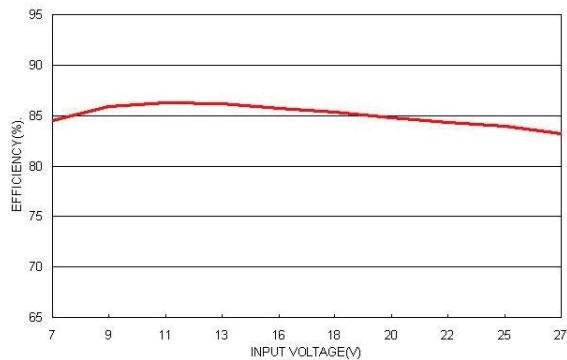
Efficiency vs Output Load



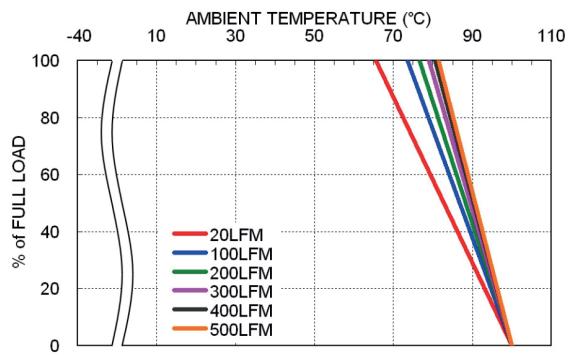
Power Dissipation vs Output Load



Efficiency vs Input Voltage

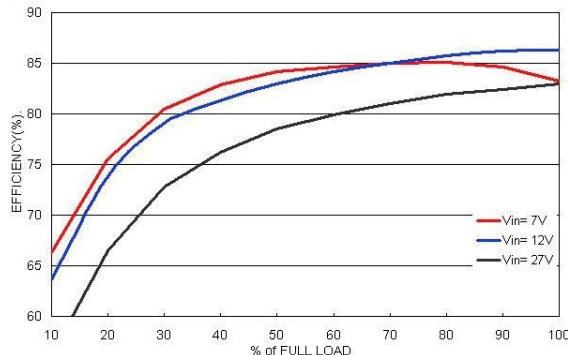


Derating Output Load versus Ambient Temperature

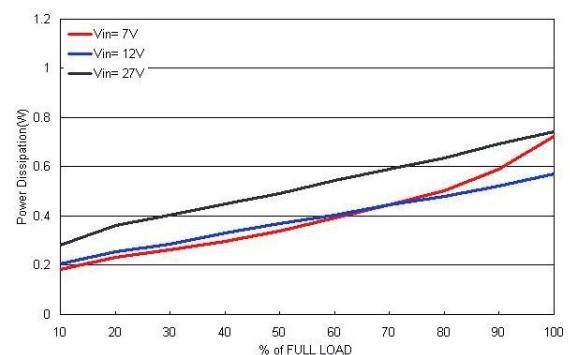


TSRN 1-2490SM, Trim-Up to 12 Vout (negative Output voltage)

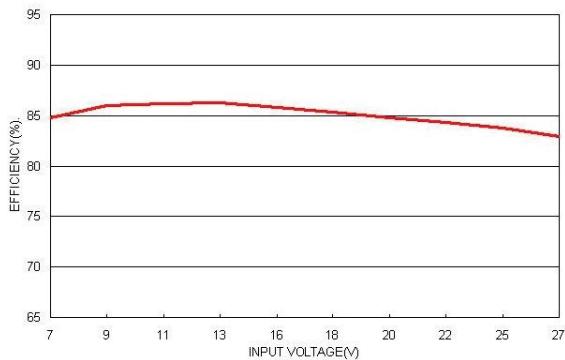
Efficiency vs Output Load



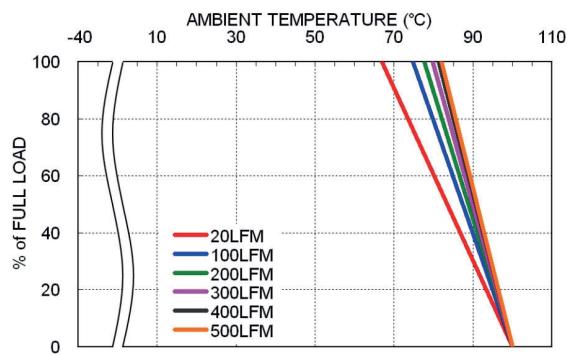
Power Dissipation vs Output Load



Efficiency vs Input Voltage

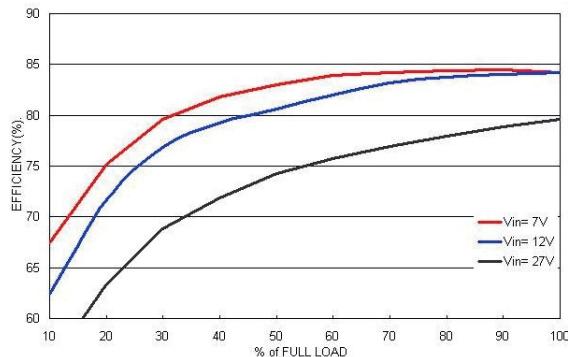


Derating Output Load versus Ambient Temperature

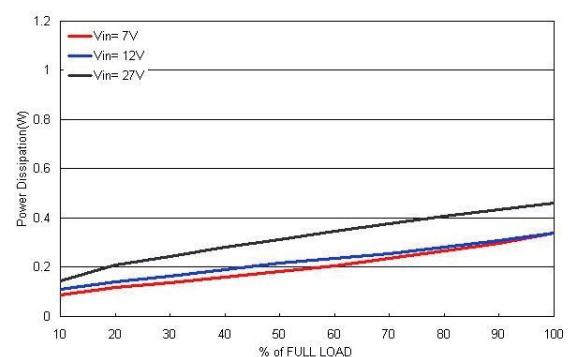


TSRN 1-2490SM, Trim-Down to 6.0 Vout (negative Output voltage)

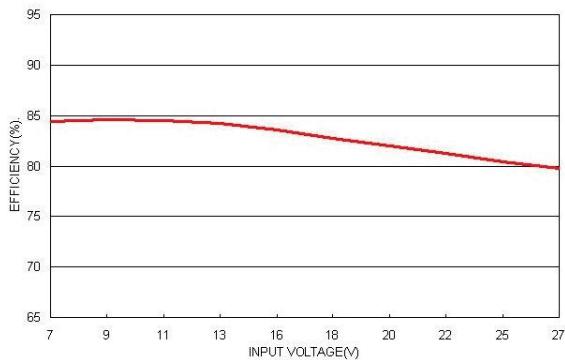
Efficiency vs Output Load



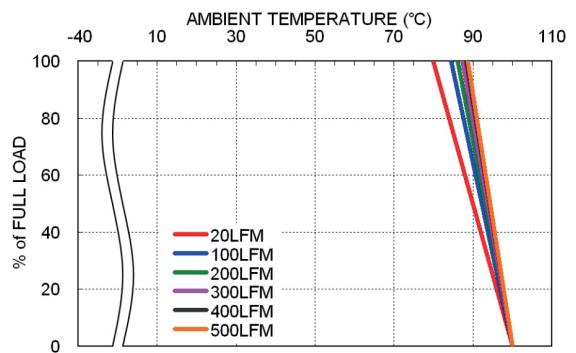
Power Dissipation vs Output Load

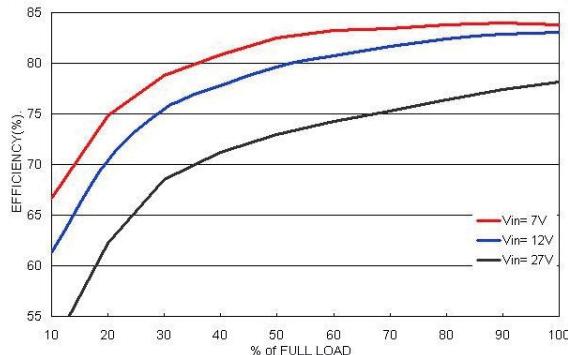
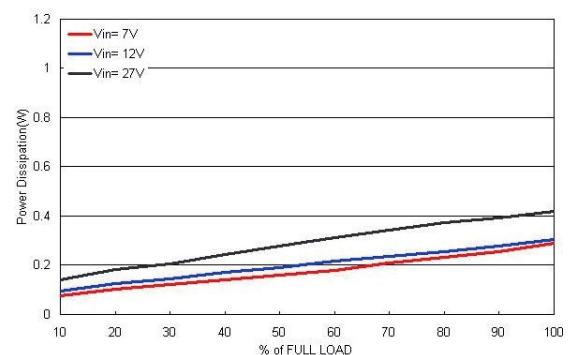
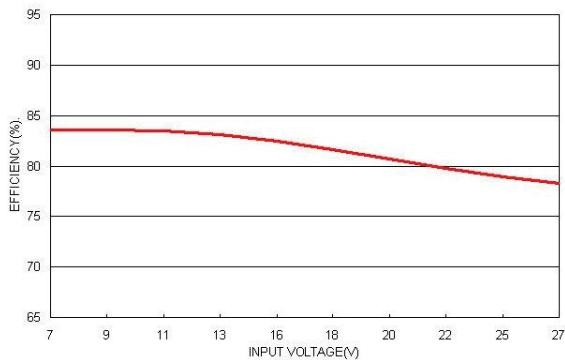
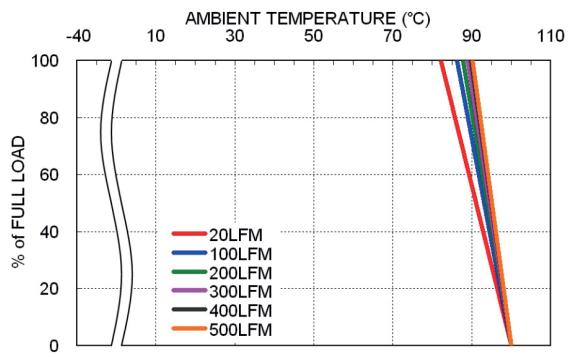


Efficiency vs Input Voltage



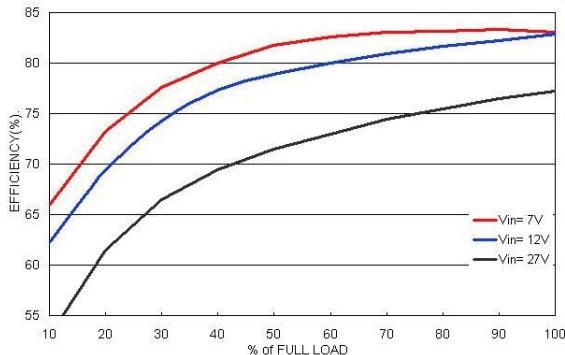
Derating Output Load versus Ambient Temperature



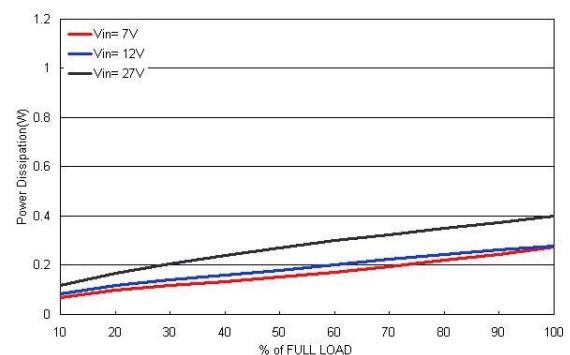
TSRN 1-2490SM, Trim-Down to 5.0 Vout (negative Output voltage)
Efficiency vs Output Load

Power Dissipation vs Output Load

Efficiency vs Input Voltage

Derating Output Load versus Ambient Temperature


TSRN 1-2490SM, Trim-Down to 4.5 Vout (negative Output voltage)

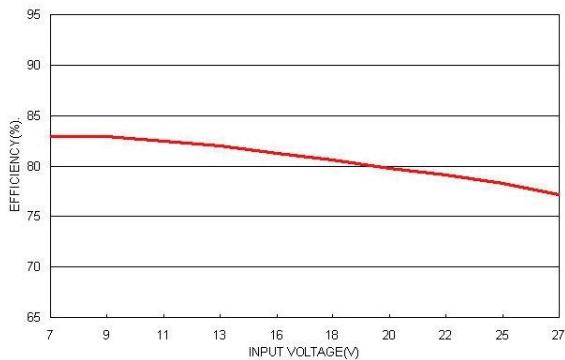
Efficiency vs Output Load



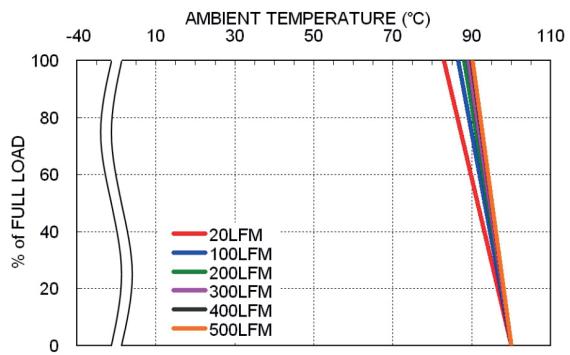
Power Dissipation vs Output Load

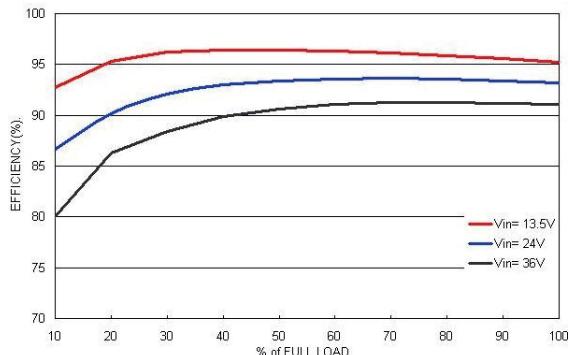
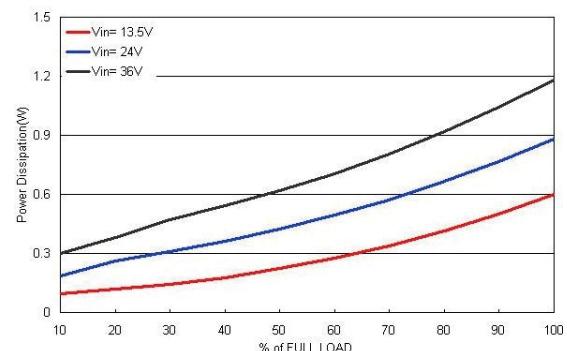
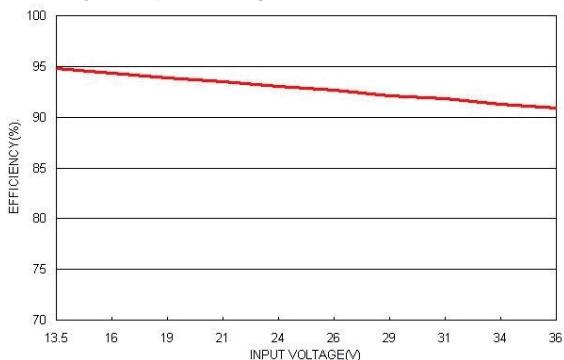
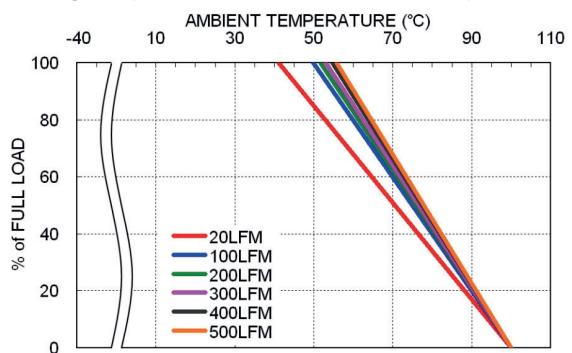
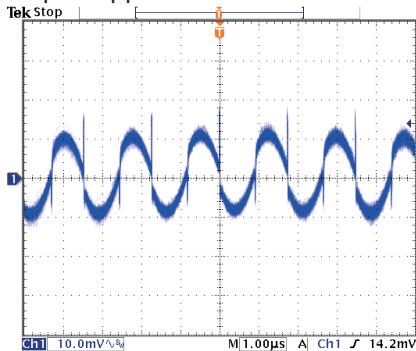
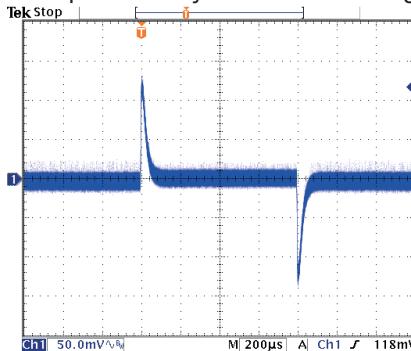
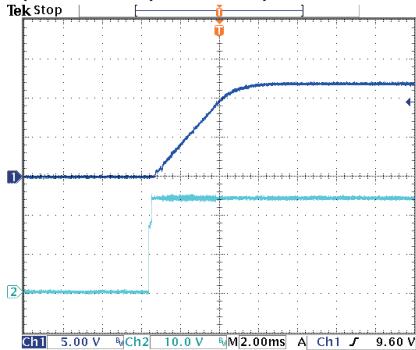


Efficiency vs Input Voltage



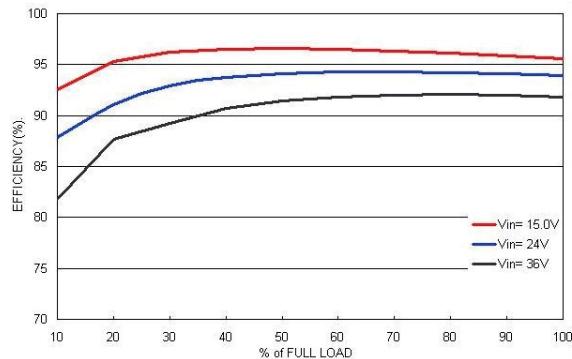
Derating Output Load versus Ambient Temperature



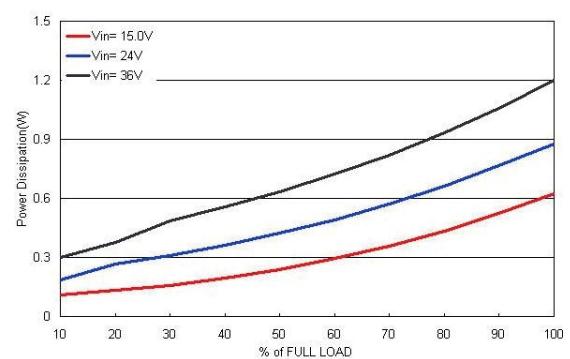
TSRN 1-24120SM (positive Output voltage)
Efficiency vs Output Load

Power Dissipation vs Output Load

Efficiency vs Input Voltage

Derating Output Load versus Ambient Temperature

Typical Output Ripple and Noise

Transient Response to Dynamic Load Change (50%)

Typical Input Start-Up and Output Rise Characteristic


TSRN 1-24120SM, Trim-Up to 13.5 Vout (positive Output voltage)

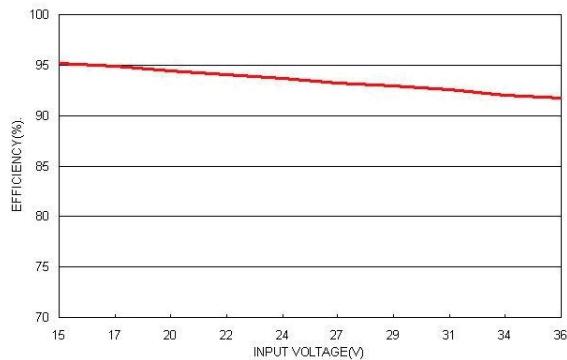
Efficiency vs Output Load



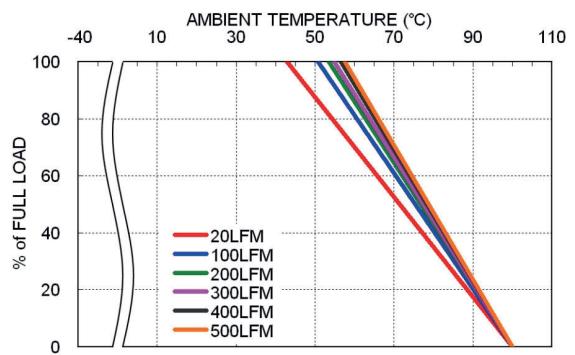
Power Dissipation vs Output Load



Efficiency vs Input Voltage

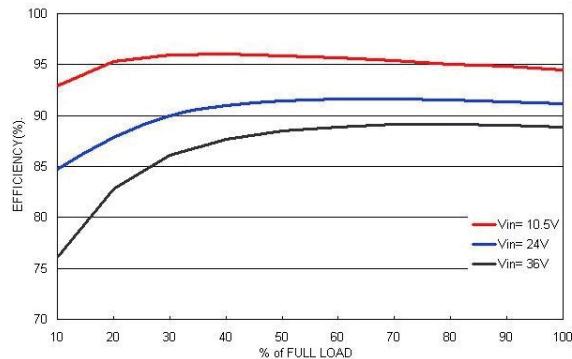


Derating Output Load versus Ambient Temperature

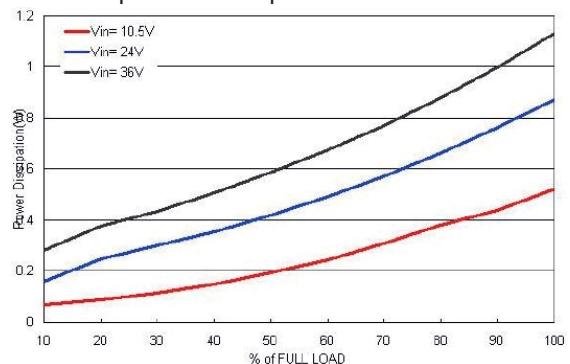


TSRN 1-24120SM, Trim-Down to 9 Vout (positive Output voltage)

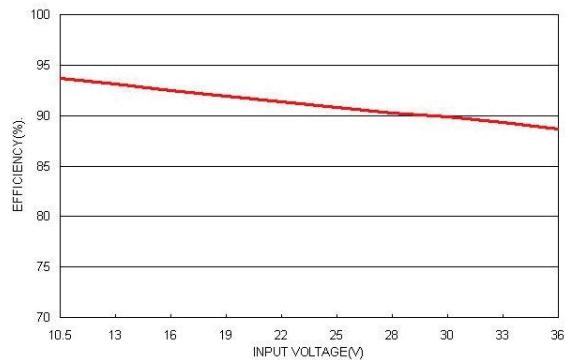
Efficiency vs Output Load



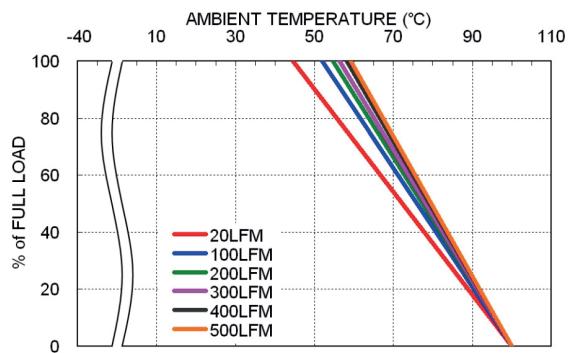
Power Dissipation vs Output Load

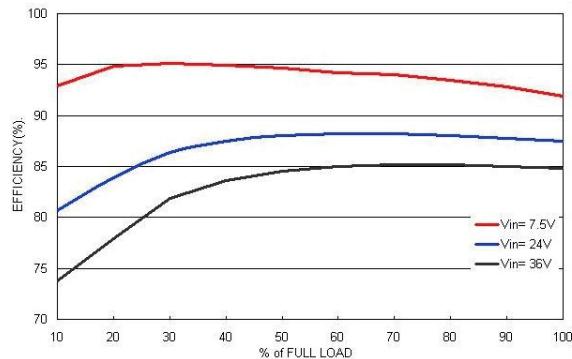
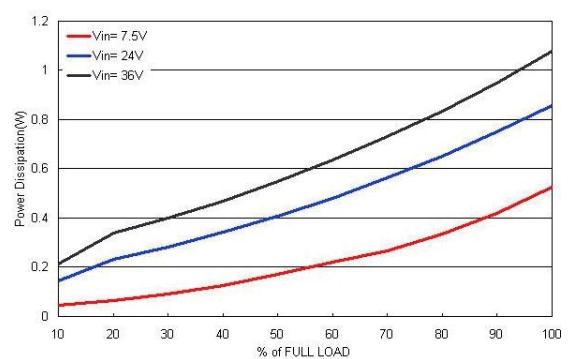
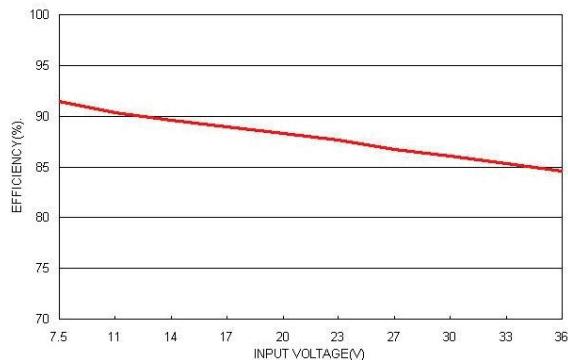
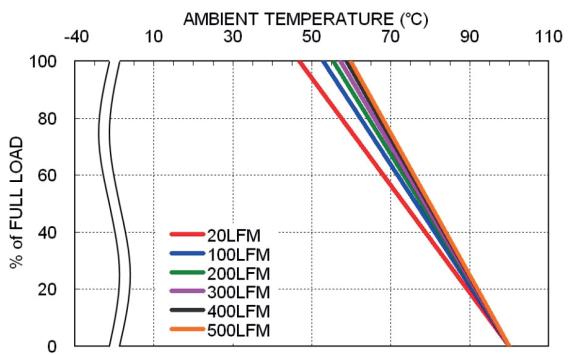


Efficiency vs Input Voltage



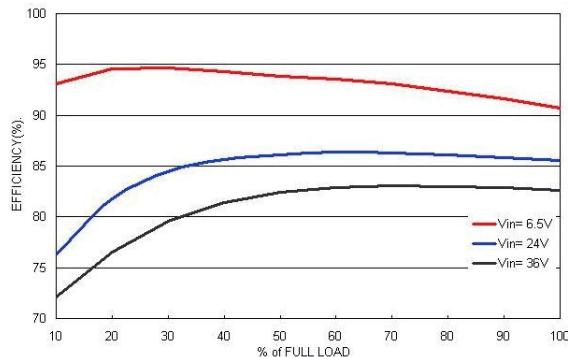
Derating Output Load versus Ambient Temperature



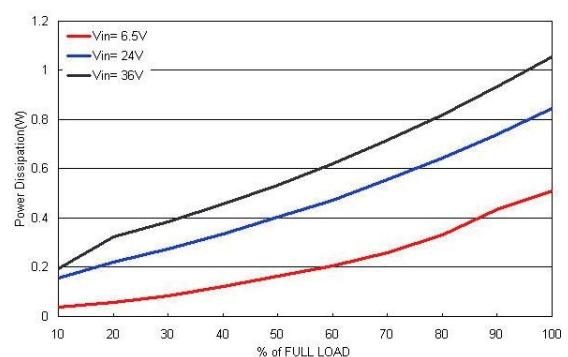
TSRN 1-24120SM, Trim-Down to 6.0 Vout (positive Output voltage)
Efficiency vs Output Load

Power Dissipation vs Output Load

Efficiency vs Input Voltage

Derating Output Load versus Ambient Temperature


TSRN 1-24120SM, Trim-Down to 5.0 Vout (positive Output voltage)

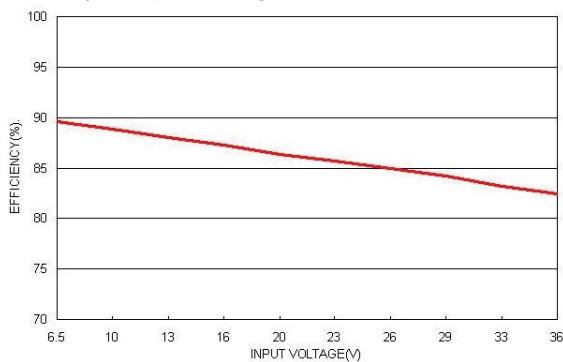
Efficiency vs Output Load



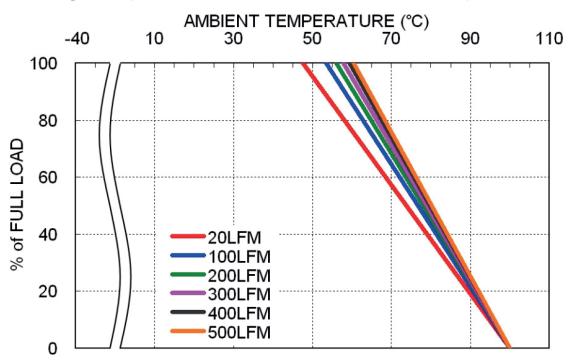
Power Dissipation vs Output Load



Efficiency vs Input Voltage

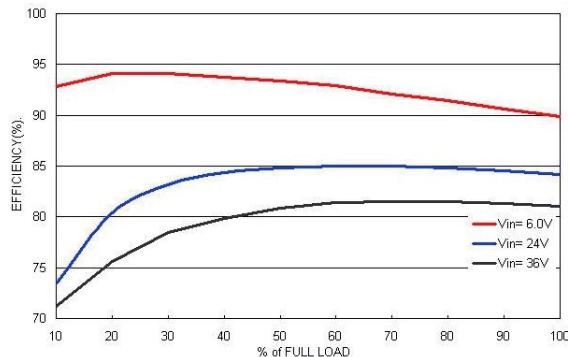


Derating Output Load versus Ambient Temperature

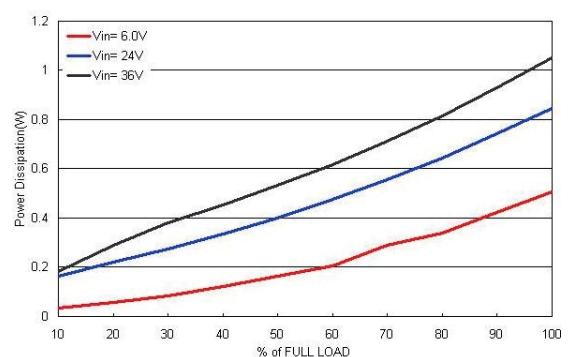


TSRN 1-24120SM, Trim-Down to 4.5 Vout (positive Output voltage)

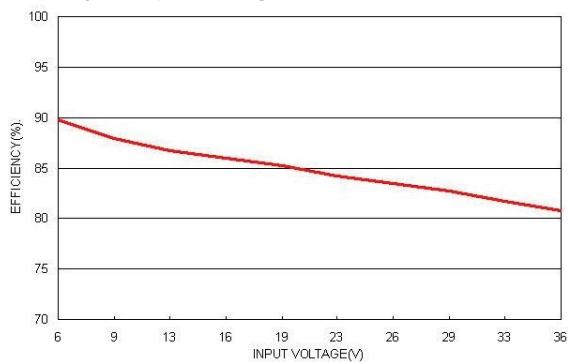
Efficiency vs Output Load



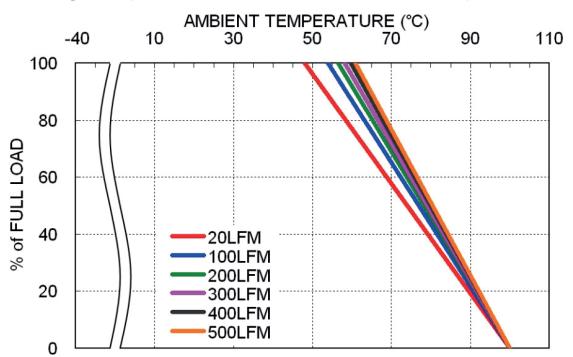
Power Dissipation vs Output Load

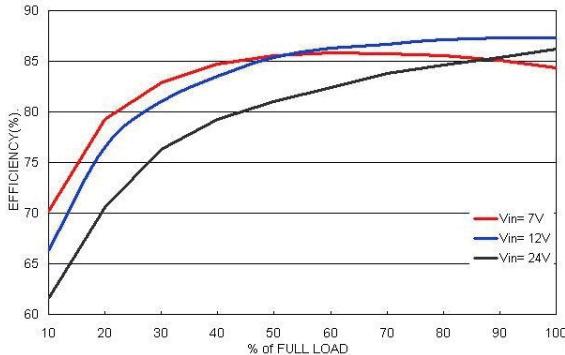
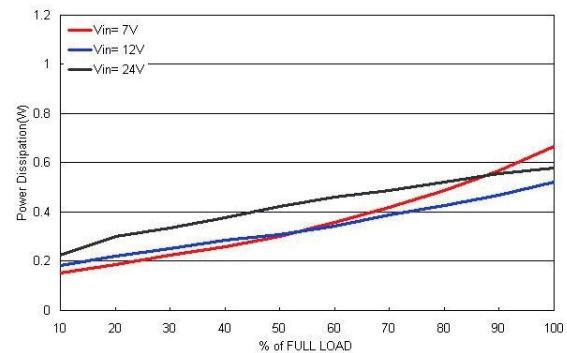
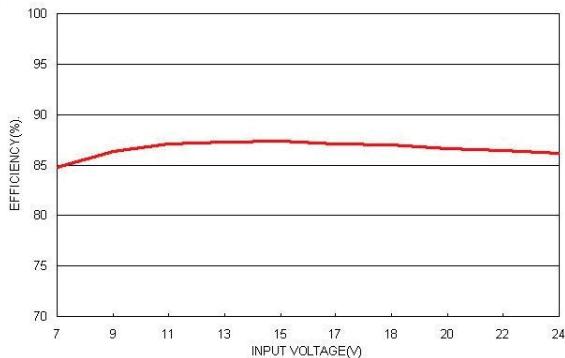
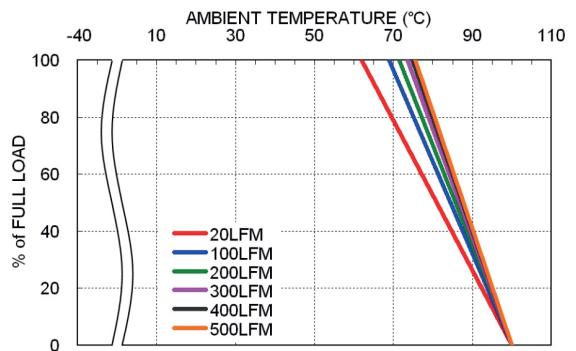
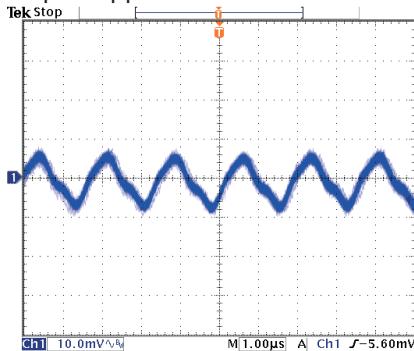
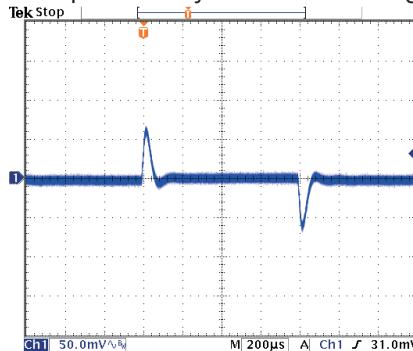
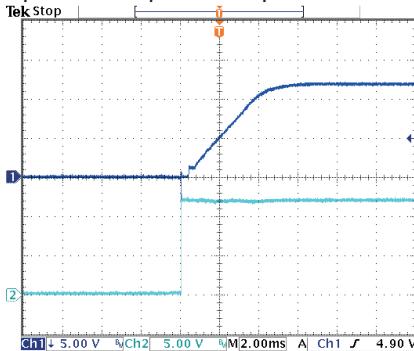


Efficiency vs Input Voltage



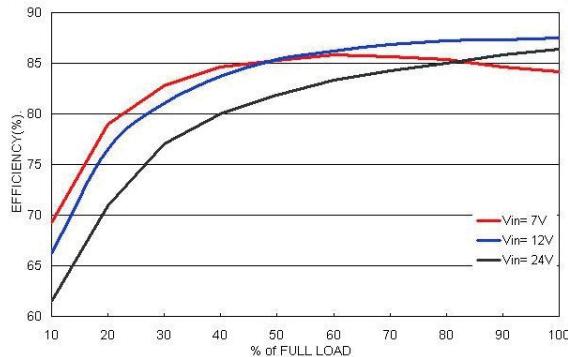
Derating Output Load versus Ambient Temperature



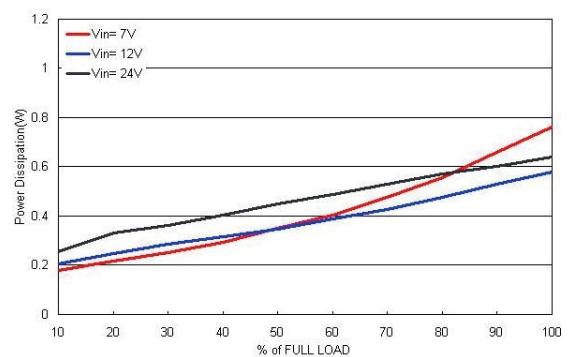
TSRN 1-24120SM (negative Output voltage)
Efficiency vs Output Load

Power Dissipation vs Output Load

Efficiency vs Input Voltage

Derating Output Load versus Ambient Temperature

Typical Output Ripple and Noise

Transient Response to Dynamic Load Change (50%)

Typical Input Start-Up and Output Rise Characteristic


TSRN 1-24120SM, Trim-Up to 13.5 Vout (negative Output voltage)

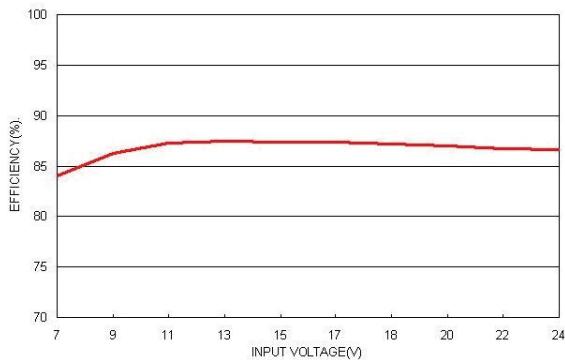
Efficiency vs Output Load



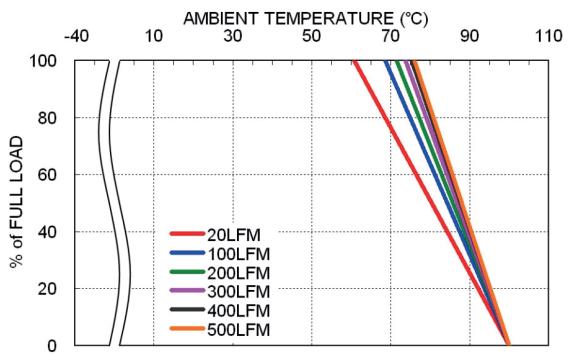
Power Dissipation vs Output Load



Efficiency vs Input Voltage

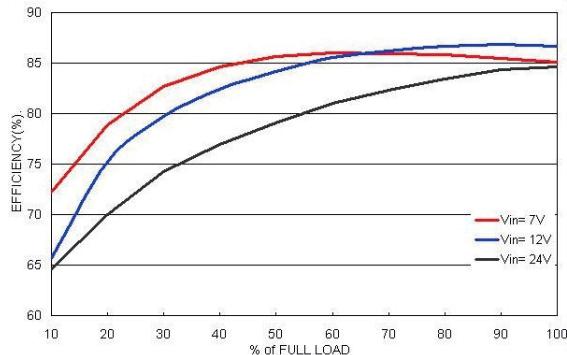


Derating Output Load versus Ambient Temperature

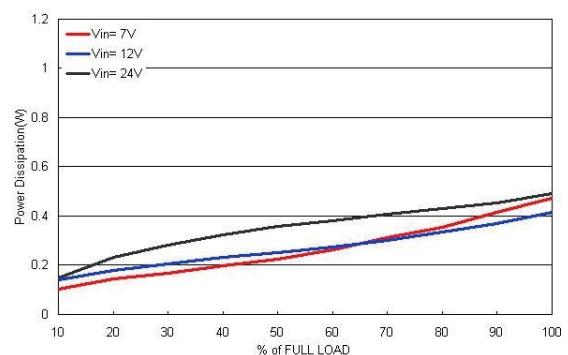


TSRN 1-24120SM, Trim-Down to 9 Vout (negative Output voltage)

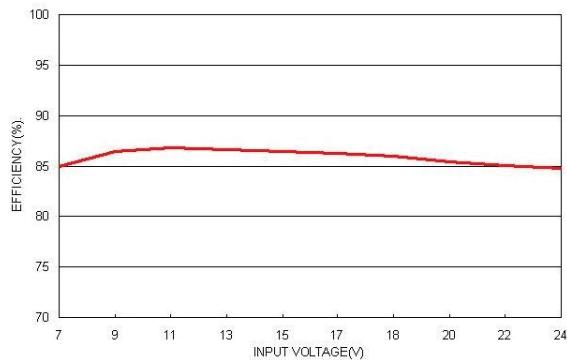
Efficiency vs Output Load



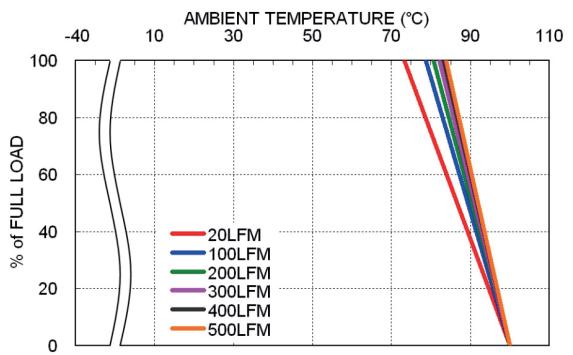
Power Dissipation vs Output Load



Efficiency vs Input Voltage

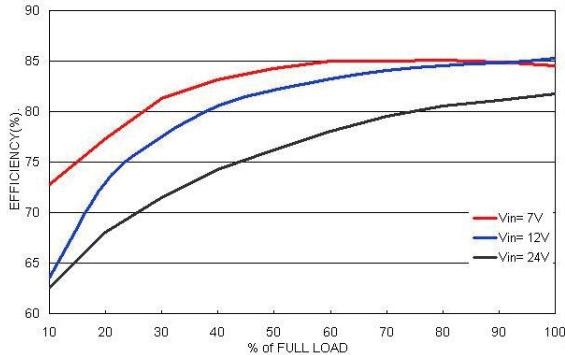


Derating Output Load versus Ambient Temperature

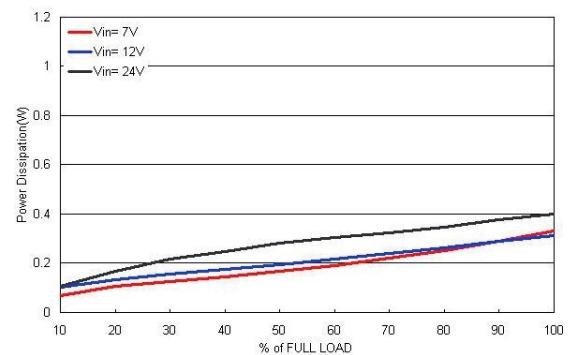


TSRN 1-24120SM, Trim-Down to 6.0 Vout (negative Output voltage)

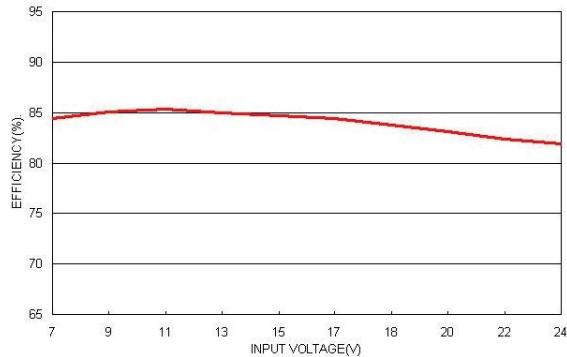
Efficiency vs Output Load



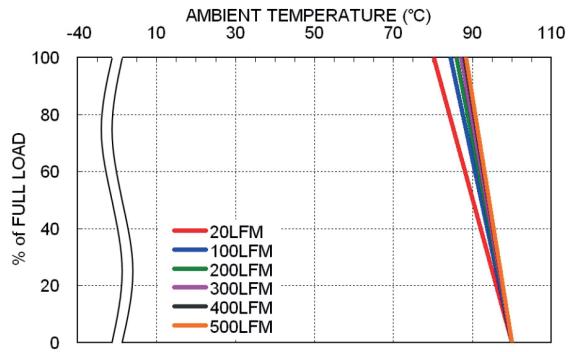
Power Dissipation vs Output Load

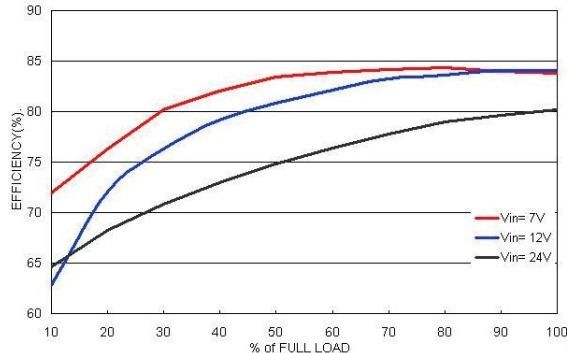
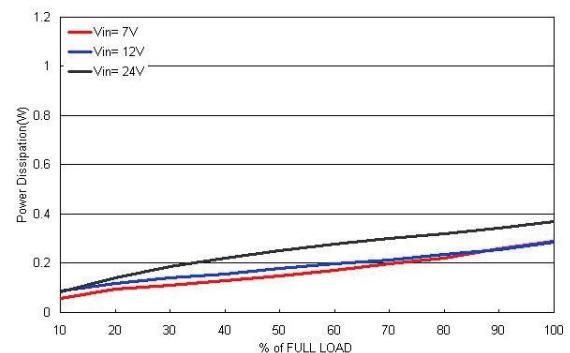
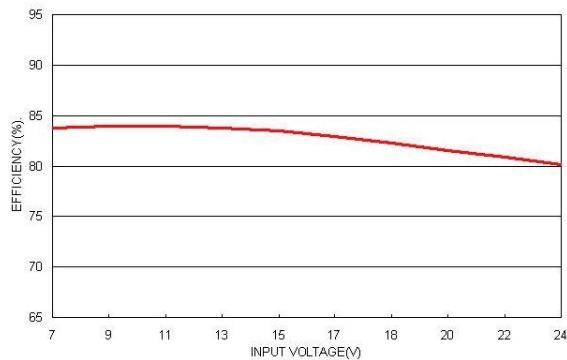
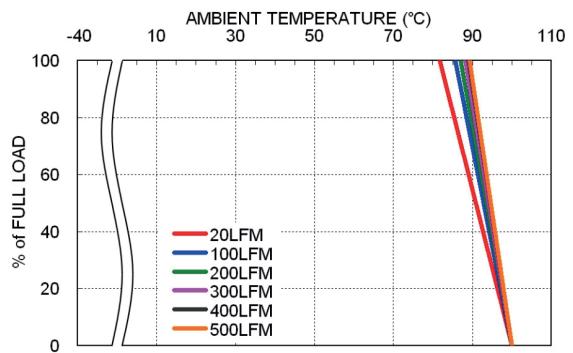


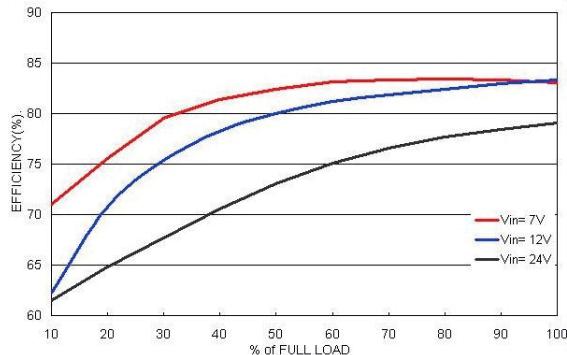
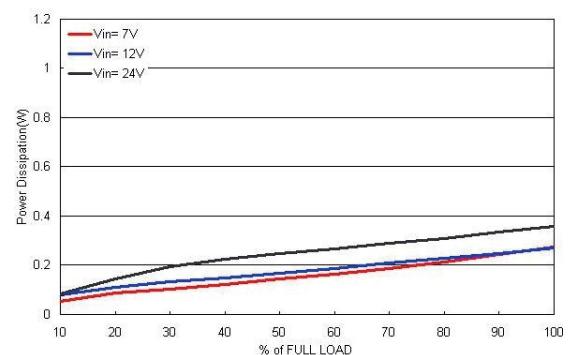
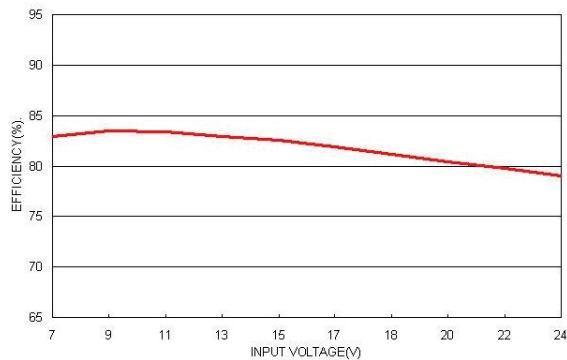
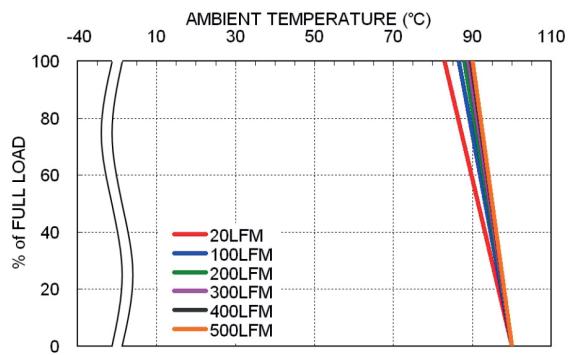
Efficiency vs Input Voltage

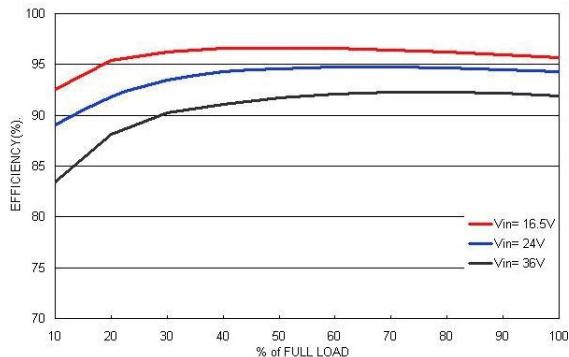
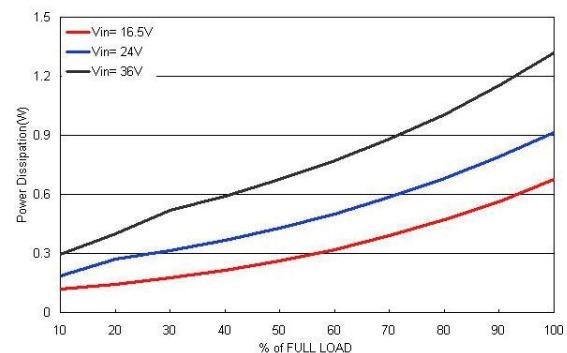
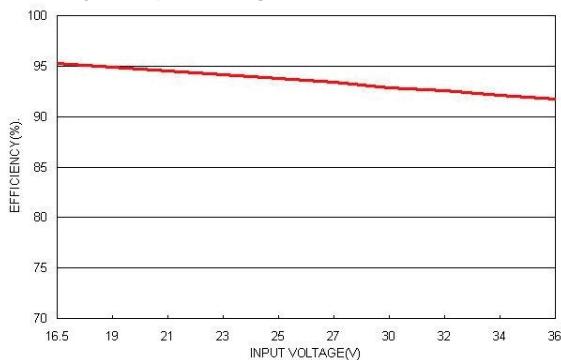
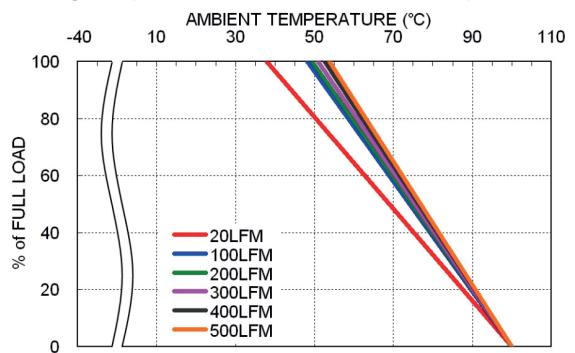
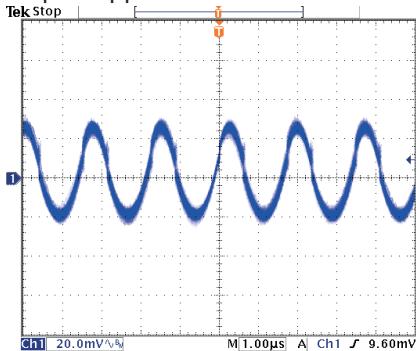
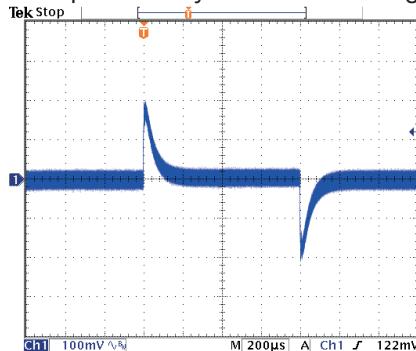
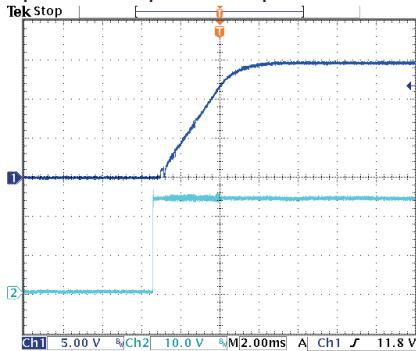


Derating Output Load versus Ambient Temperature



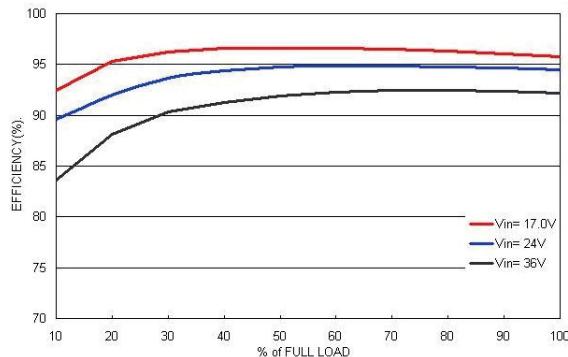
TSRN 1-24120SM, Trim-Down to 5.0 Vout (negative Output voltage)
Efficiency vs Output Load

Power Dissipation vs Output Load

Efficiency vs Input Voltage

Derating Output Load versus Ambient Temperature


TSRN 1-24120SM, Trim-Down to 4.5 Vout (negative Output voltage)
Efficiency vs Output Load

Power Dissipation vs Output Load

Efficiency vs Input Voltage

Derating Output Load versus Ambient Temperature


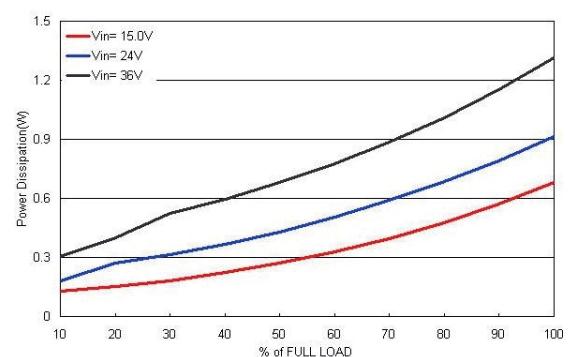
TSRN 1-24150SM (positive Output voltage)
Efficiency vs Output Load

Power Dissipation vs Output Load

Efficiency vs Input Voltage

Derating Output Load versus Ambient Temperature

Typical Output Ripple and Noise

Transient Response to Dynamic Load Change (50%)

Typical Input Start-Up and Output Rise Characteristic


TSRN 1-24150SM, Trim-Up to 15.5 Vout (positive Output voltage)

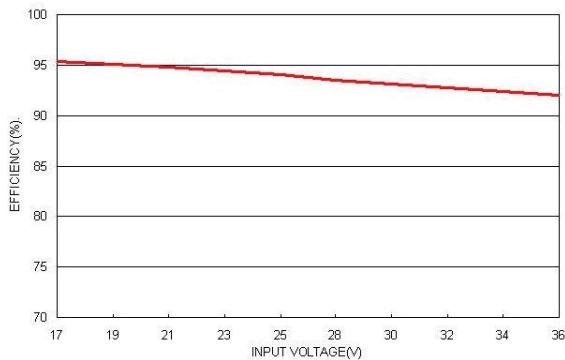
Efficiency vs Output Load



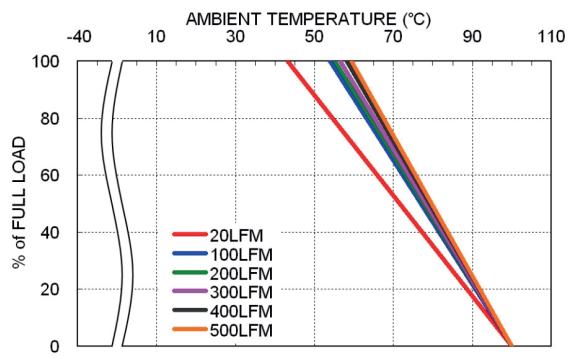
Power Dissipation vs Output Load

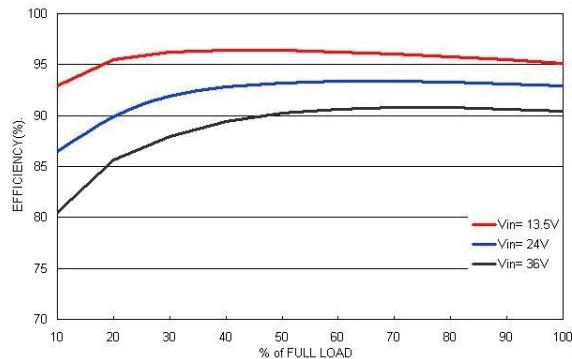
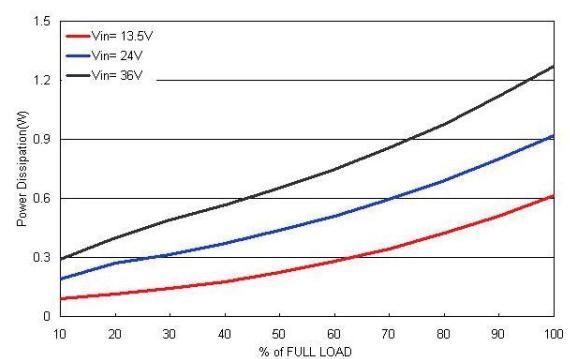
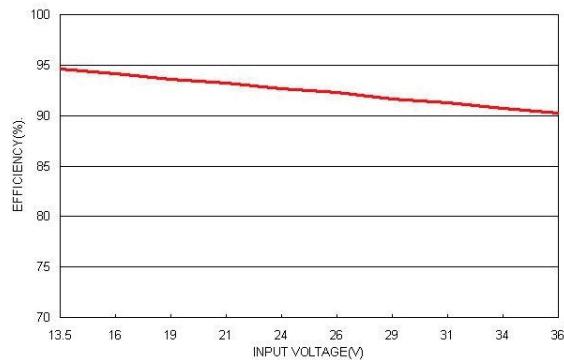
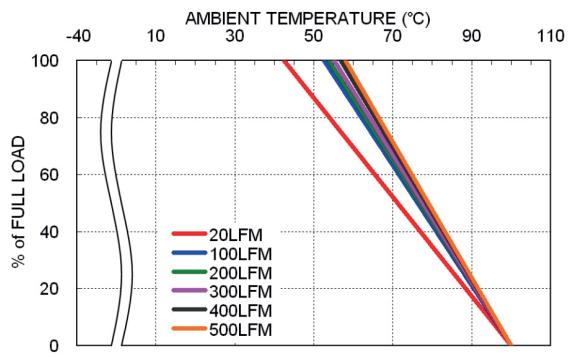


Efficiency vs Input Voltage



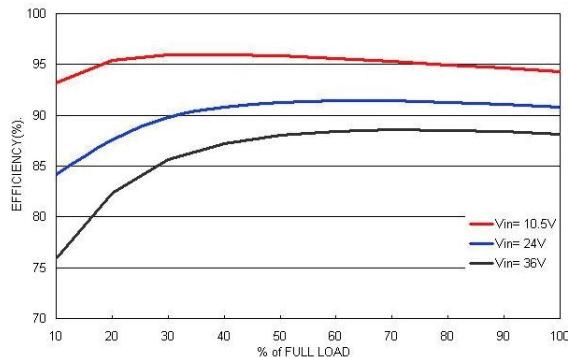
Derating Output Load versus Ambient Temperature



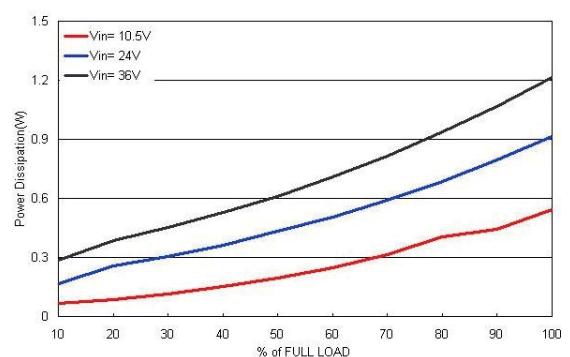
TSRN 1-24150SM, Trim-Down to 12 Vout (positive Output voltage)
Efficiency vs Output Load

Power Dissipation vs Output Load

Efficiency vs Input Voltage

Derating Output Load versus Ambient Temperature


TSRN 1-24150SM, Trim-Down to 9.0 Vout (positive Output voltage)

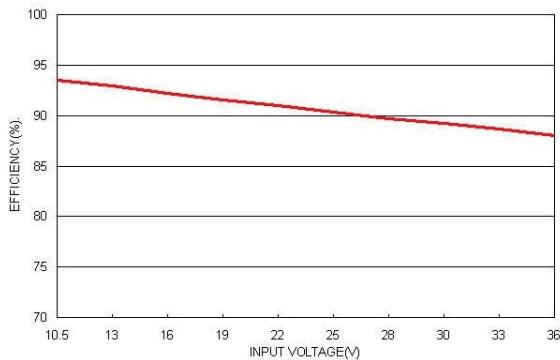
Efficiency vs Output Load



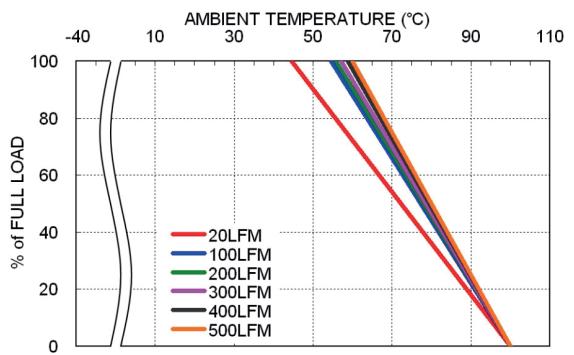
Power Dissipation vs Output Load



Efficiency vs Input Voltage

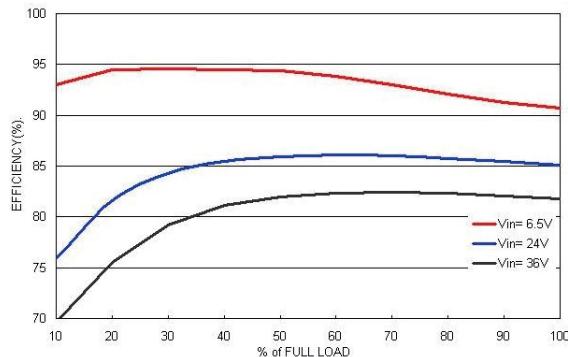


Derating Output Load versus Ambient Temperature

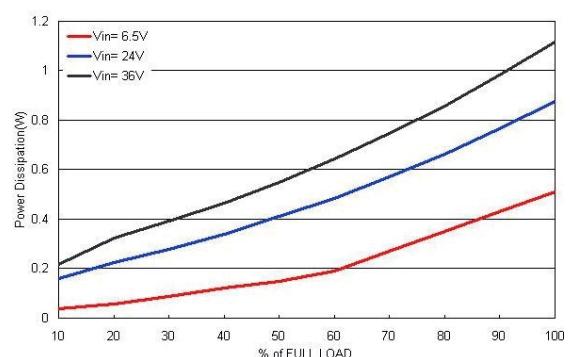


TSRN 1-24150SM, Trim-Down to 5.0 Vout (positive Output voltage)

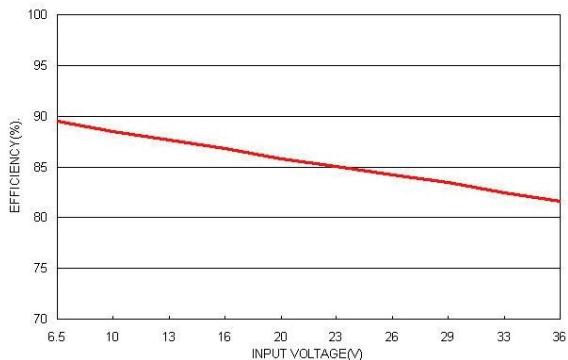
Efficiency vs Output Load



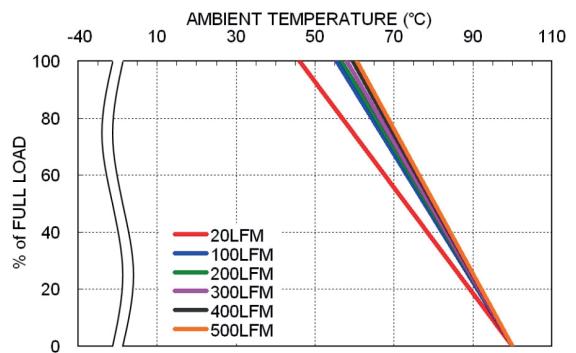
Power Dissipation vs Output Load



Efficiency vs Input Voltage

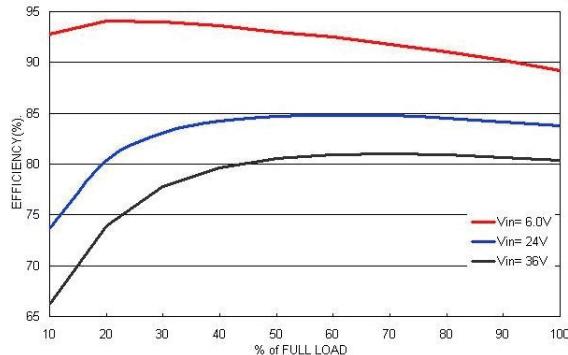


Derating Output Load versus Ambient Temperature

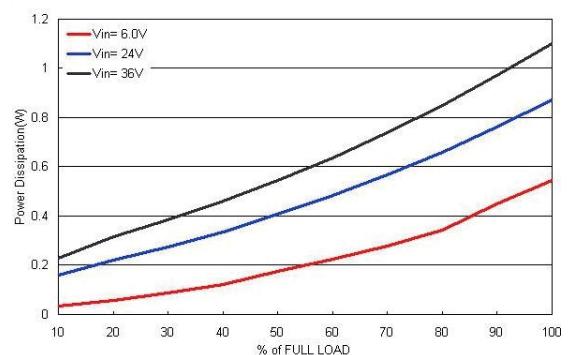


TSRN 1-24150SM, Trim-Down to 4.5 Vout (positive Output voltage)

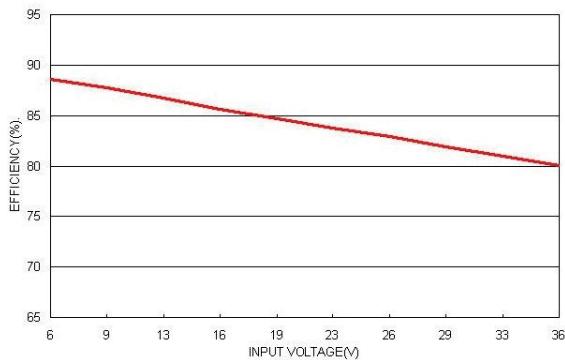
Efficiency vs Output Load



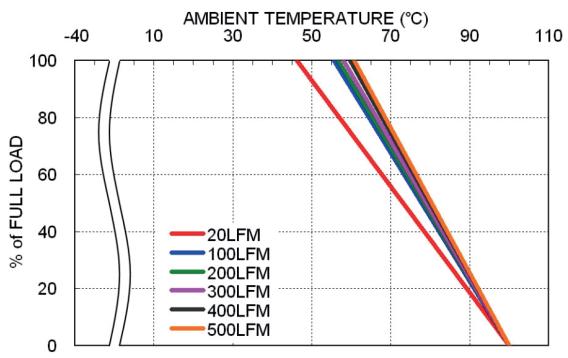
Power Dissipation vs Output Load

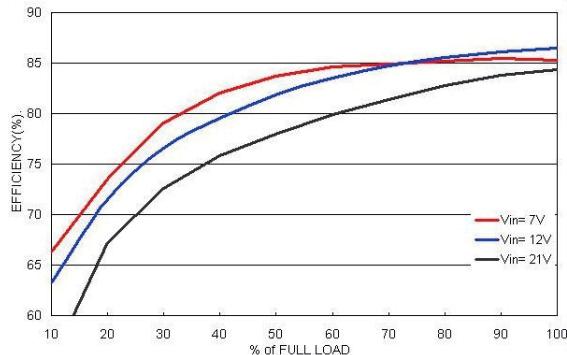
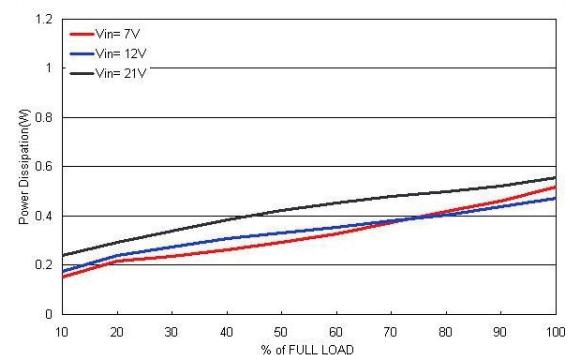
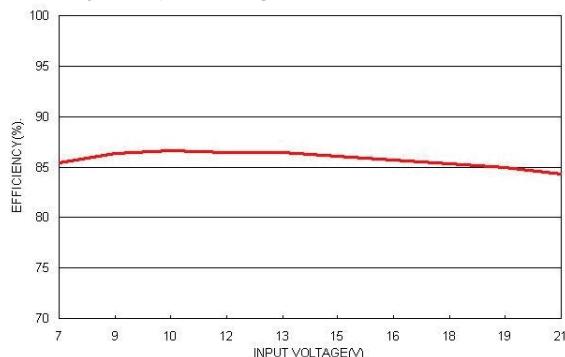
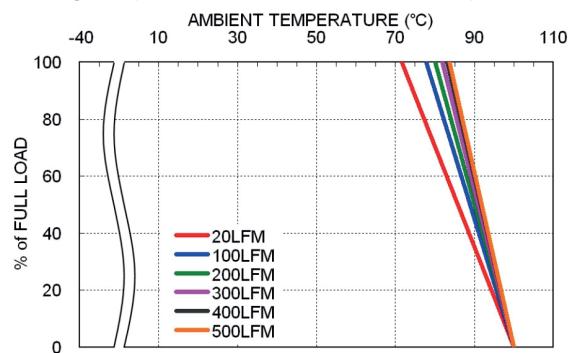
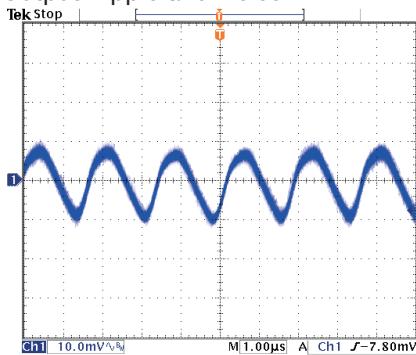
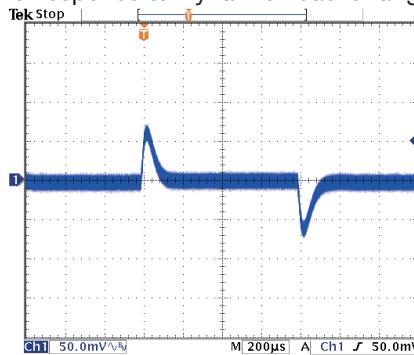
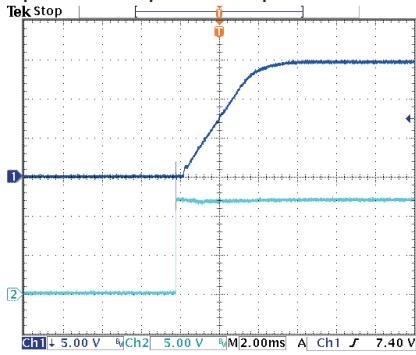


Efficiency vs Input Voltage



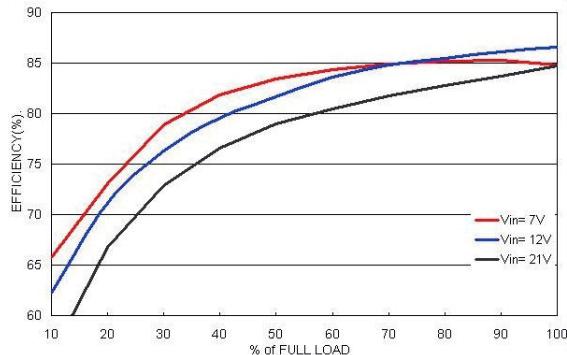
Derating Output Load versus Ambient Temperature



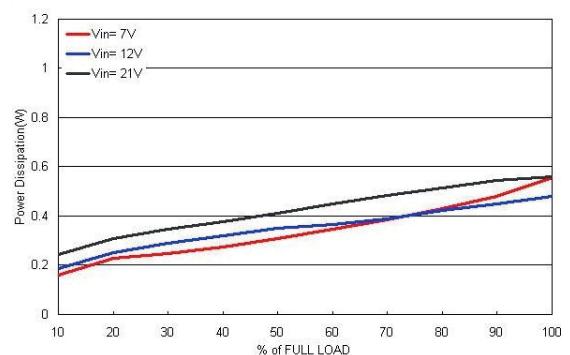
TSRN 1-24150SM (negative Output voltage)
Efficiency vs Output Load

Power Dissipation vs Output Load

Efficiency vs Input Voltage

Derating Output Load versus Ambient Temperature

Typical Output Ripple and Noise

Transient Response to Dynamic Load Change (50%)

Typical Input Start-Up and Output Rise Characteristic


TSRN 1-24150SM, Trim-Up to 15.5 Vout (negative Output voltage)

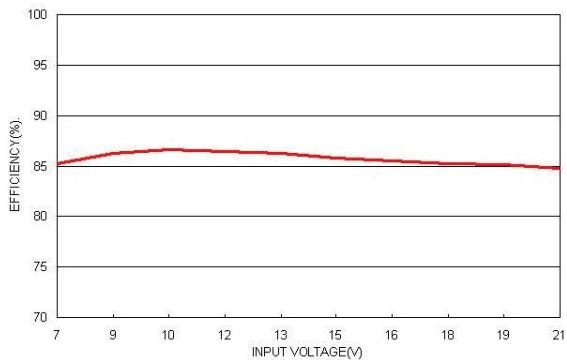
Efficiency vs Output Load



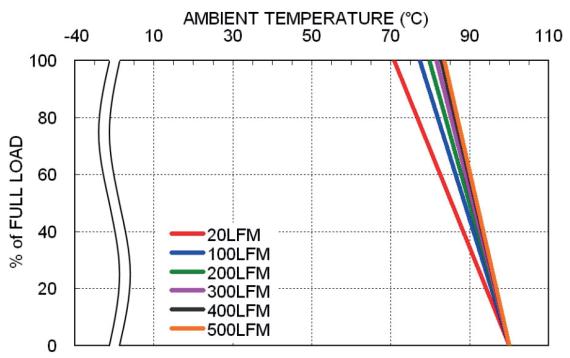
Power Dissipation vs Output Load



Efficiency vs Input Voltage

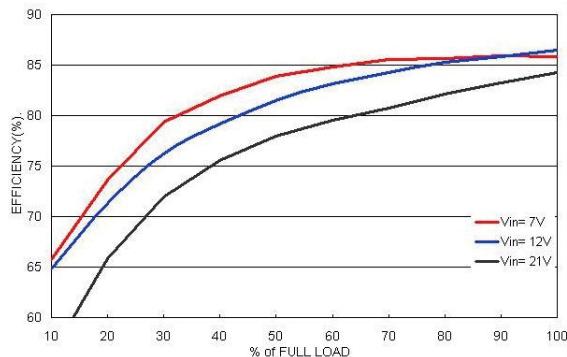


Derating Output Load versus Ambient Temperature

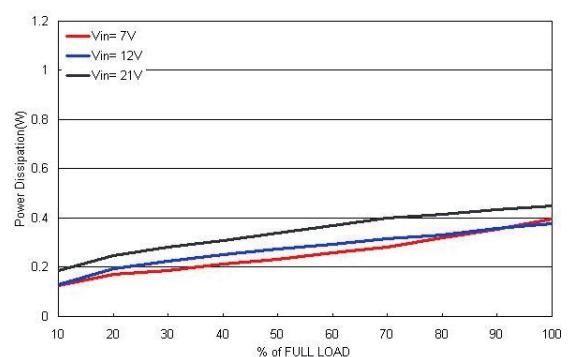


TSRN 1-24150SM, Trim-Down to 12 Vout (negative Output voltage)

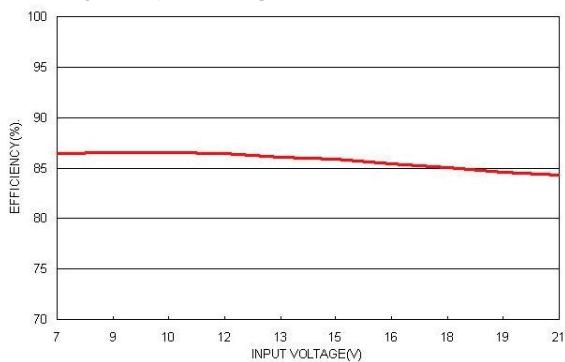
Efficiency vs Output Load



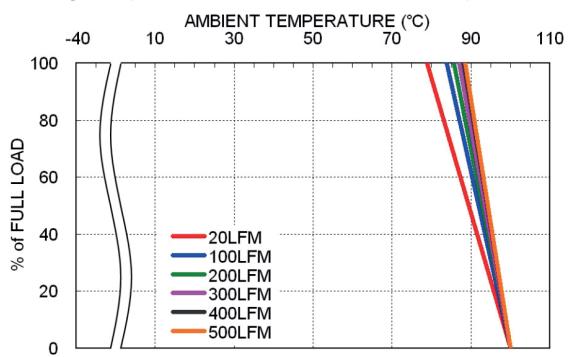
Power Dissipation vs Output Load



Efficiency vs Input Voltage

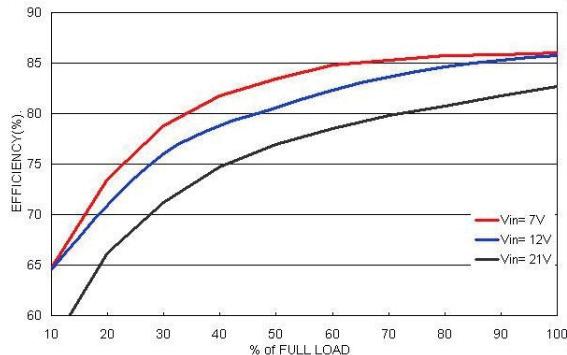


Derating Output Load versus Ambient Temperature

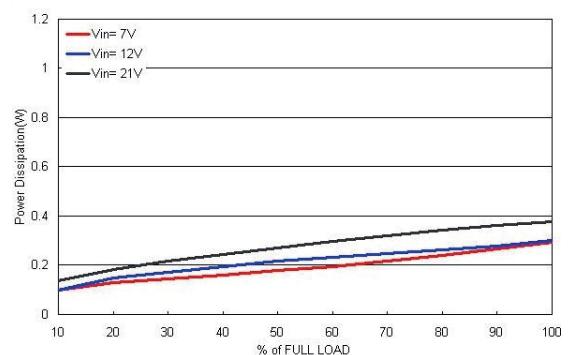


TSRN 1-24150SM, Trim-Down to 9.0 Vout (negative Output voltage)

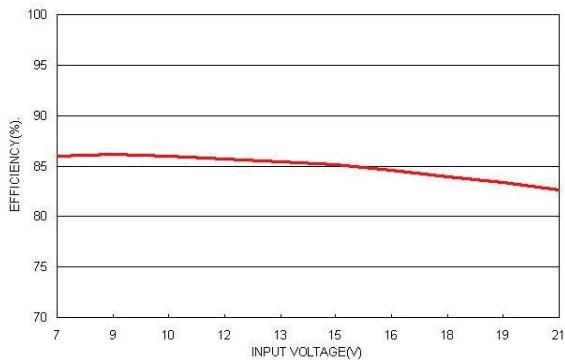
Efficiency vs Output Load



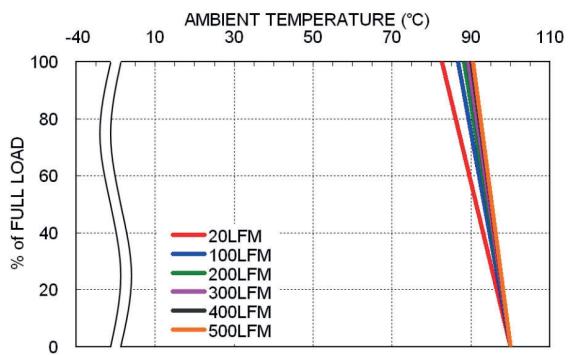
Power Dissipation vs Output Load



Efficiency vs Input Voltage

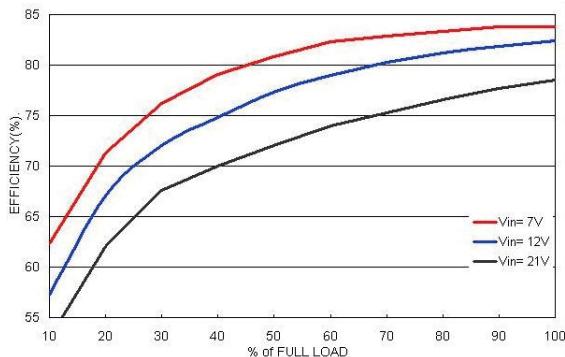


Derating Output Load versus Ambient Temperature

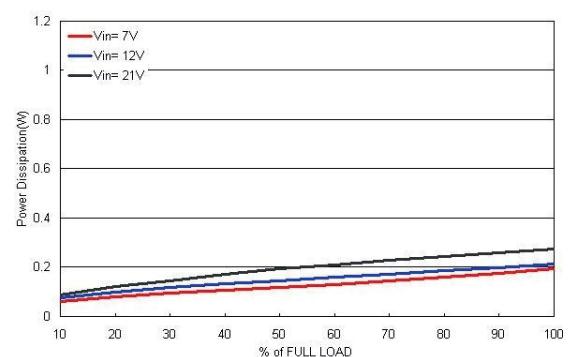


TSRN 1-24150SM, Trim-Down to 5.0 Vout (negative Output voltage)

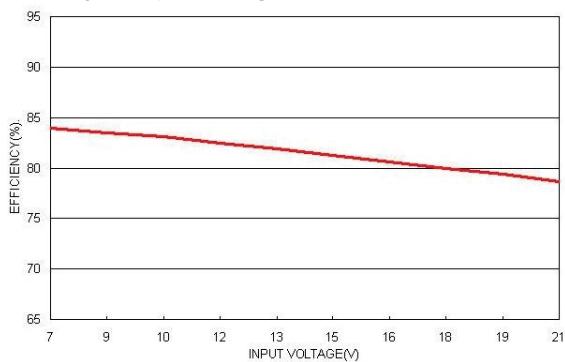
Efficiency vs Output Load



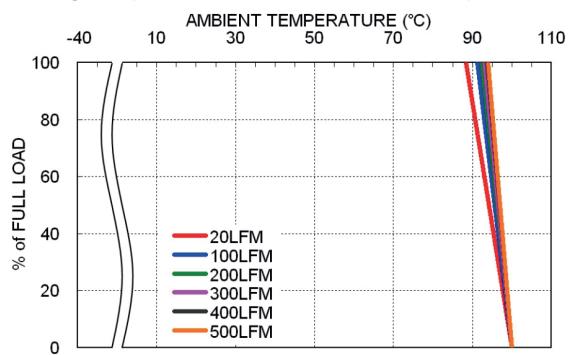
Power Dissipation vs Output Load



Efficiency vs Input Voltage

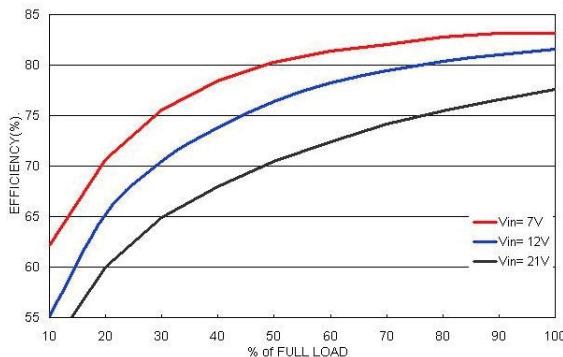


Derating Output Load versus Ambient Temperature

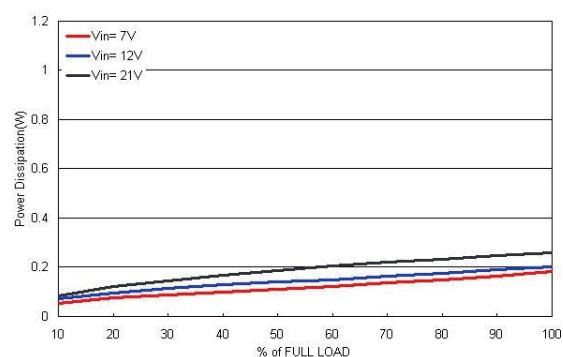


TSRN 1-24150SM, Trim-Down to 4.5 Vout (negative Output voltage)

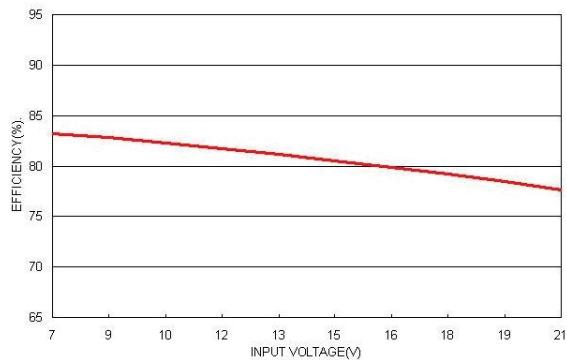
Efficiency vs Output Load



Power Dissipation vs Output Load



Efficiency vs Input Voltage



Derating Output Load versus Ambient Temperature

