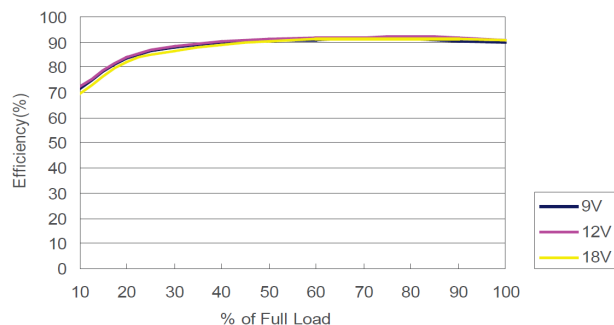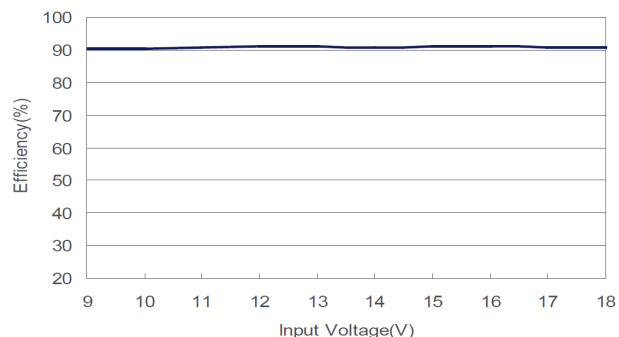# TRACO POWER

Characteristic Curves
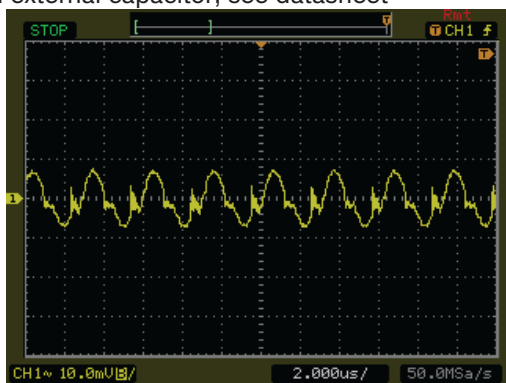
TEN 40-1210N

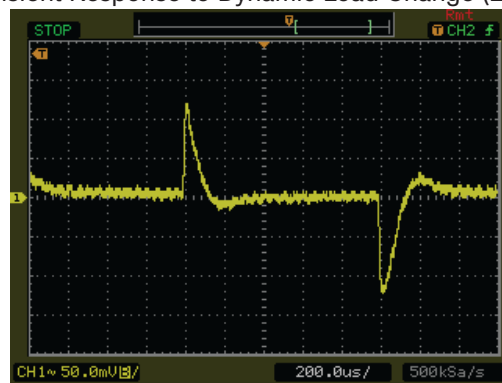Efficiency versus Output Load

Efficiency versus Input Voltage

Typical Output Ripple and Noise
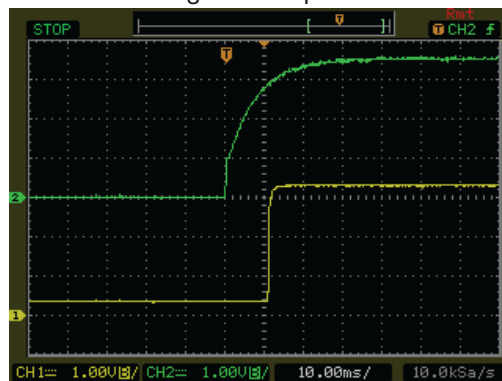with external capacitor; see datasheet

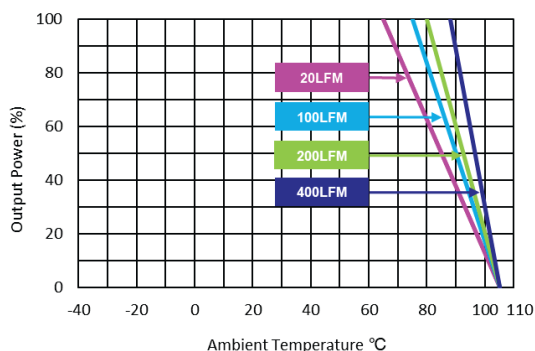Transient Response to Dynamic Load Change (25%)

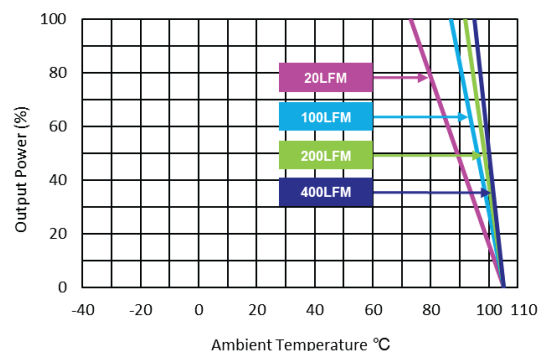Typical Start-Up and Output Rise Characteristic

Remote on/off Voltage Start-Up Characteristic

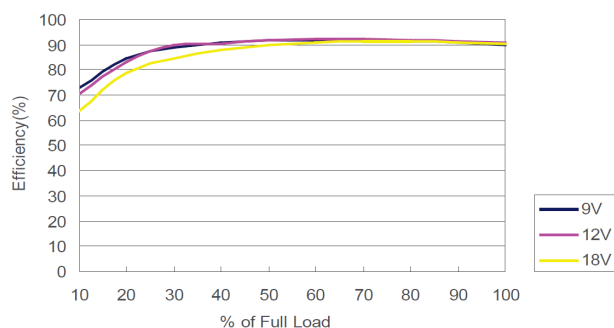Derating Output Load versus Ambient Temperature
without Heatsink

Derating Output Load versus Ambient Temperature
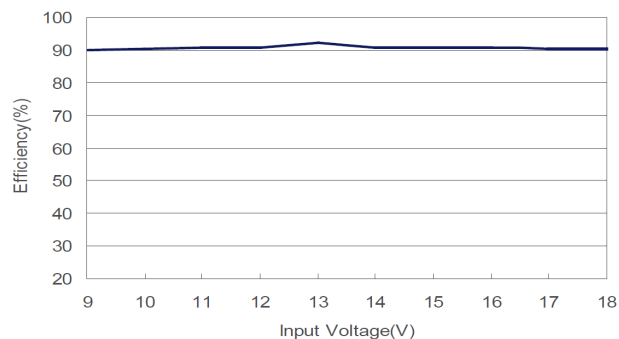with Heatsink TEN-HS4

TEN 40-1211N

Efficiency versus Output Load

Legend:
- 9V
- 12V
- 18V

Efficiency versus Input Voltage

Typical Output Ripple and Noise
with external capacitor; see datasheet

Transient Response to Dynamic Load Change (25%)

Typical Start-Up and Output Rise Characteristic

Remote on/off Voltage Start-Up Characteristic

Derating Output Load versus Ambient Temperature
without Heatsink

Derating Output Load versus Ambient Temperature
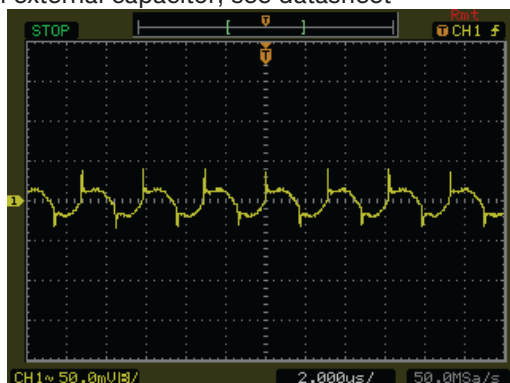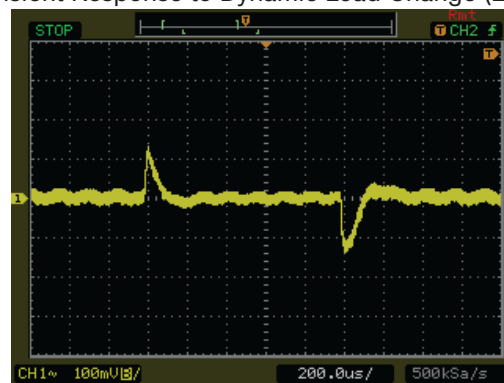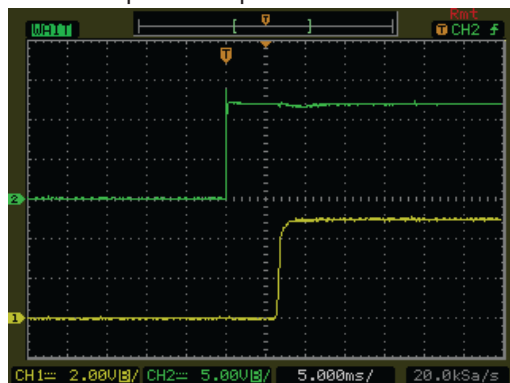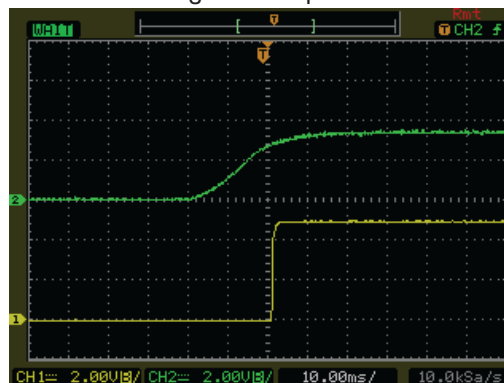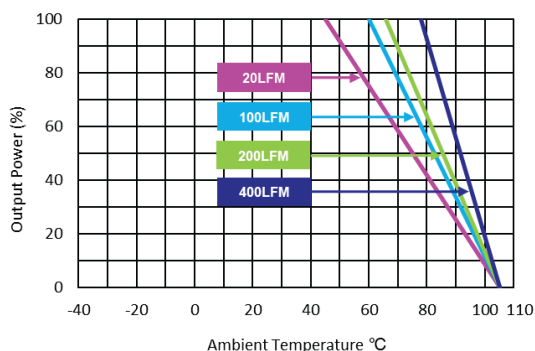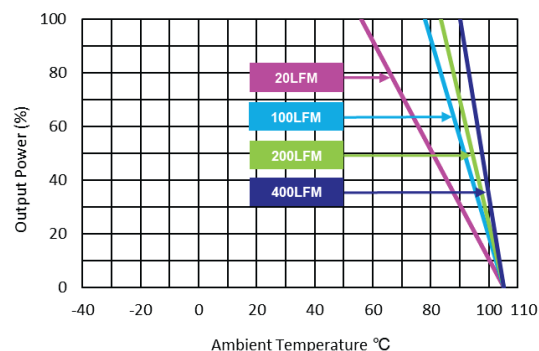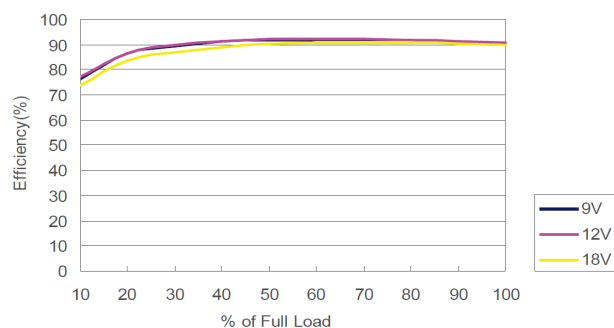with Heatsink TEN-HS4

TEN 40-1212N

Efficiency versus Output Load

Efficiency versus Input Voltage

Typical Output Ripple and Noise
with external capacitor; see datasheet

Transient Response to Dynamic Load Change (25%)

Typical Start-Up and Output Rise Characteristic

Remote on/off Voltage Start-Up Characteristic

Derating Output Load versus Ambient Temperature without Heatsink

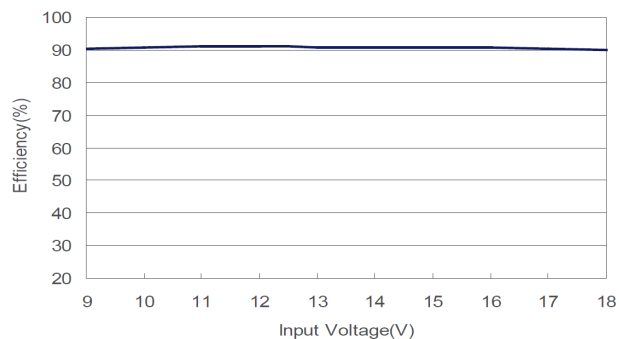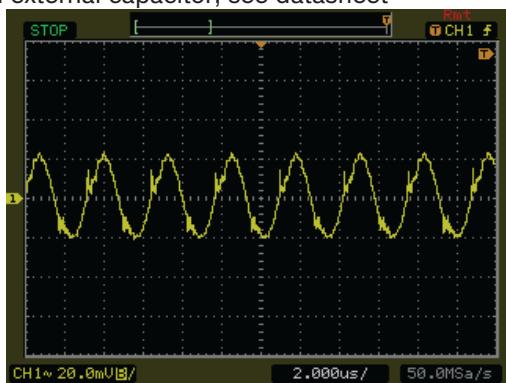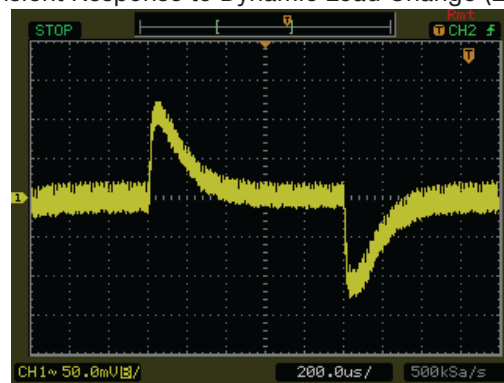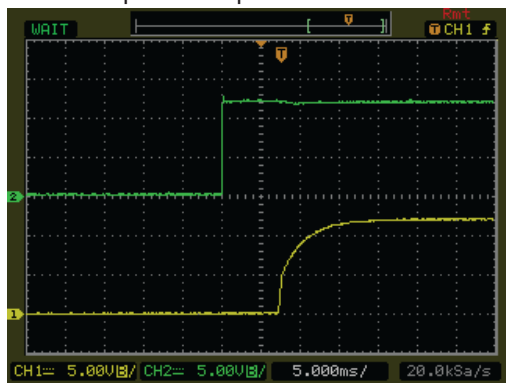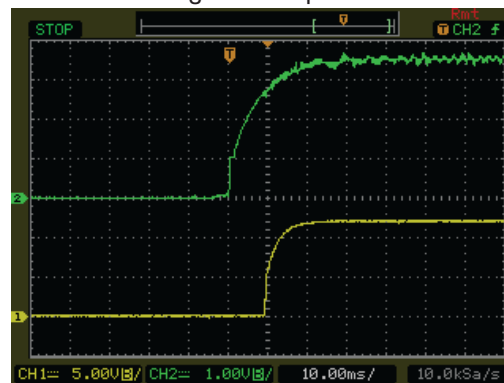### Derating Output Load versus Ambient Temperature with Heatsink TEN-HS4

TEN 40-1213N

Efficiency versus Output Load

Efficiency versus Input Voltage

Typical Output Ripple and Noise
with external capacitor; see datasheet

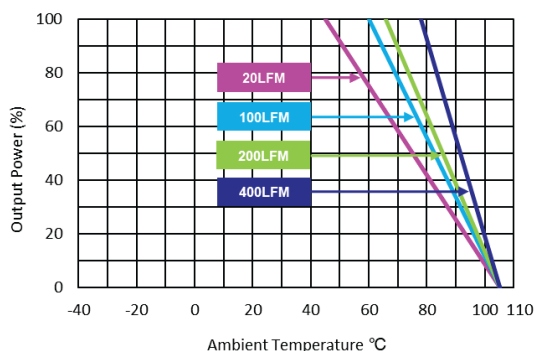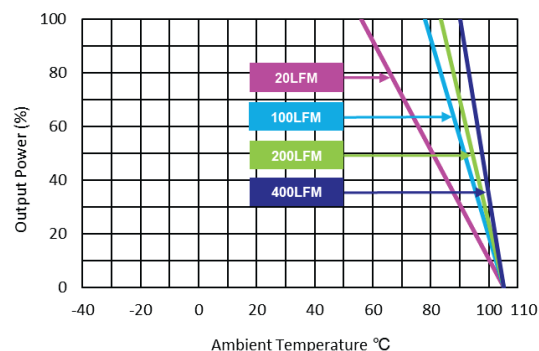
Transient Response to Dynamic Load Change (25%)

Typical Start-Up and Output Rise Characteristic

Remote on/off Voltage Start-Up Characteristic

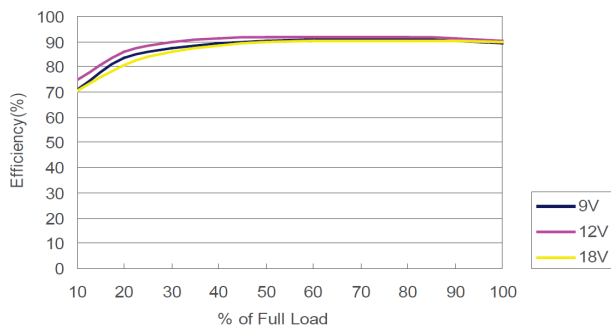### Derating Output Load versus Ambient Temperature
without Heatsink

Derating Output Load versus Ambient Temperature
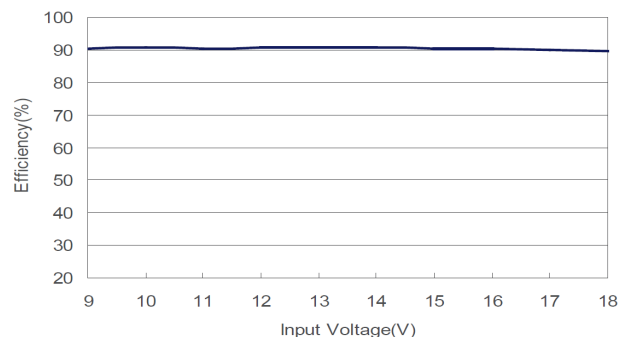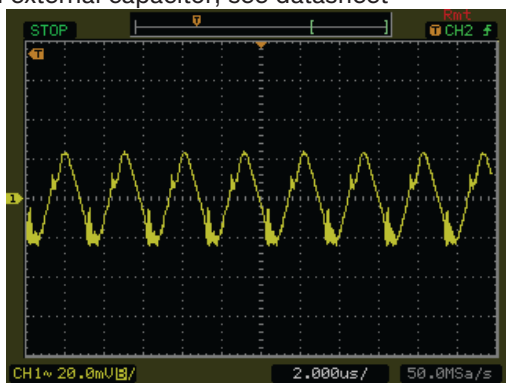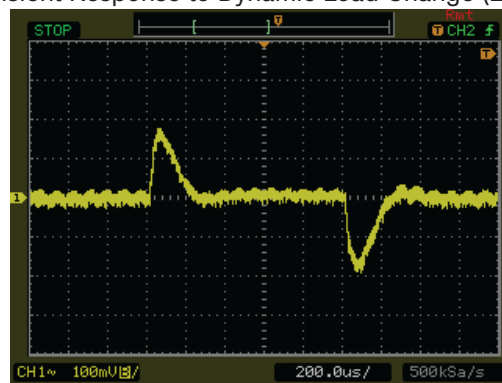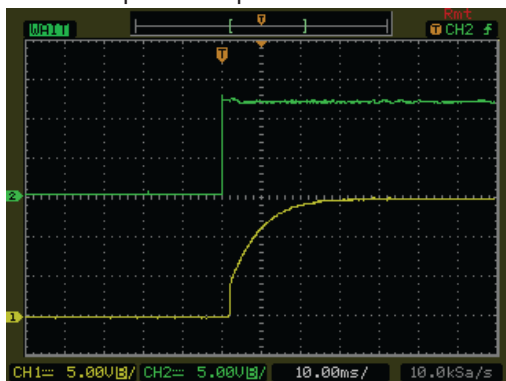with Heatsink TEN-HS4

TEN 40-1215N

Efficiency versus Output Load

Efficiency versus Input Voltage

Typical Output Ripple and Noise
with external capacitor; see datasheet

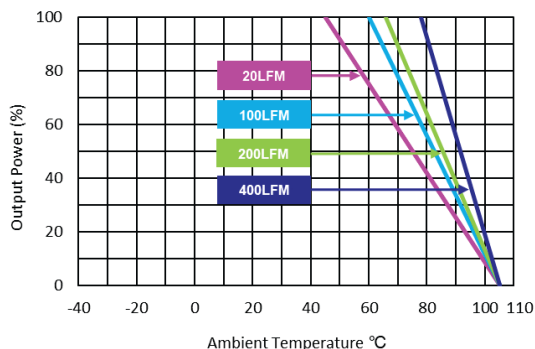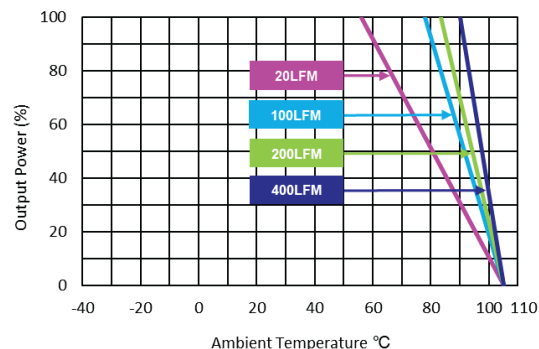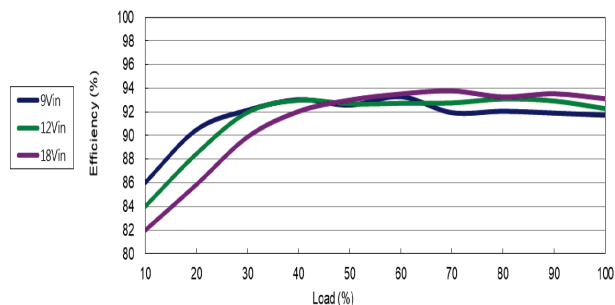
Transient Response to Dynamic Load Change (25%)

Typical Start-Up and Output Rise Characteristic

Remote on/off Voltage Start-Up Characteristic

Derating Output Load versus Ambient Temperature without Heatsink

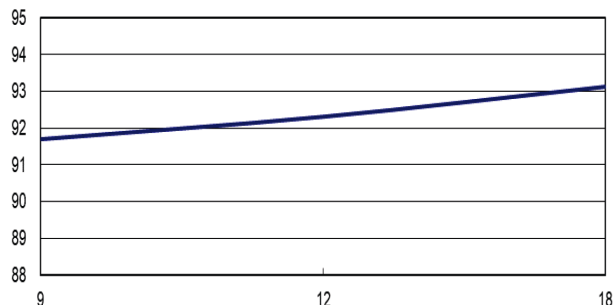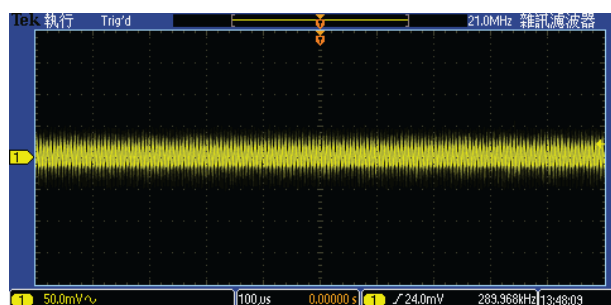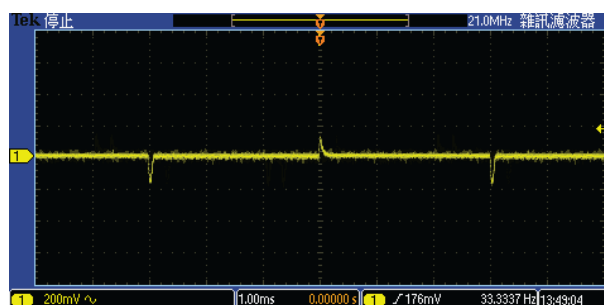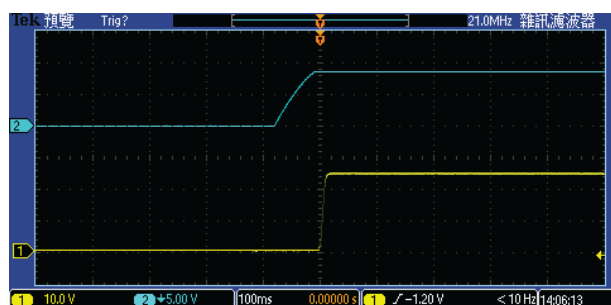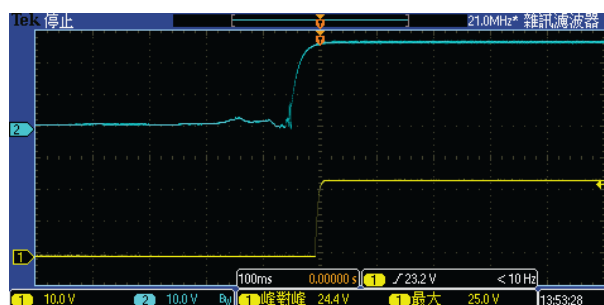**Derating Output Load versus Ambient Temperature with Heatsink TEN-HS6**

TEN 40-1222N

Efficiency versus Output Load

9V	
12V	
18V	

Efficiency versus Input Voltage

Typical Output Ripple and Noise
with external capacitor; see datasheet

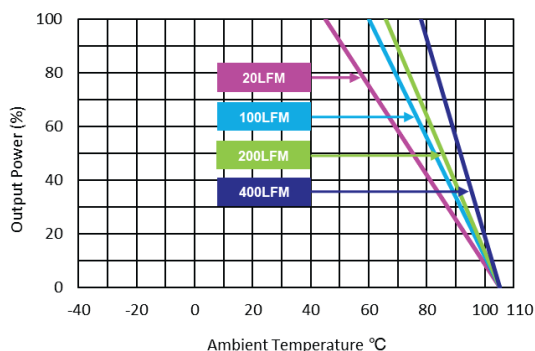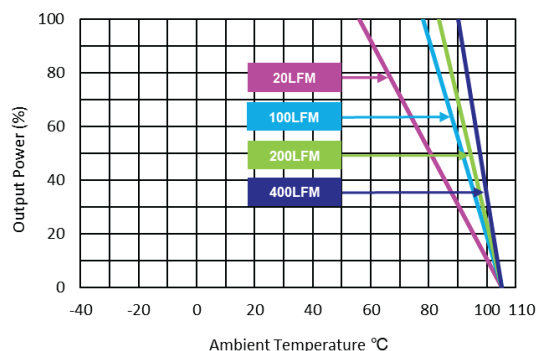### Transient Response to Dynamic Load Change (25%)

Typical Start-Up and Output Rise Characteristic

Remote on/off Voltage Start-Up Characteristic

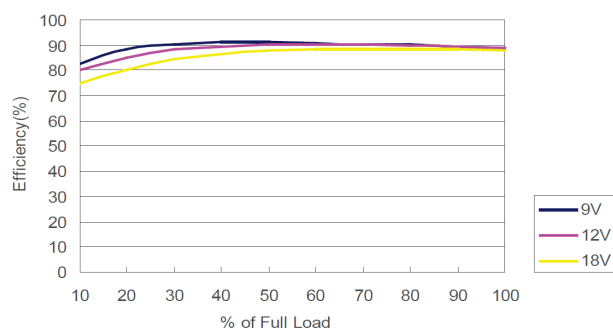### Derating Output Load versus Ambient Temperature without Heatsink

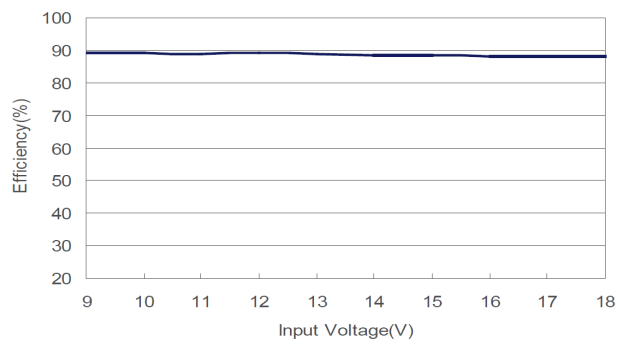### Derating Output Load versus Ambient Temperature with Heatsink TEN-HS4
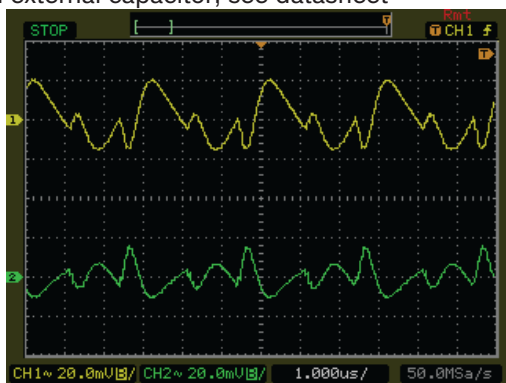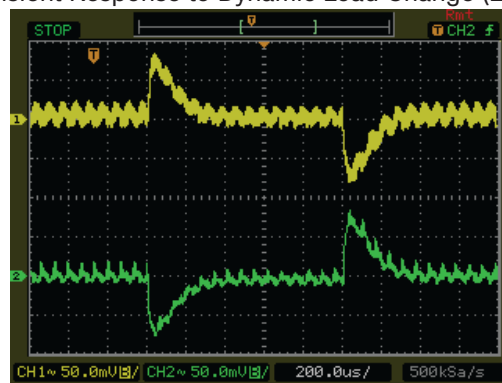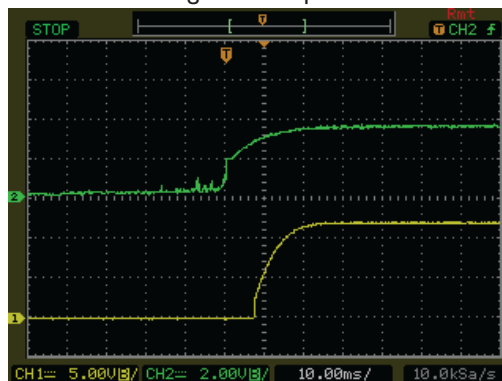
TEN 40-1223N

Efficiency versus Output Load

Efficiency versus Input Voltage

Typical Output Ripple and Noise
with external capacitor; see datasheet

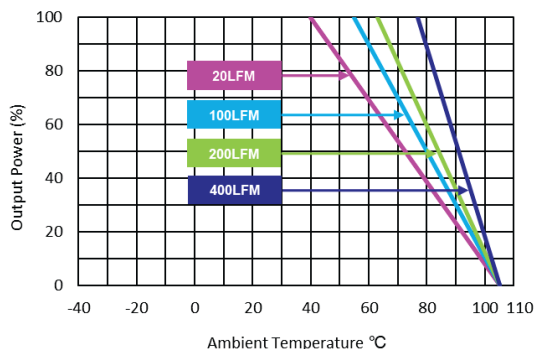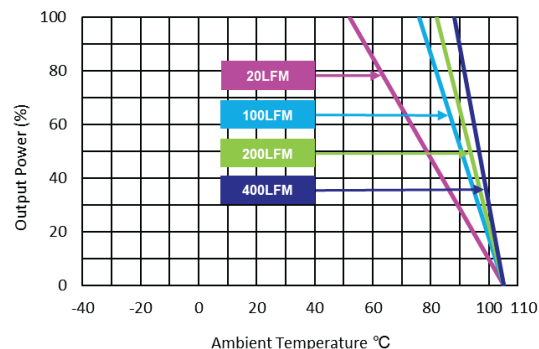### Transient Response to Dynamic Load Change (25%)

Typical Start-Up and Output Rise Characteristic

Remote on/off Voltage Start-Up Characteristic

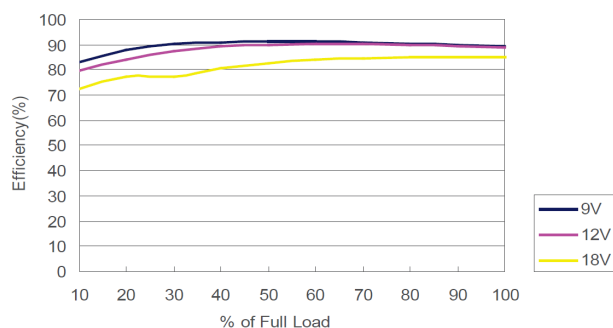### Derating Output Load versus Ambient Temperature without Heatsink

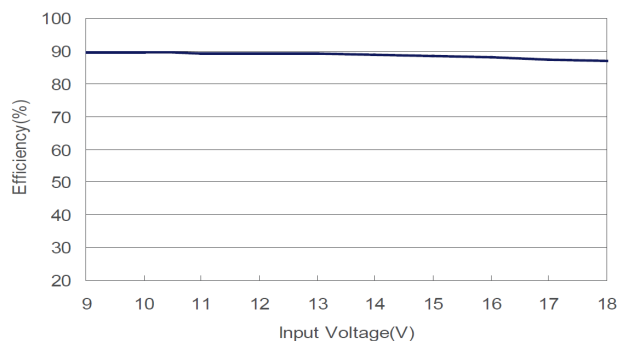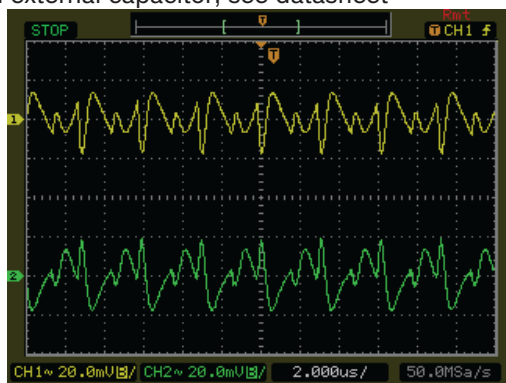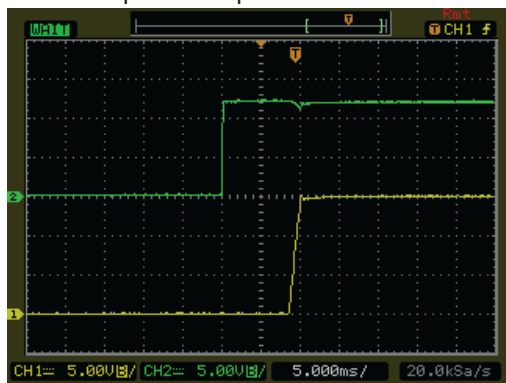### Derating Output Load versus Ambient Temperature with Heatsink TEN-HS4

TEN 40-2410N

Efficiency versus Output Load

Efficiency versus Input Voltage

Typical Output Ripple and Noise
with external capacitor; see datasheet

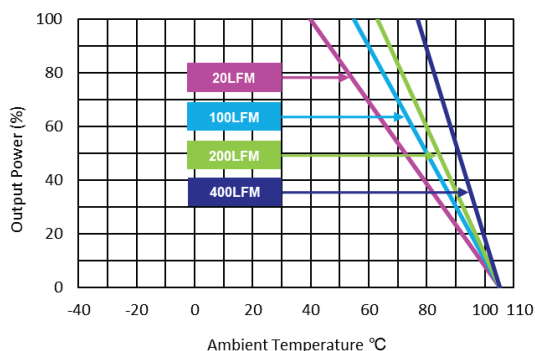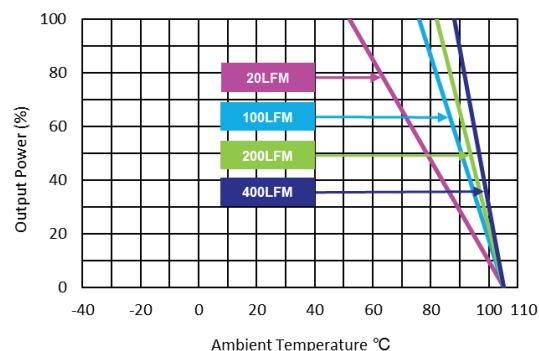
Transient Response to Dynamic Load Change (25%)

Typical Start-Up and Output Rise Characteristic

Remote on/off Voltage Start-Up Characteristic

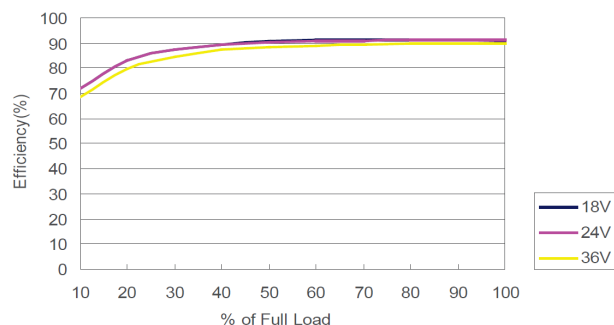### Derating Output Load versus Ambient Temperature
without Heatsink

Derating Output Load versus Ambient Temperature
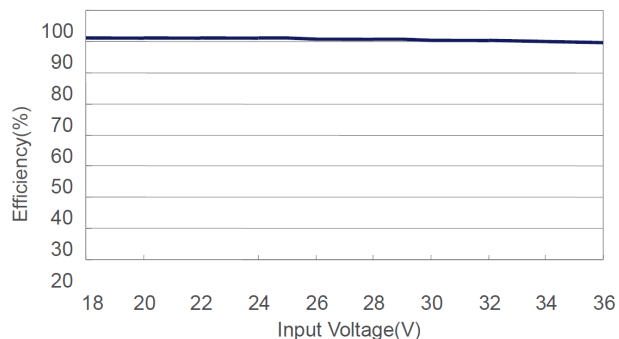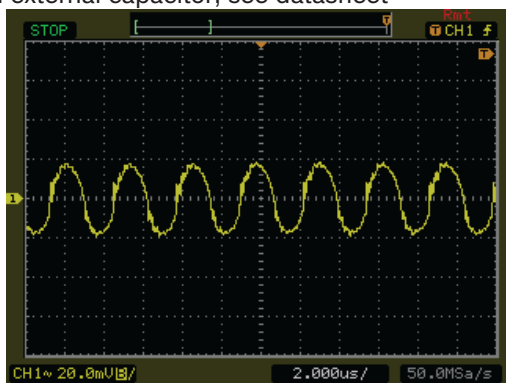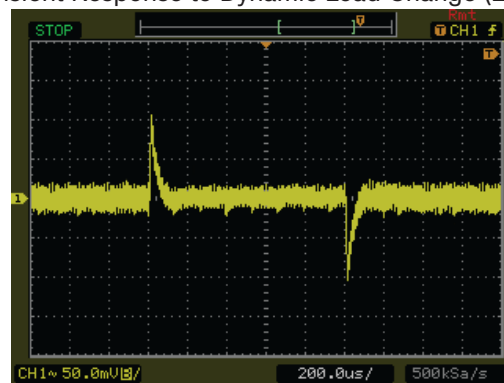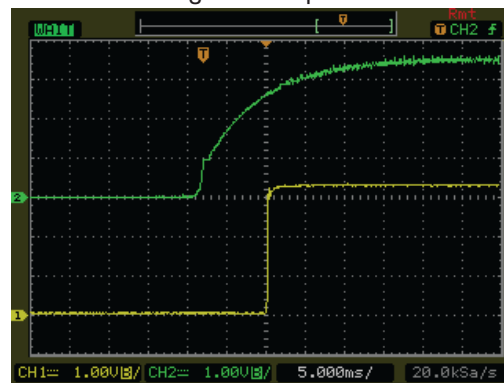with Heatsink TEN-HS4

TEN 40-2411N

Efficiency versus Output Load

Legend:
- 18V
- 24V
- 36V

Efficiency versus Input Voltage

Typical Output Ripple and Noise
with external capacitor; see datasheet

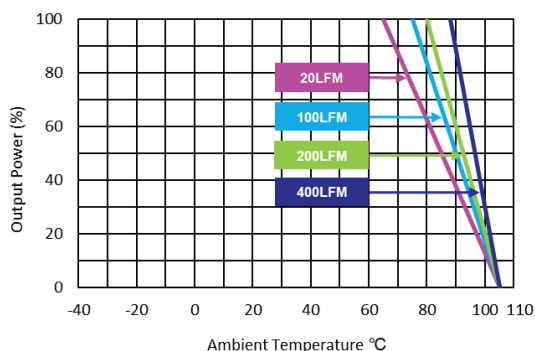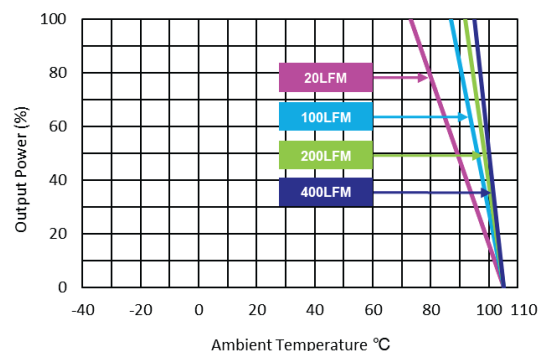### Transient Response to Dynamic Load Change (25%)

Typical Start-Up and Output Rise Characteristic

Remote on/off Voltage Start-Up Characteristic

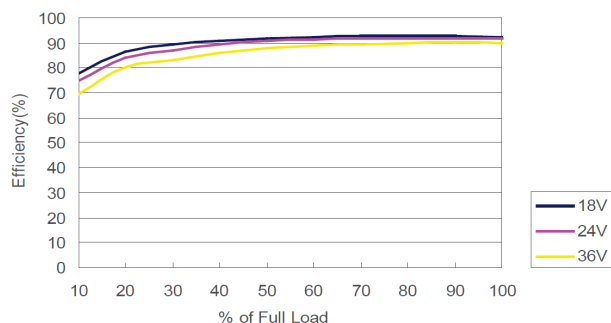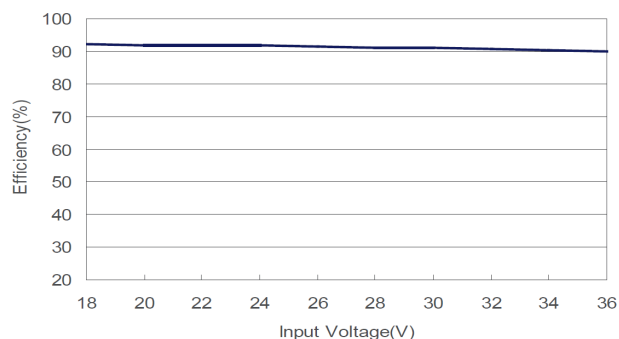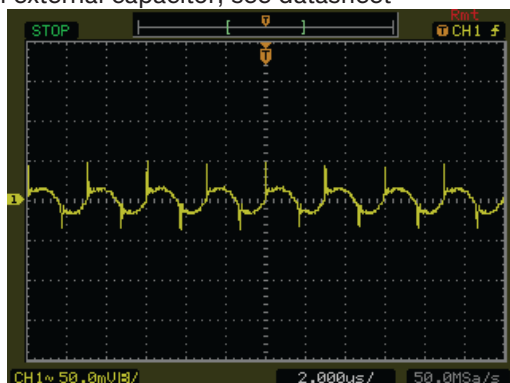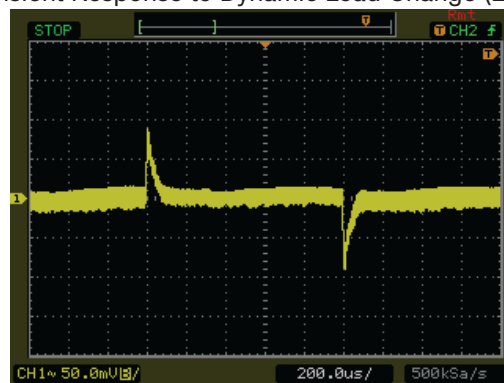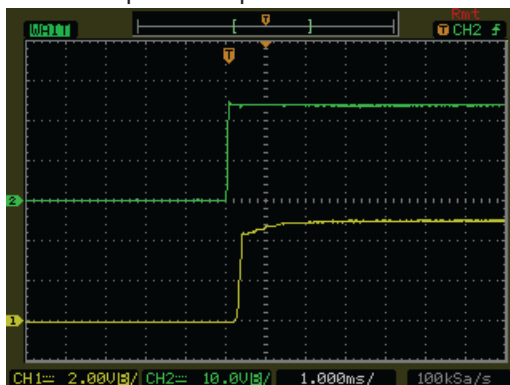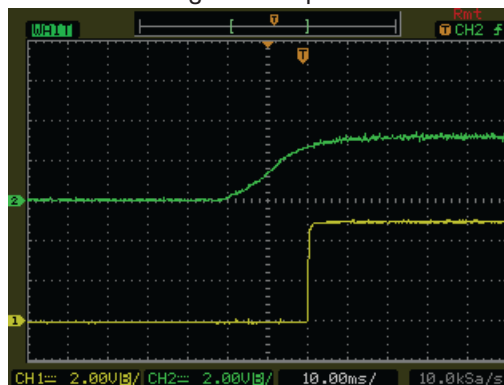### Derating Output Load versus Ambient Temperature
without Heatsink

- 20LFM
- 100LFM
- 200LFM
- 400LFM

Derating Output Load versus Ambient Temperature
with Heatsink TEN-HS4

- 20LFM
- 100LFM
- 200LFM
- 400LFM

TEN 40-2412N

Efficiency versus Output Load

Efficiency versus Input Voltage

Typical Output Ripple and Noise
with external capacitor; see datasheet
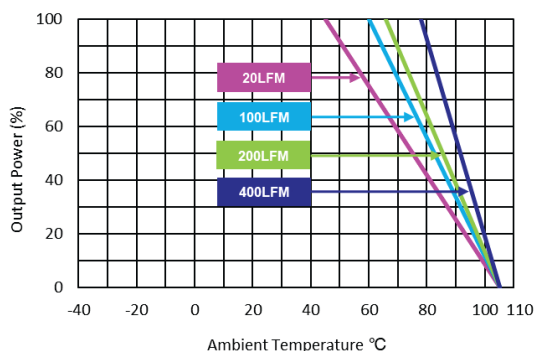

Transient Response to Dynamic Load Change (25%)

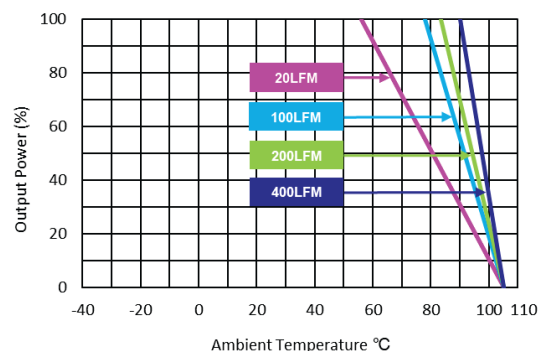### Typical Start-Up and Output Rise Characteristic

Remote on/off Voltage Start-Up Characteristic

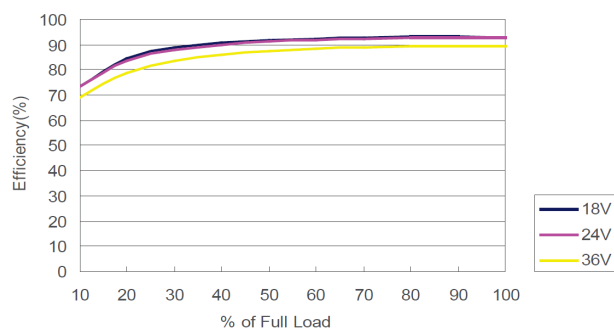### Derating Output Load versus Ambient Temperature without Heatsink

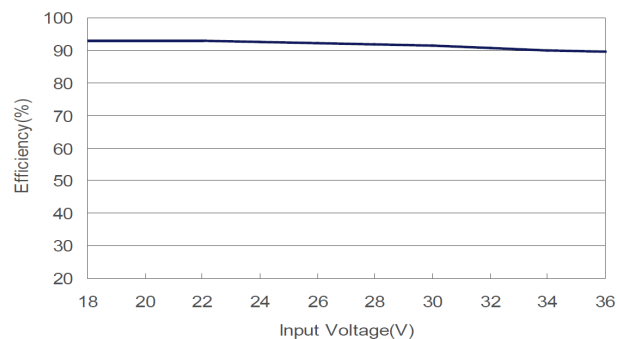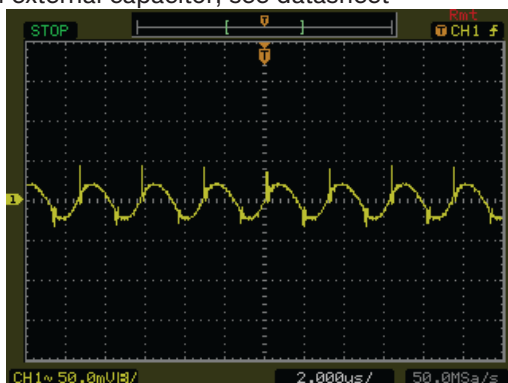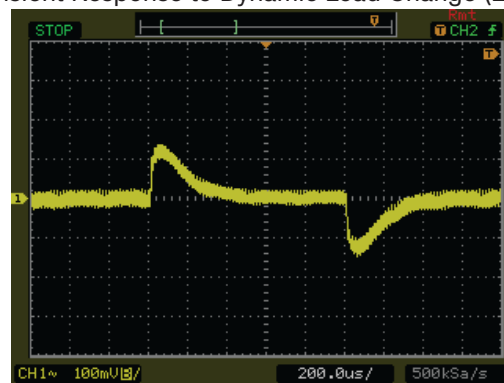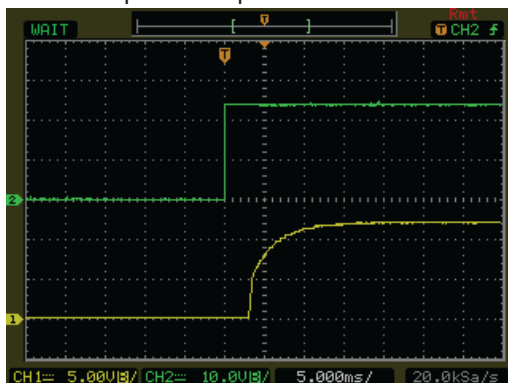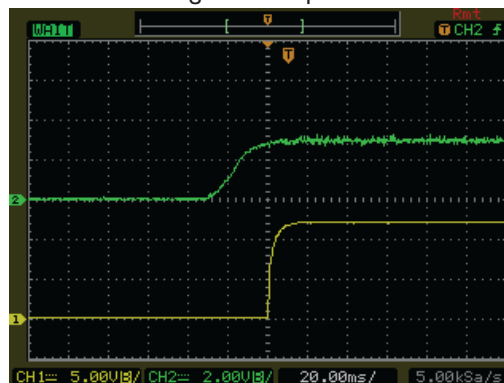### Derating Output Load versus Ambient Temperature with Heatsink TEN-HS4

TEN 40-2413N

Efficiency versus Output Load

Efficiency versus Input Voltage

Typical Output Ripple and Noise
with external capacitor; see datasheet

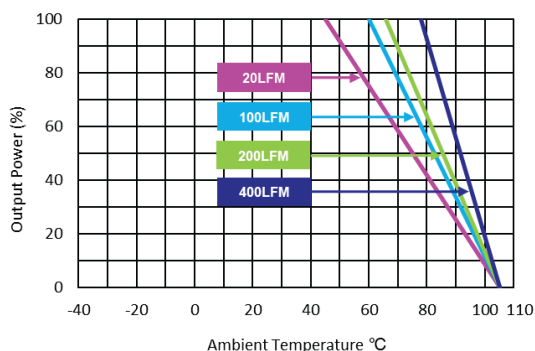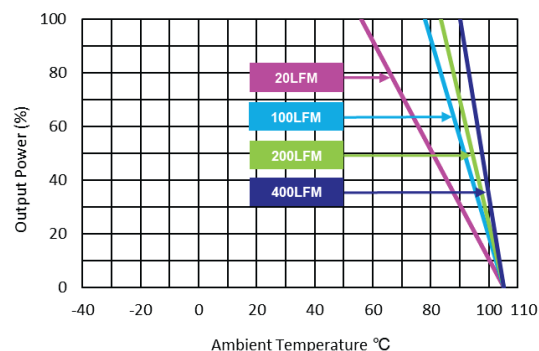
Transient Response to Dynamic Load Change (25%)

Typical Start-Up and Output Rise Characteristic

Remote on/off Voltage Start-Up Characteristic

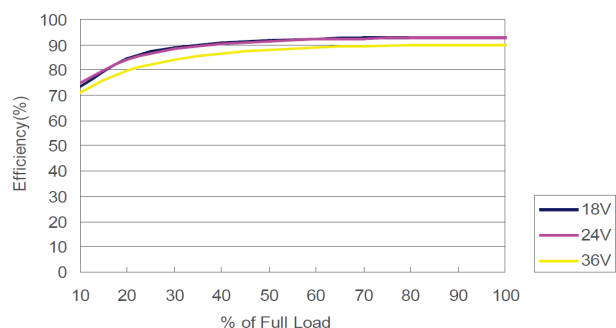### Derating Output Load versus Ambient Temperature without Heatsink

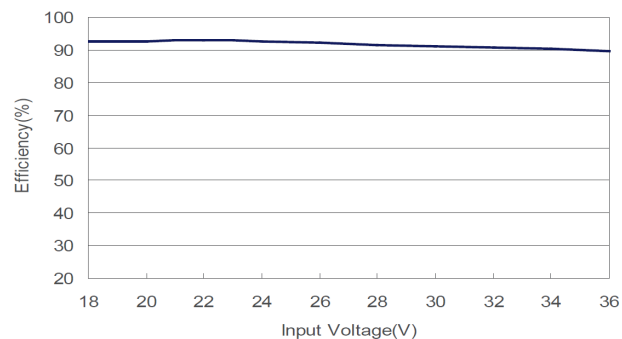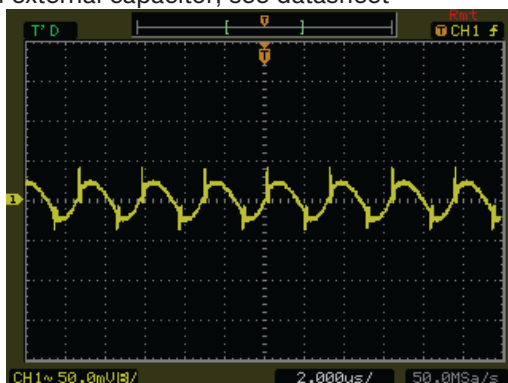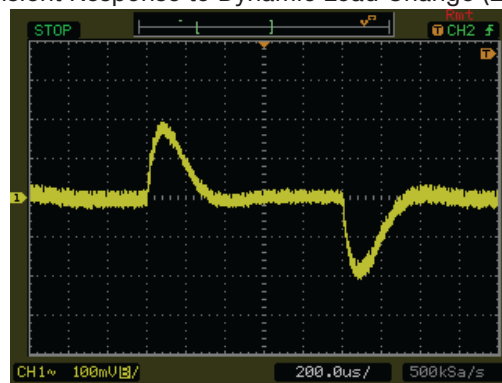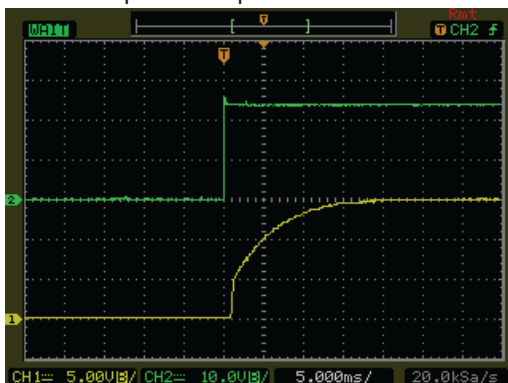### Derating Output Load versus Ambient Temperature with Heatsink TEN-HS4

TEN 40-2415N

Efficiency versus Output Load

Efficiency versus Input Voltage

Typical Output Ripple and Noise
with external capacitor; see datasheet

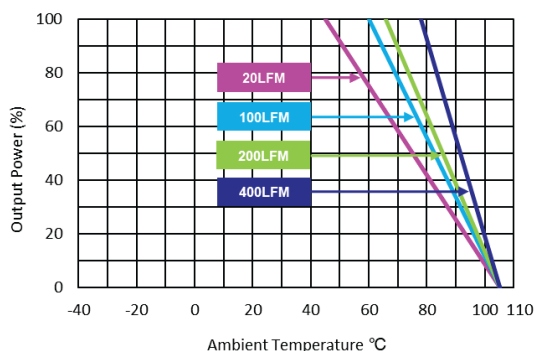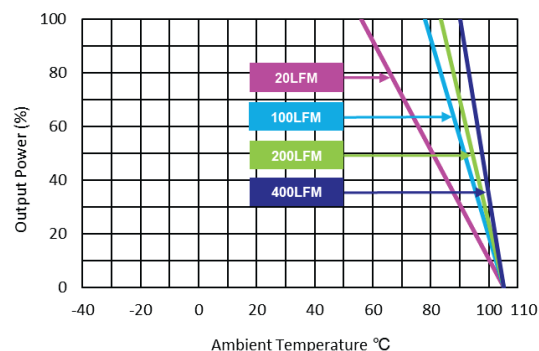
Transient Response to Dynamic Load Change (25%)

Typical Start-Up and Output Rise Characteristic

Remote on/off Voltage Start-Up Characteristic

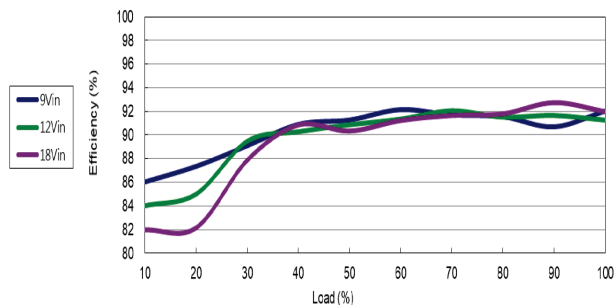### Derating Output Load versus Ambient Temperature without Heatsink

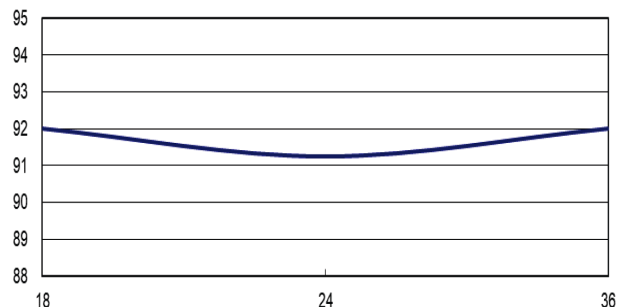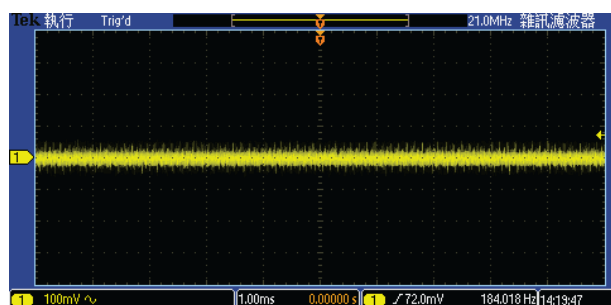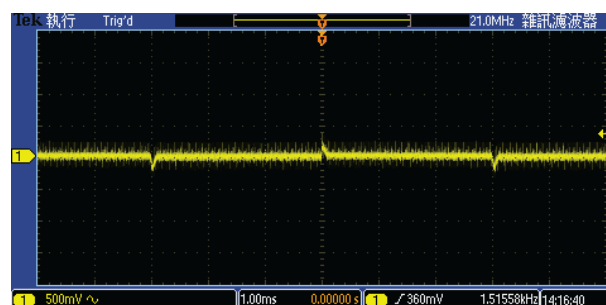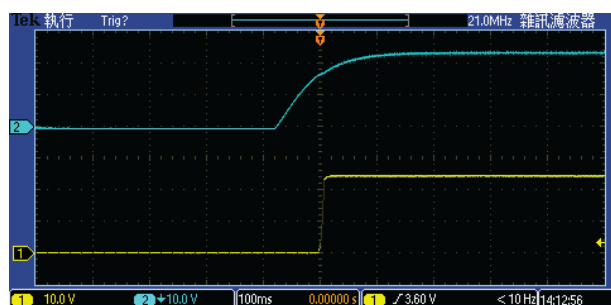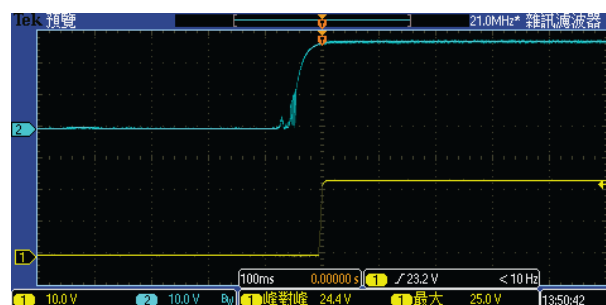### Derating Output Load versus Ambient Temperature with Heatsink TEN-HS6

TEN 40-2422N

Efficiency versus Output Load

Efficiency versus Input Voltage

Typical Output Ripple and Noise
with external capacitor; see datasheet

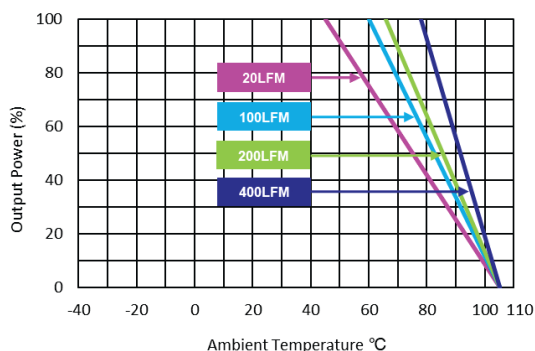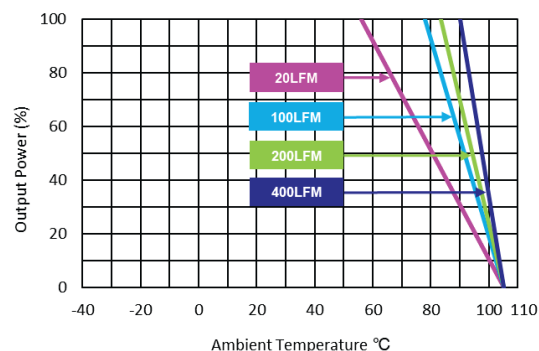
Transient Response to Dynamic Load Change (25%)

Typical Start-Up and Output Rise Characteristic

Remote on/off Voltage Start-Up Characteristic

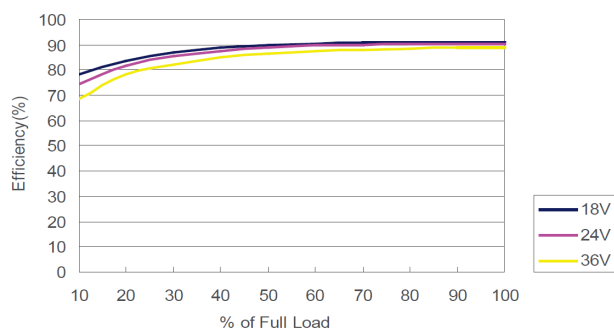### Derating Output Load versus Ambient Temperature
without Heatsink

Derating Output Load versus Ambient Temperature
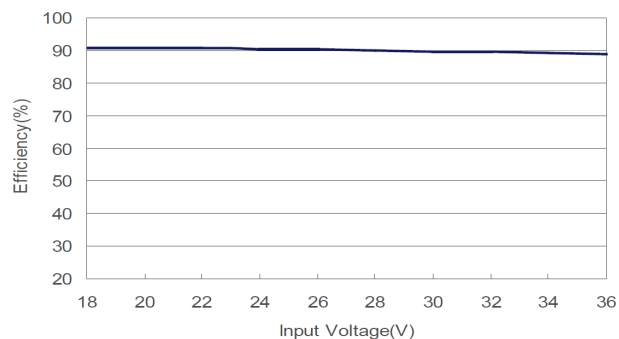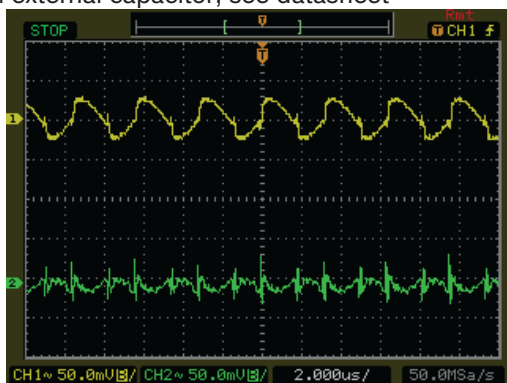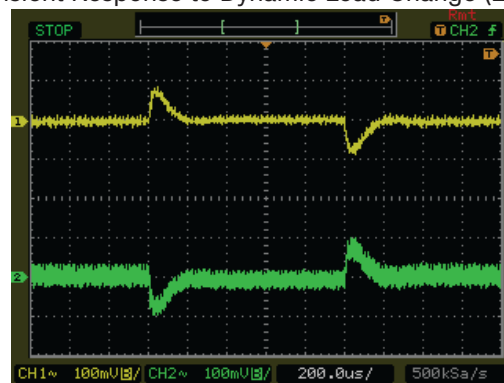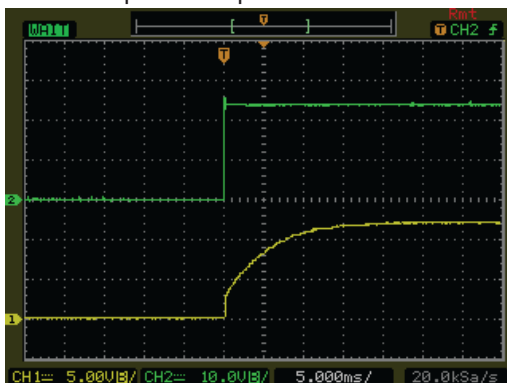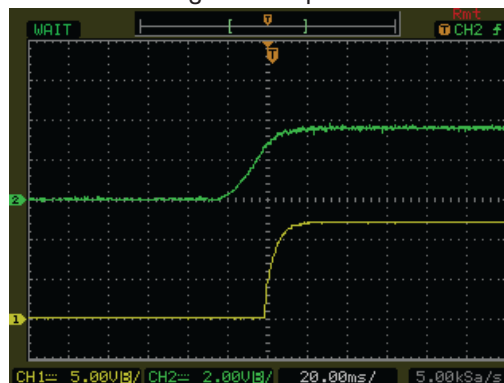with Heatsink TEN-HS4

TEN 40-2423N

Efficiency versus Output Load

Efficiency versus Input Voltage

Typical Output Ripple and Noise
with external capacitor; see datasheet

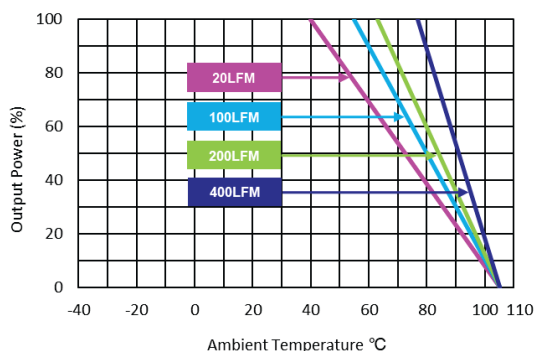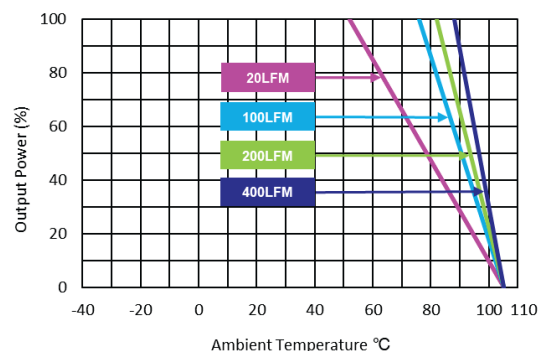
Transient Response to Dynamic Load Change (25%)

Typical Start-Up and Output Rise Characteristic

Remote on/off Voltage Start-Up Characteristic

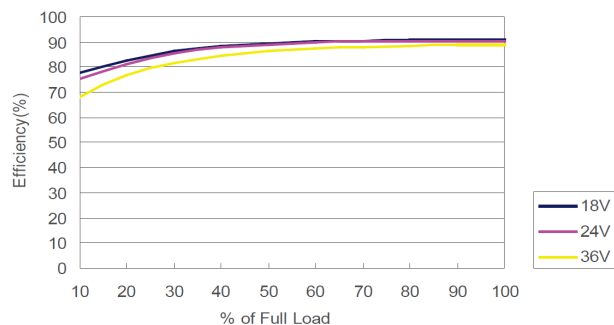### Derating Output Load versus Ambient Temperature
without Heatsink

Derating Output Load versus Ambient Temperature
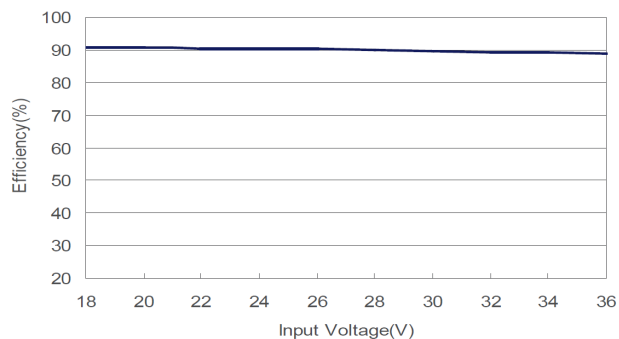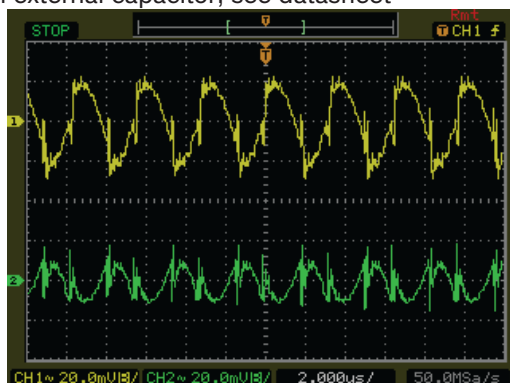with Heatsink TEN-HS4

TEN 40-4810N

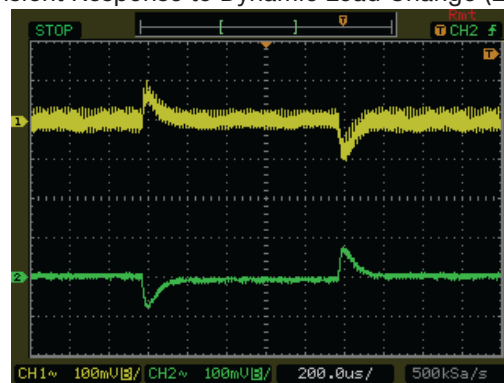### Efficiency versus Output Load
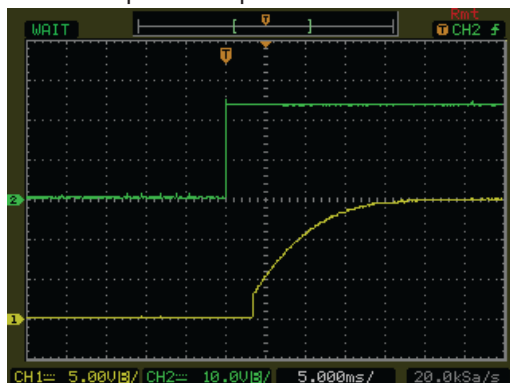

Efficiency versus Input Voltage

Typical Output Ripple and Noise
with external capacitor; see datasheet

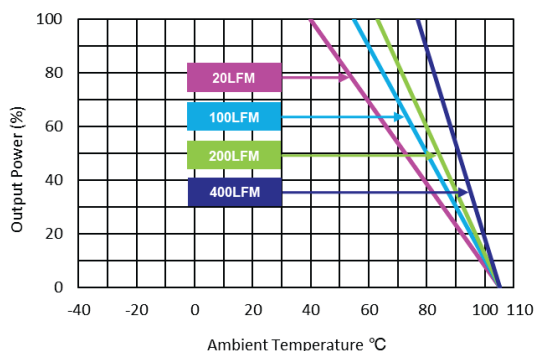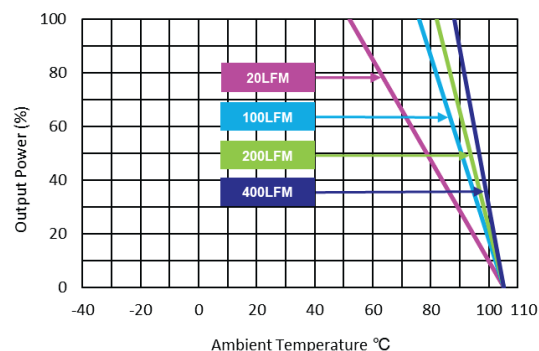
Transient Response to Dynamic Load Change (25%)

Typical Start-Up and Output Rise Characteristic

Remote on/off Voltage Start-Up Characteristic

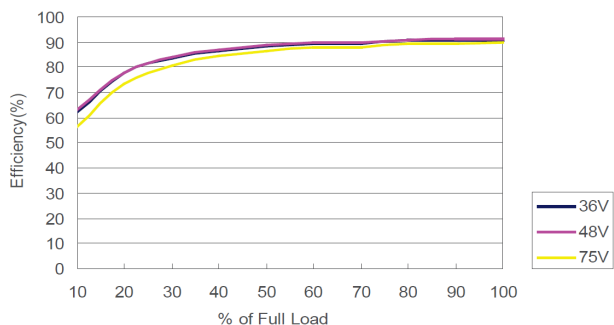### Derating Output Load versus Ambient Temperature
without Heatsink

Derating Output Load versus Ambient Temperature
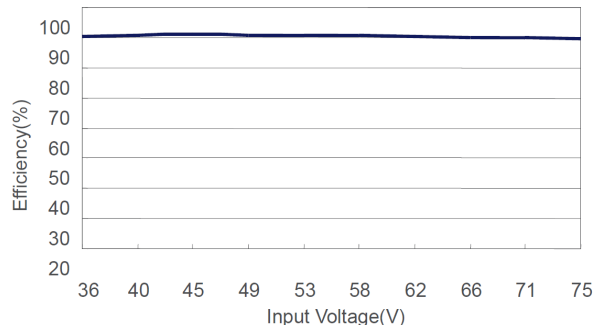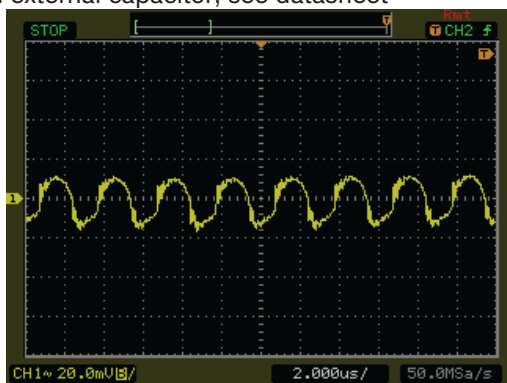with Heatsink TEN-HS4

TEN 40-4811N
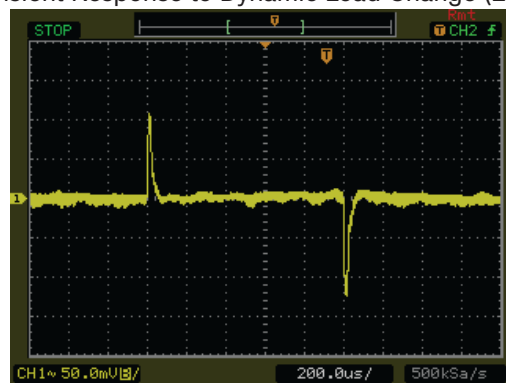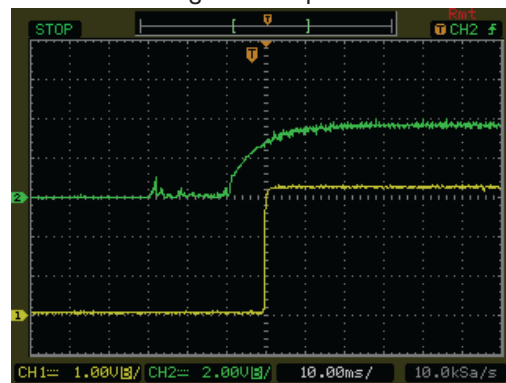
Efficiency versus Output Load

Efficiency versus Input Voltage

Typical Output Ripple and Noise
with external capacitor; see datasheet
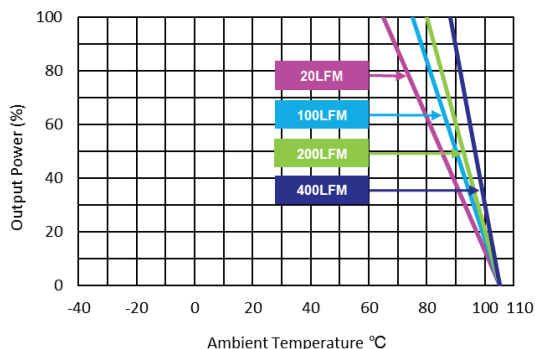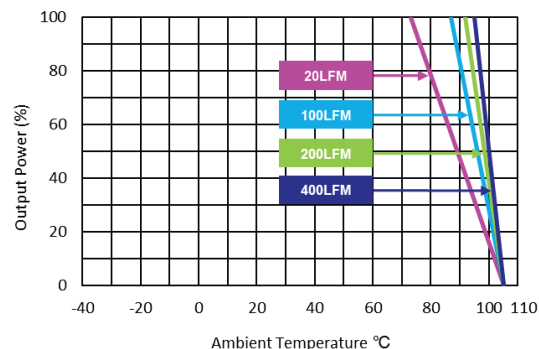

Transient Response to Dynamic Load Change (25%)

Typical Start-Up and Output Rise Characteristic

Remote on/off Voltage Start-Up Characteristic

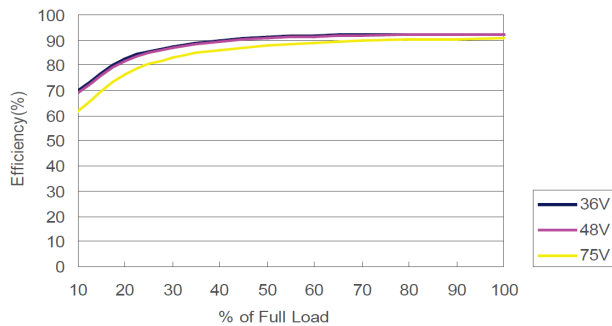### Derating Output Load versus Ambient Temperature
without Heatsink

Derating Output Load versus Ambient Temperature
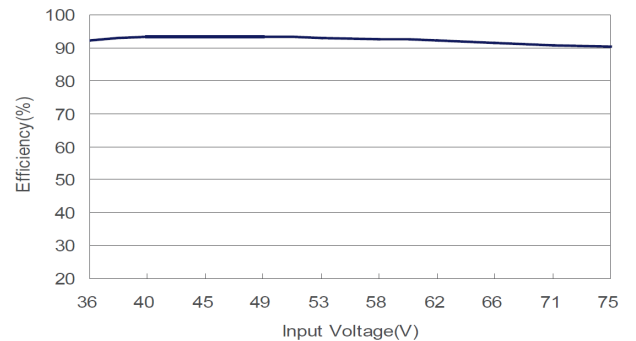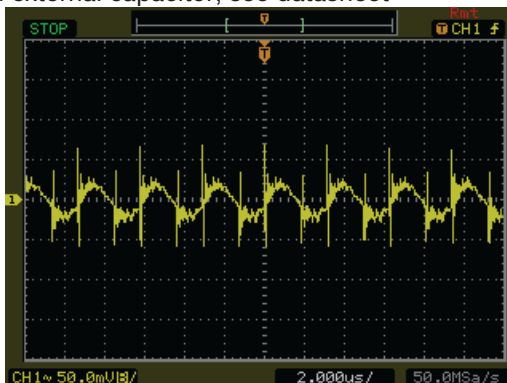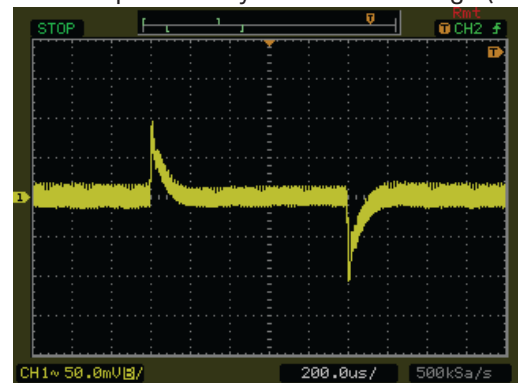with Heatsink TEN-HS4

TRACO POWER

TEN 40-4812N

Efficiency versus Output Load

Legend:
- 36V
- 48V
- 75V

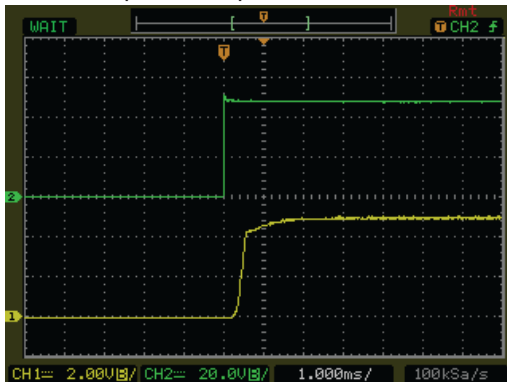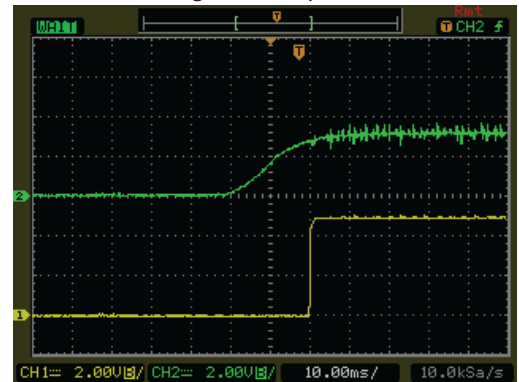### Efficiency versus Input Voltage

Typical Output Ripple and Noise
with external capacitor; see datasheet

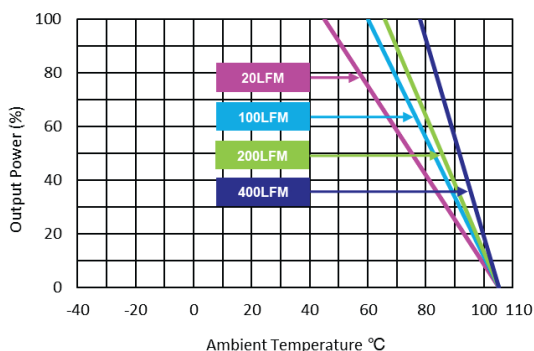### Transient Response to Dynamic Load Change (25%)

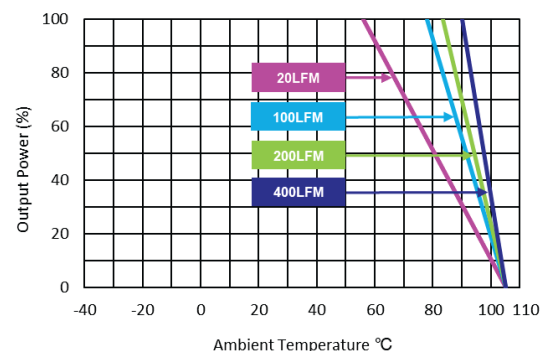### Typical Start-Up and Output Rise Characteristic

Remote on/off Voltage Start-Up Characteristic

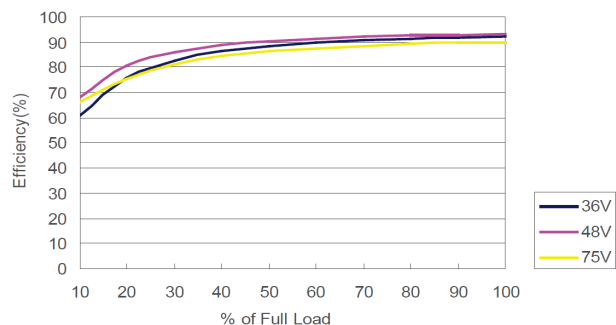### Derating Output Load versus Ambient Temperature without Heatsink

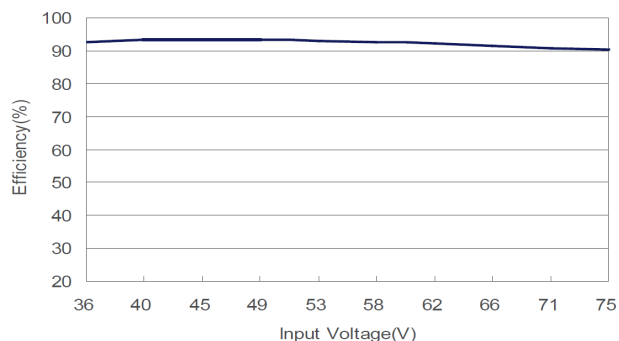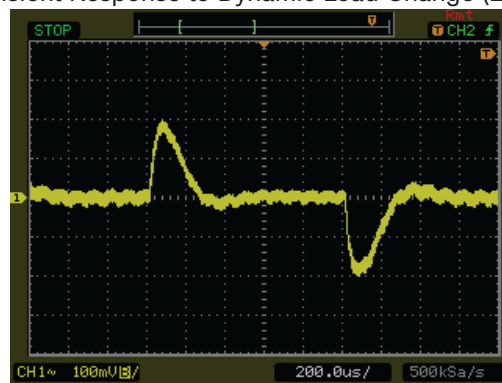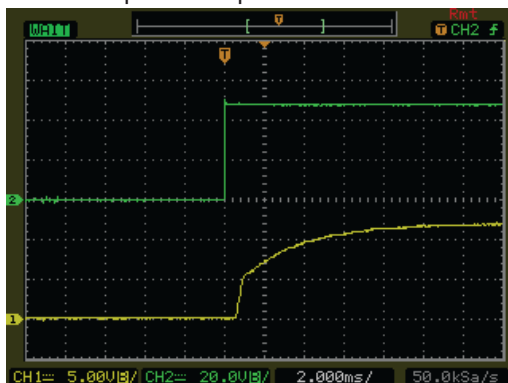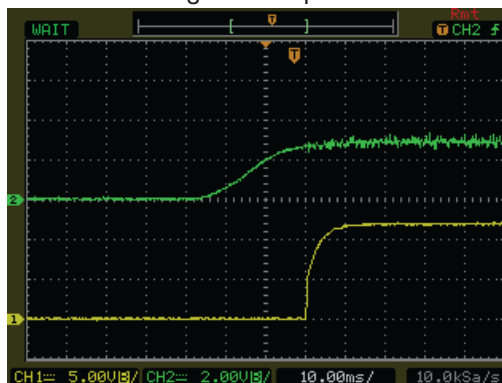### Derating Output Load versus Ambient Temperature with Heatsink TEN-HS4

TEN 40-4813N

Efficiency versus Output Load

Efficiency versus Input Voltage

Typical Output Ripple and Noise
with external capacitor; see datasheet
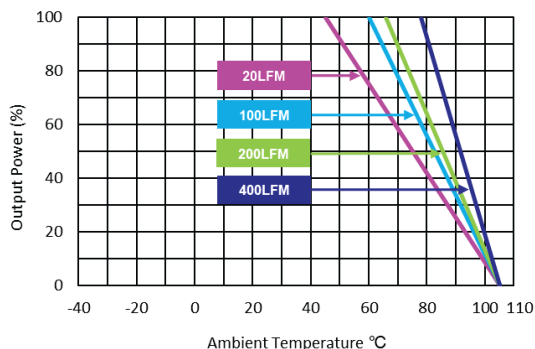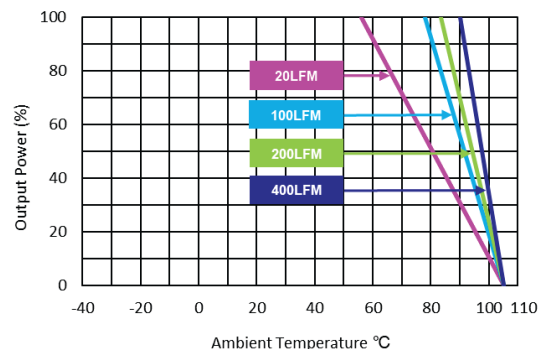

Transient Response to Dynamic Load Change (25%)

Typical Start-Up and Output Rise Characteristic

Remote on/off Voltage Start-Up Characteristic

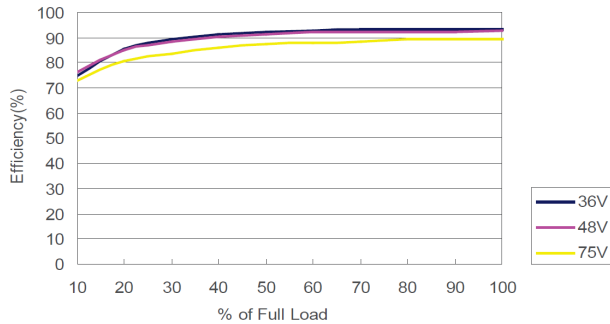### Derating Output Load versus Ambient Temperature
without Heatsink

Derating Output Load versus Ambient Temperature
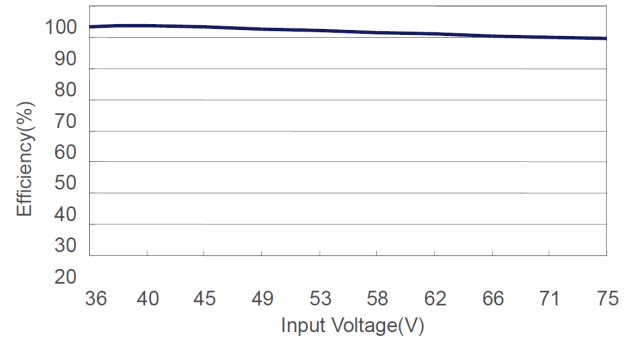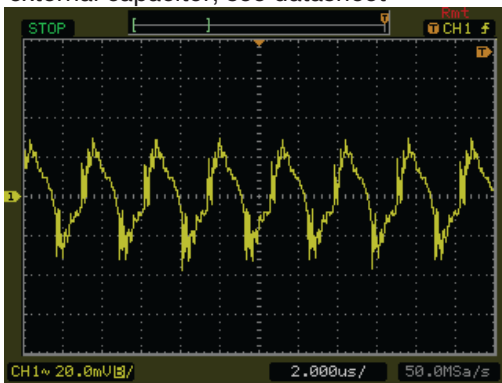with Heatsink TEN-HS4

TEN 40-4815N

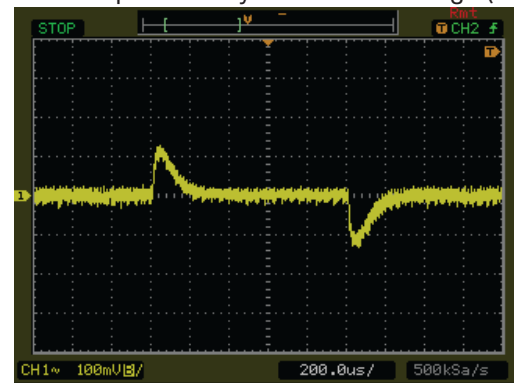**Efficiency versus Output Load**
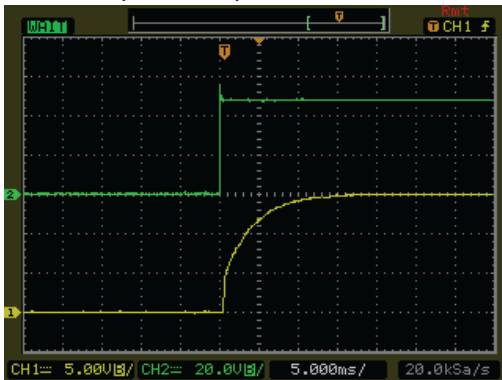

Efficiency versus Input Voltage

Typical Output Ripple and Noise
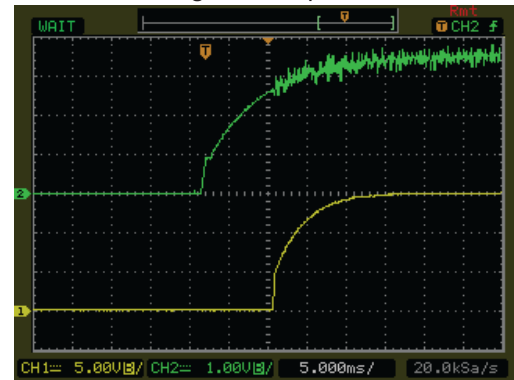with external capacitor; see datasheet

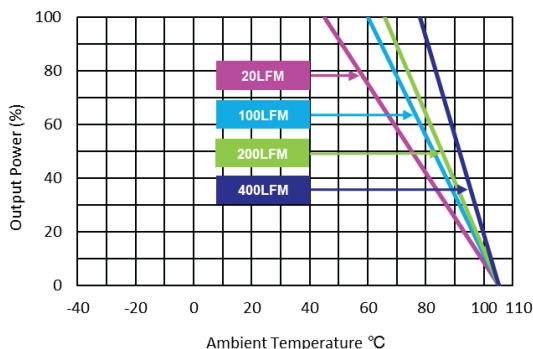
Transient Response to Dynamic Load Change (25%)

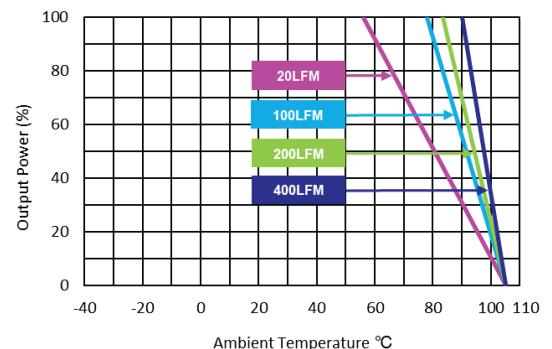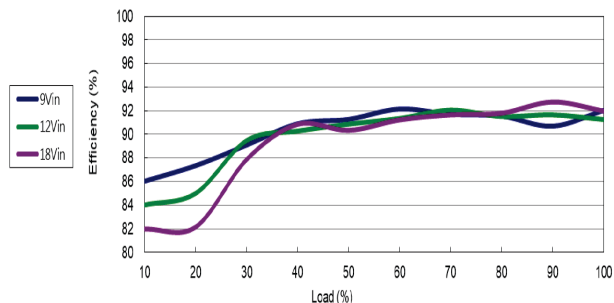**Typical Start-Up and Output Rise Characteristic**

Remote on/off Voltage Start-Up Characteristic

Derating Output Load versus Ambient Temperature without Heatsink

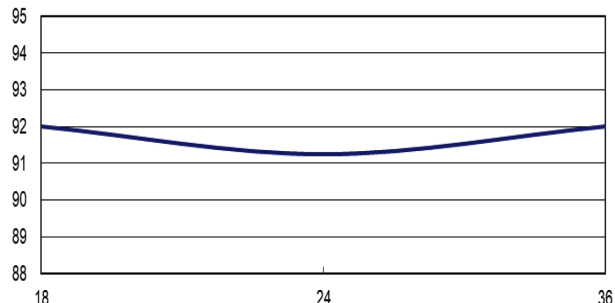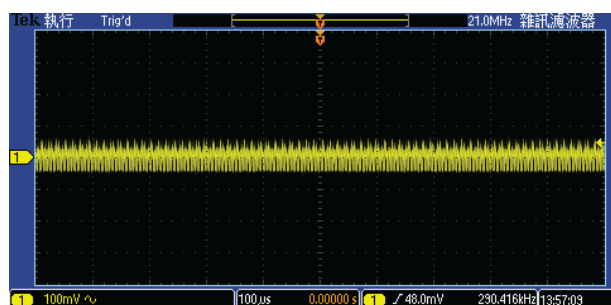**Derating Output Load versus Ambient Temperature with Heatsink TEN-HS6**

TEN 40-4822N

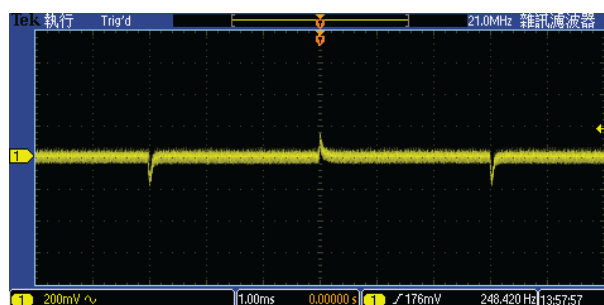**Efficiency versus Output Load**
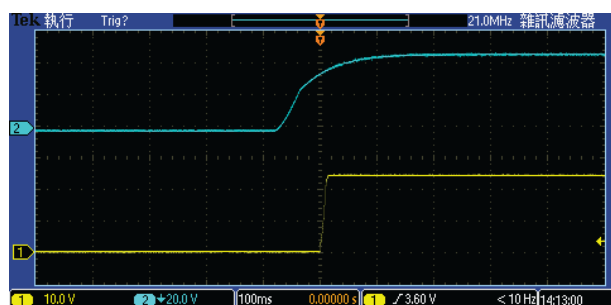

Efficiency versus Input Voltage

Typical Output Ripple and Noise
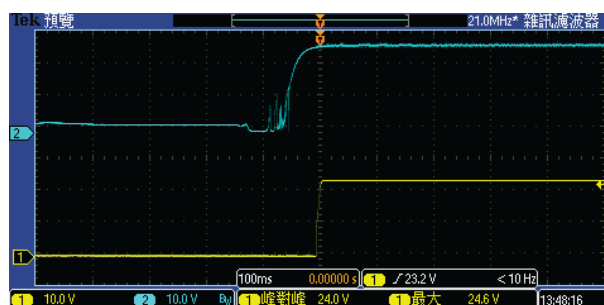with external capacitor; see datasheet

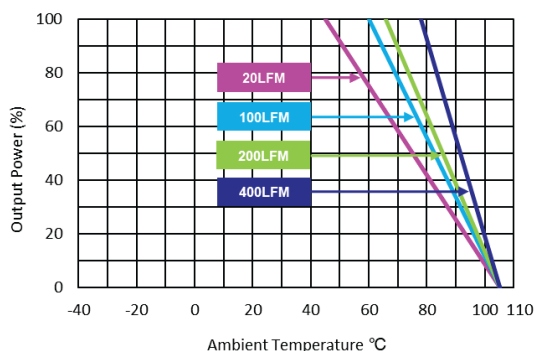**Transient Response to Dynamic Load Change (25%)**

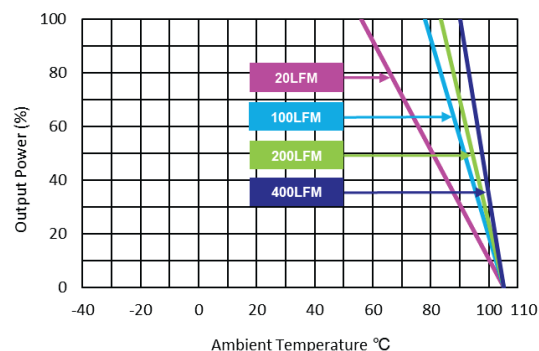**Typical Start-Up and Output Rise Characteristic**

Remote on/off Voltage Start-Up Characteristic

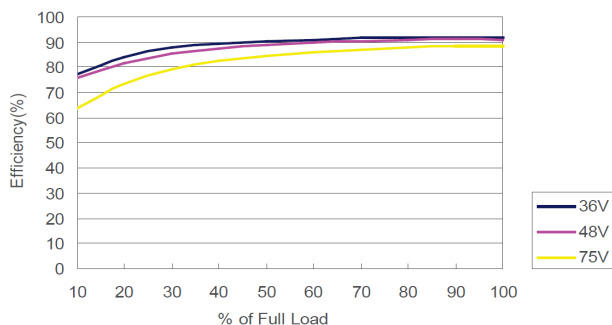**Derating Output Load versus Ambient Temperature**
without Heatsink

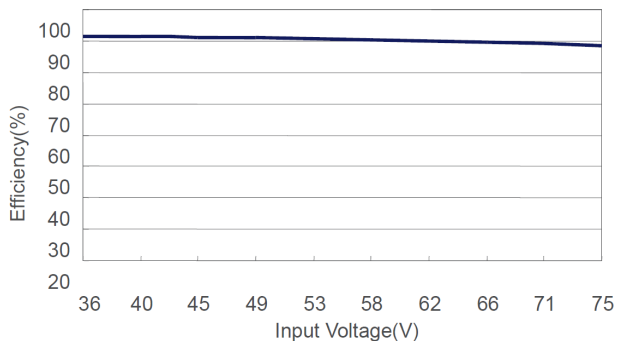**Derating Output Load versus Ambient Temperature**
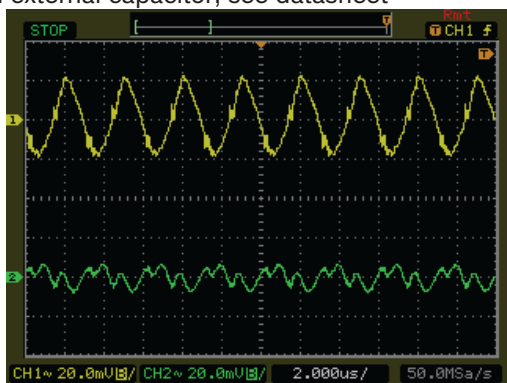with Heatsink TEN-HS4

TEN 40-4823N

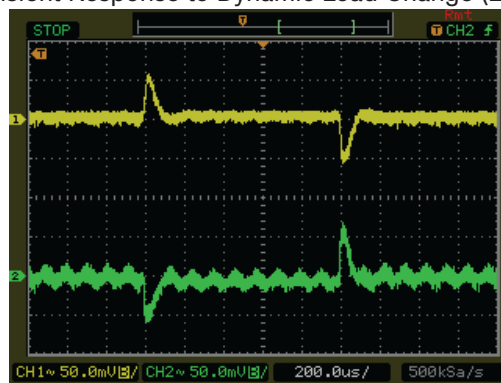### Efficiency versus Output Load

Efficiency versus Input Voltage

Typical Output Ripple and Noise
with external capacitor; see datasheet

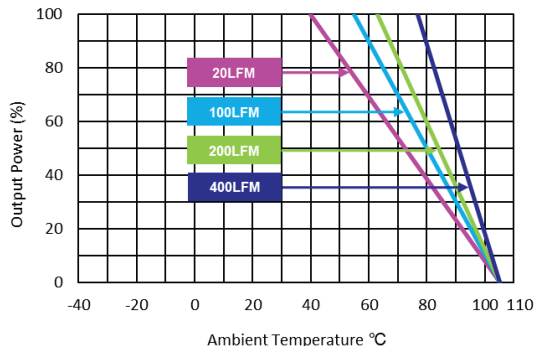
Transient Response to Dynamic Load Change (25%)

Typical Start-Up and Output Rise Characteristic
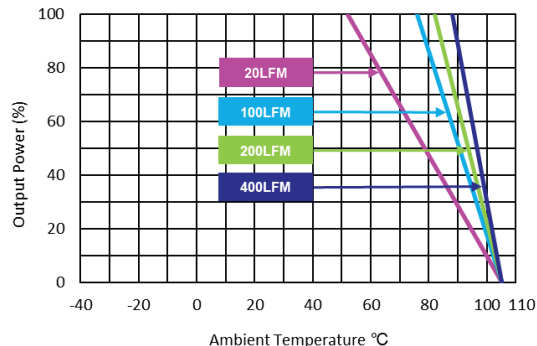

Remote on/off Voltage Start-Up Characteristic

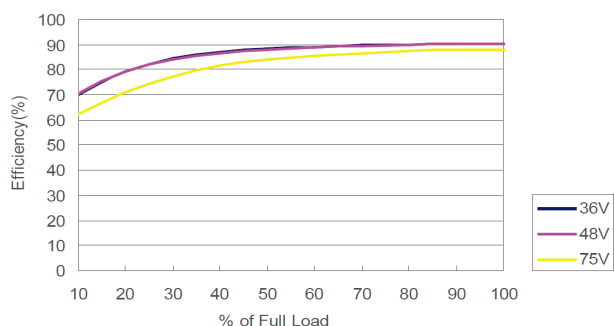### Derating Output Load versus Ambient Temperature
without Heatsink

Derating Output Load versus Ambient Temperature
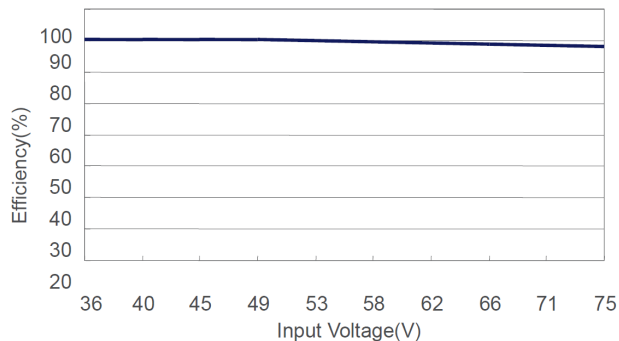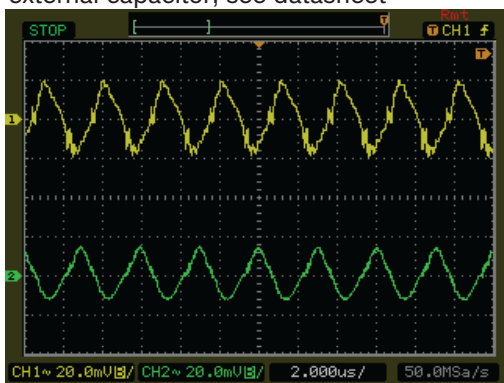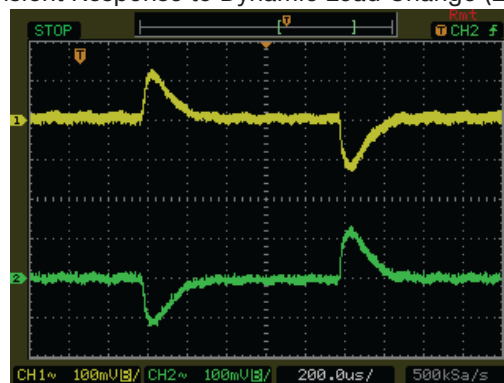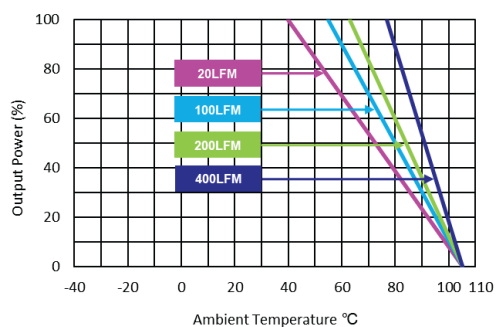with Heatsink TEN-HS4

Specifications can be changed without notice!