## Characteristic Curves

## TES 1-0510

### Efficiency versus Output Load



### Efficiency versus Input Voltage



### Typical Output Ripple and Noise



### Typical Start-Up and Output Rise Characteristic



### Derating Output Load versus Ambient Temperature



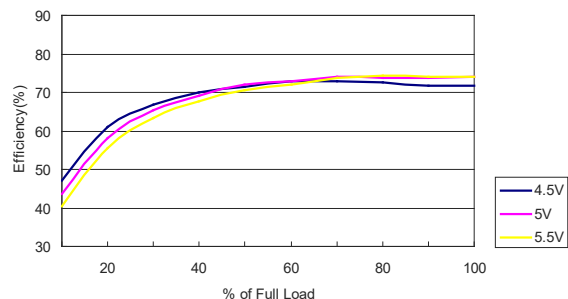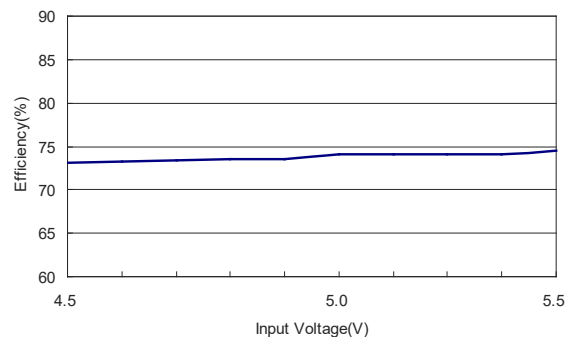### Load Variation versus Output Voltage
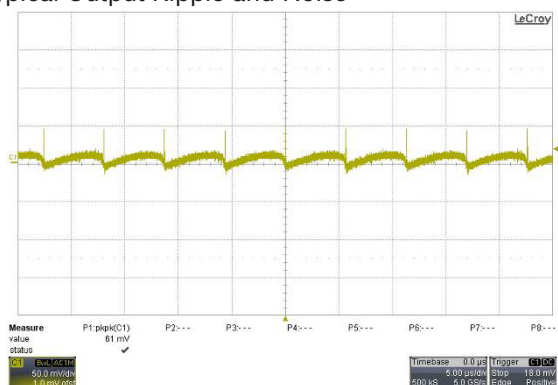
## Characteristic Curves

### TES 1-0511

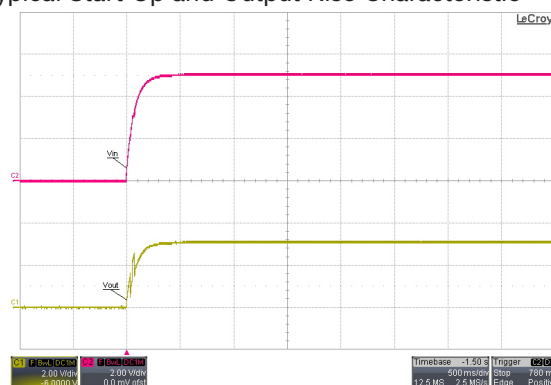Efficiency versus Output Load



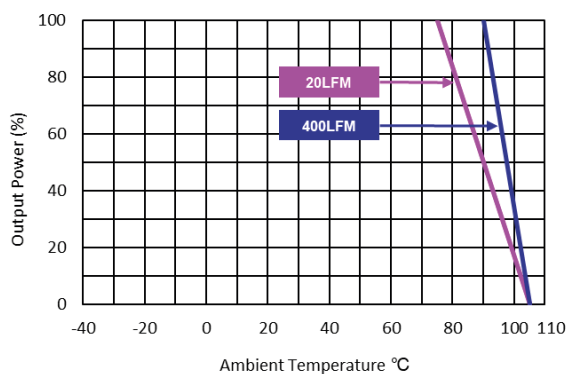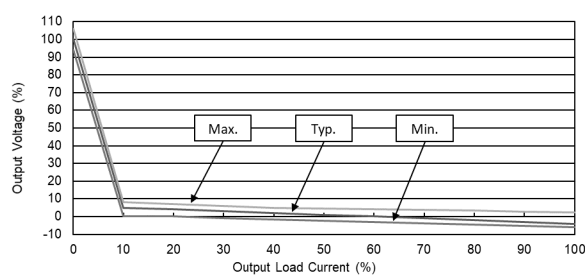Efficiency versus Input Voltage



Typical Output Ripple and Noise



Typical Start-Up and Output Rise Characteristic



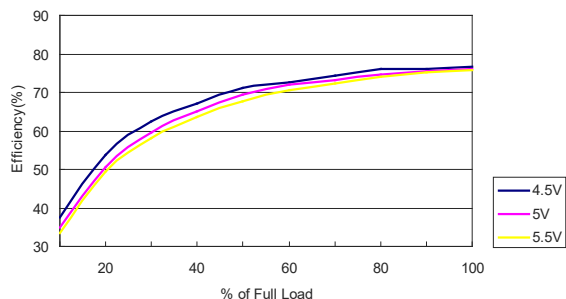Derating Output Load versus Ambient Temperature
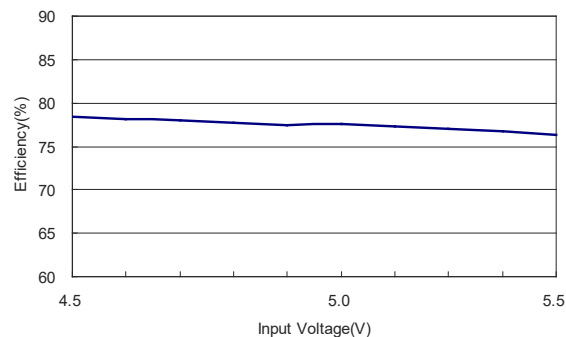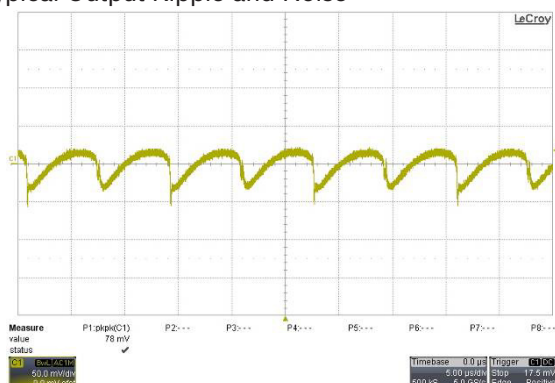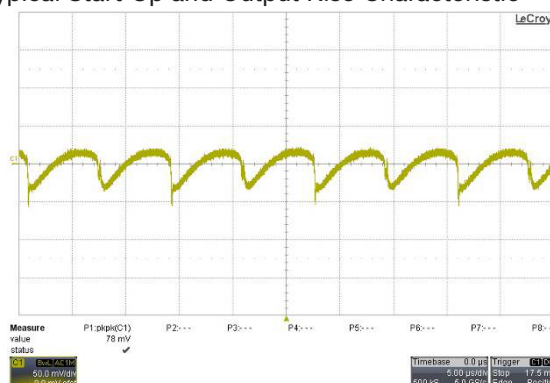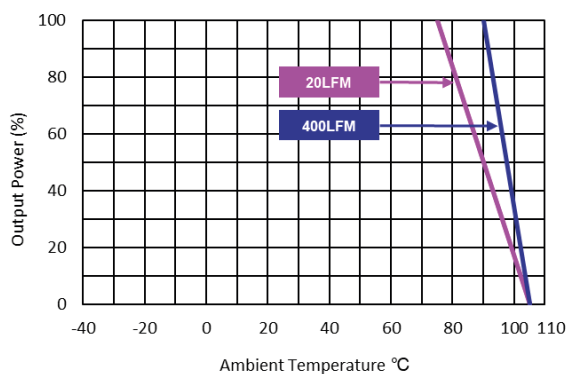


Load Variation versus Output Voltage

**TRACO POWER**

## Characteristic Curves

### TES 1-0519

Efficiency versus Output Load



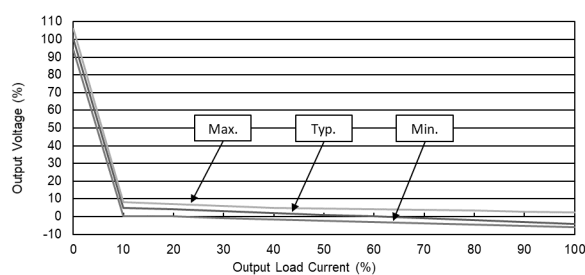Efficiency versus Input Voltage



Typical Output Ripple and Noise



Typical Start-Up and Output Rise Characteristic
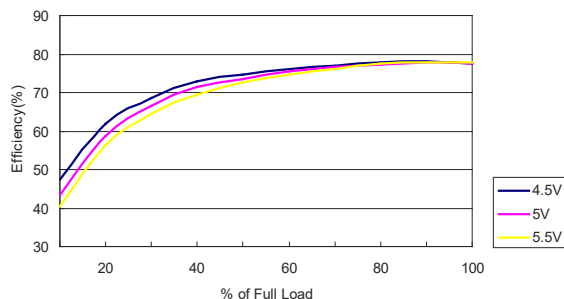


Derating Output Load versus Ambient Temperature
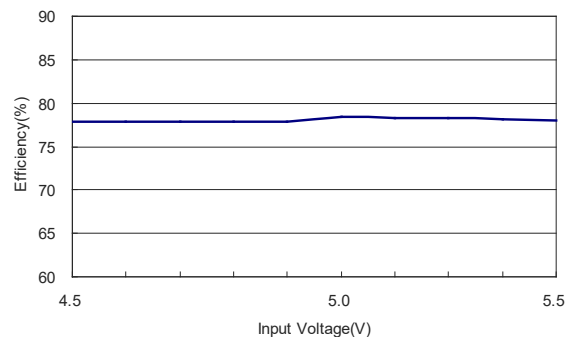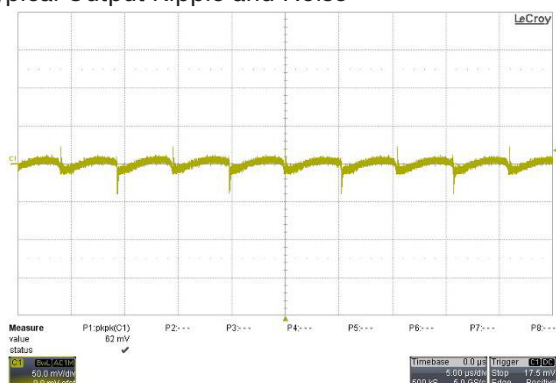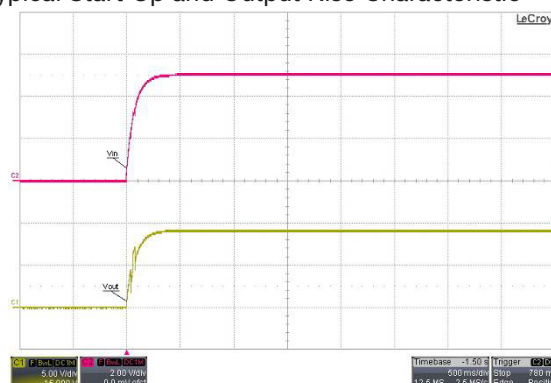


Load Variation versus Output Voltage

## Characteristic Curves

### TES 1-0512

Efficiency versus Output Load



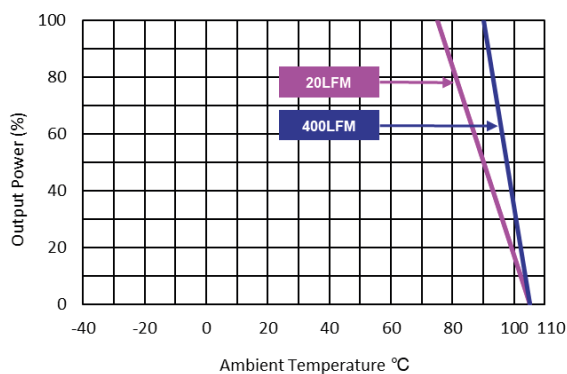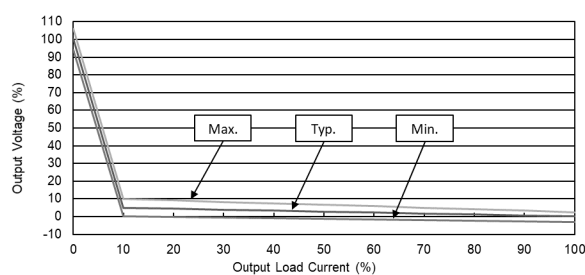Efficiency versus Input Voltage



Typical Output Ripple and Noise



Typical Start-Up and Output Rise Characteristic



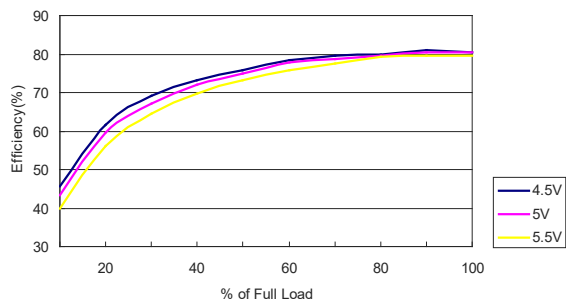Derating Output Load versus Ambient Temperature
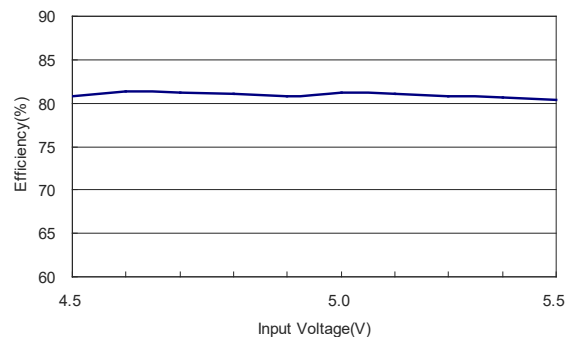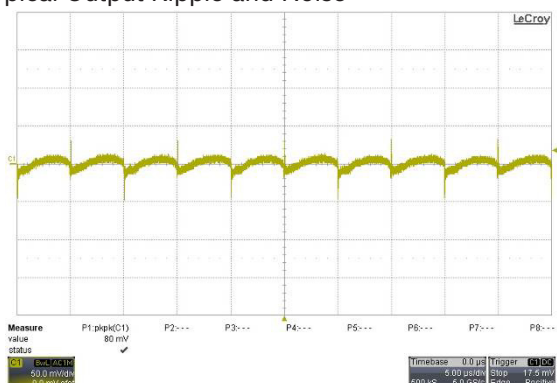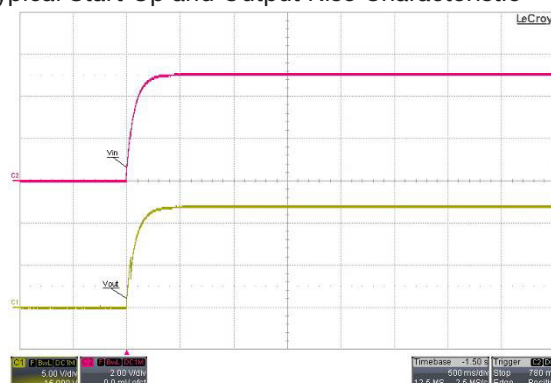


Load Variation versus Output Voltage

# TRACO POWER

## Characteristic Curves

### TES 1-0513

Efficiency versus Output Load



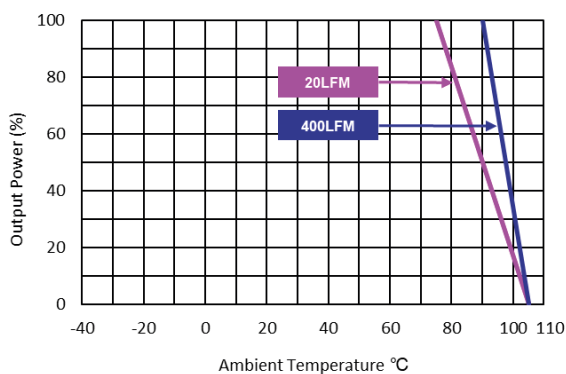Efficiency versus Input Voltage
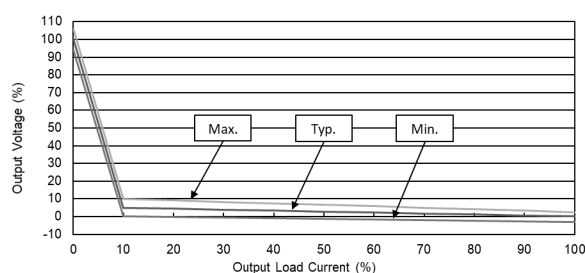


Typical Output Ripple and Noise



Typical Start-Up and Output Rise Characteristic
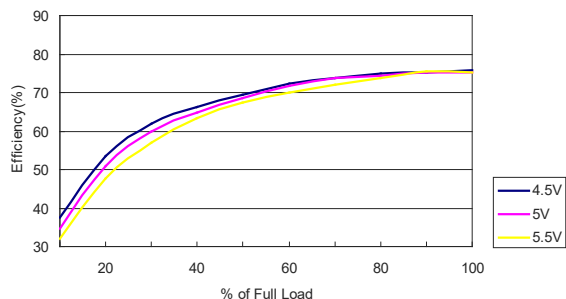


Derating Output Load versus Ambient Temperature


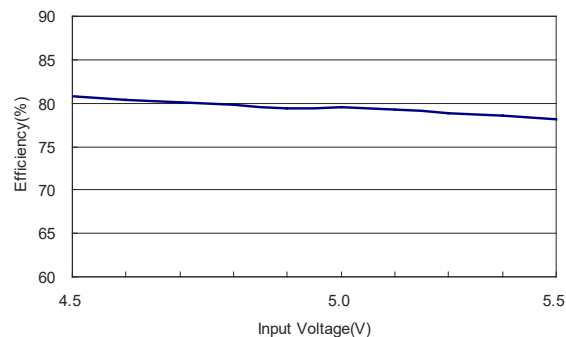
Load Variation versus Output Voltage

# TRACO POWER

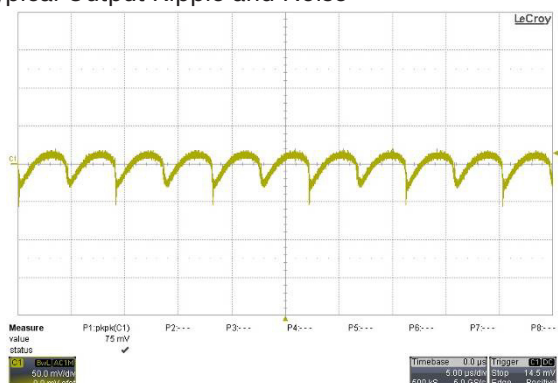## Characteristic Curves

### TES 1-0521
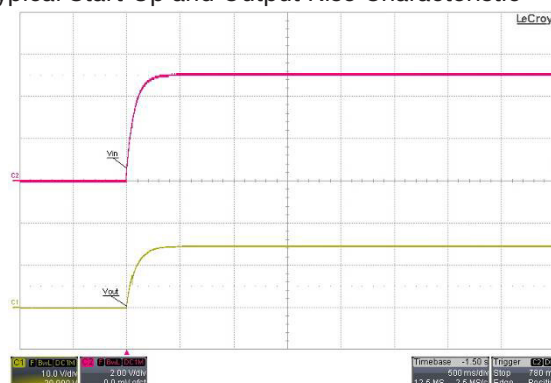
Efficiency versus Output Load
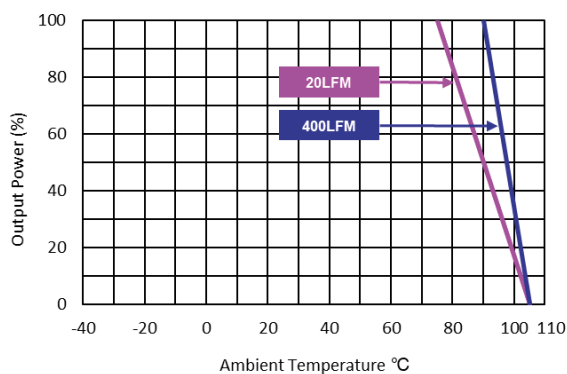


Efficiency versus Input Voltage
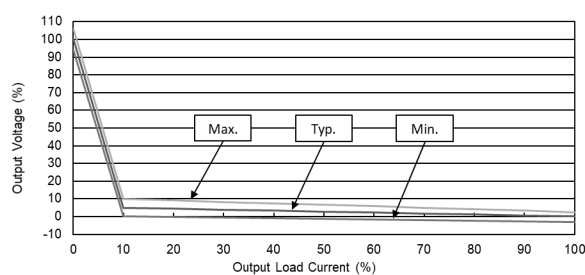


Typical Output Ripple and Noise



Typical Start-Up and Output Rise Characteristic
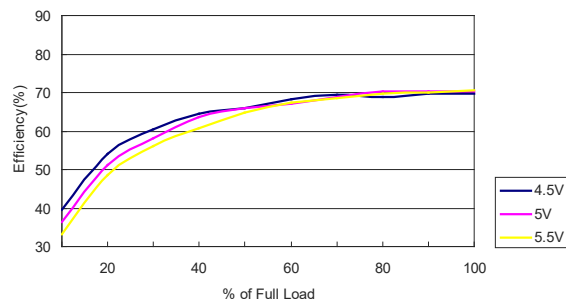


Derating Output Load versus Ambient Temperature


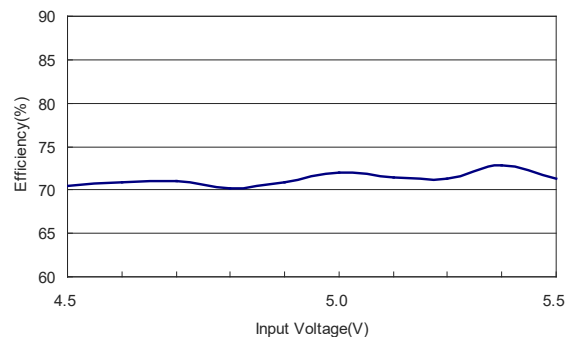
Load Variation versus Output Voltage

## **Characteristic Curves**
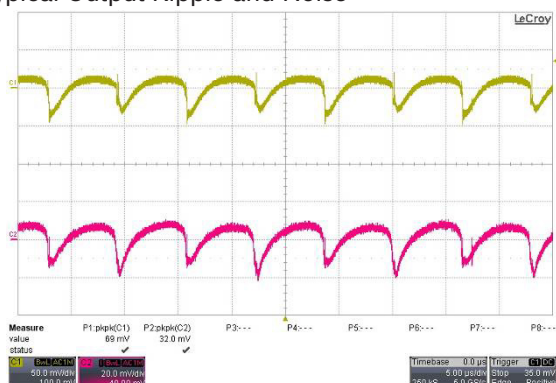
### **TES 1-0522**

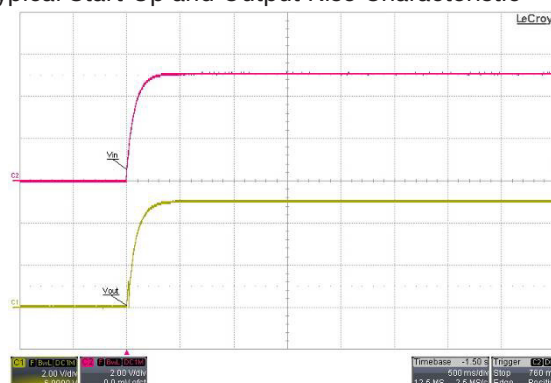Efficiency versus Output Load

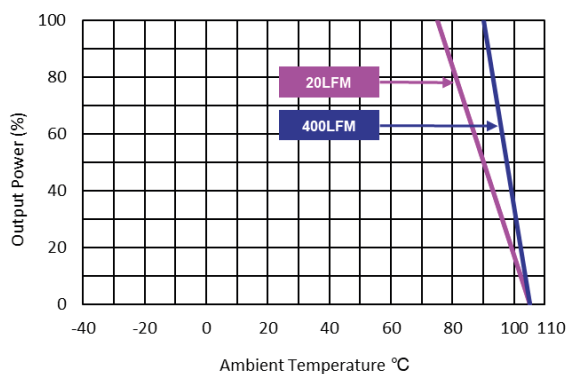

Efficiency versus Input Voltage
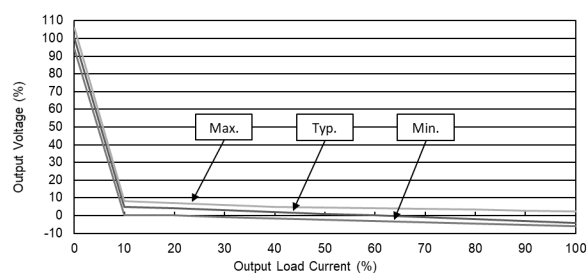


Typical Output Ripple and Noise



Typical Start-Up and Output Rise Characteristic
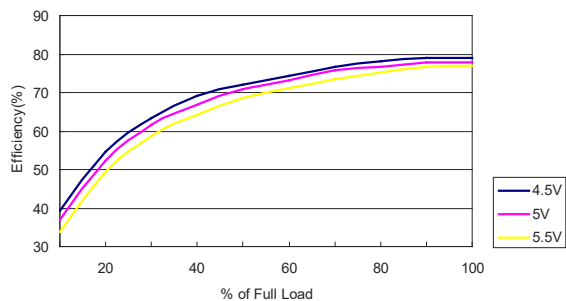


Derating Output Load versus Ambient Temperature



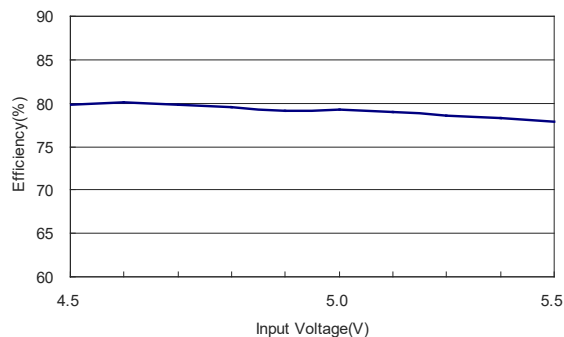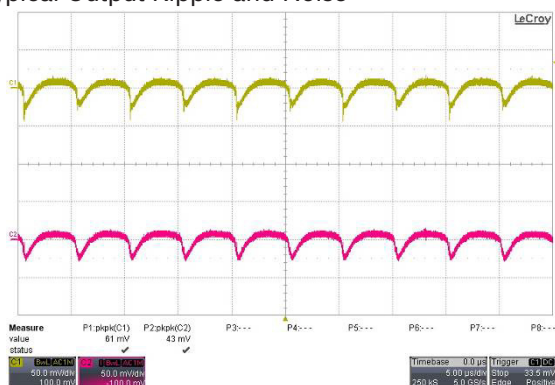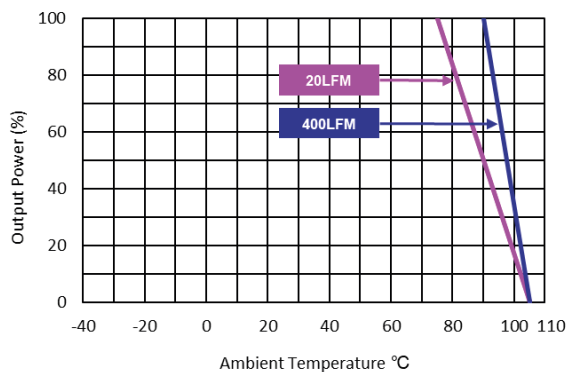Load Variation versus Output Voltage

# TRACO POWER

## Characteristic Curves

### TES 1-0523

**Efficiency versus Output Load**



**Efficiency versus Input Voltage**



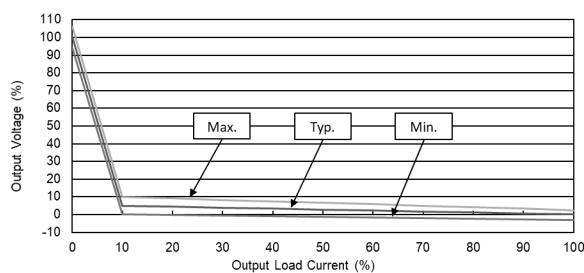**Typical Output Ripple and Noise**



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



**Derating Output Load versus Ambient Temperature**



**Load Variation versus Output Voltage**

## Characteristic Curves

### TES 1-1211

Efficiency versus Output Load



Efficiency versus Input Voltage



Typical Output Ripple and Noise



Typical Start-Up and Output Rise Characteristic



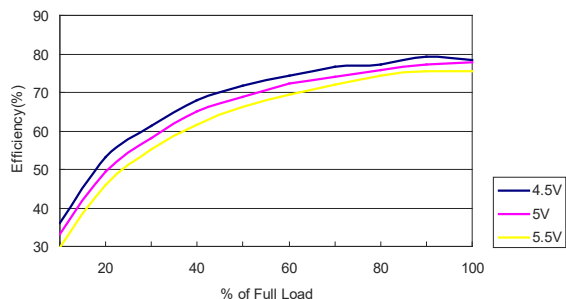Derating Output Load versus Ambient Temperature
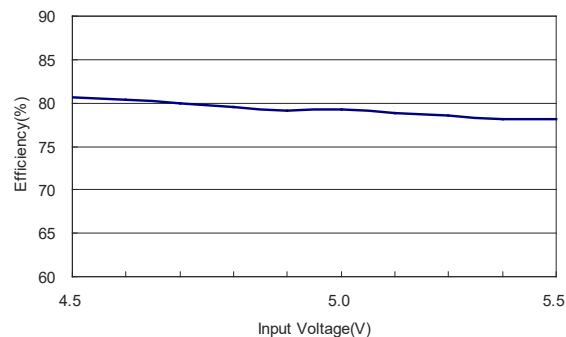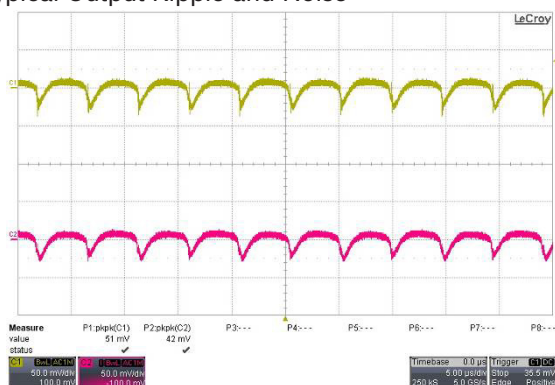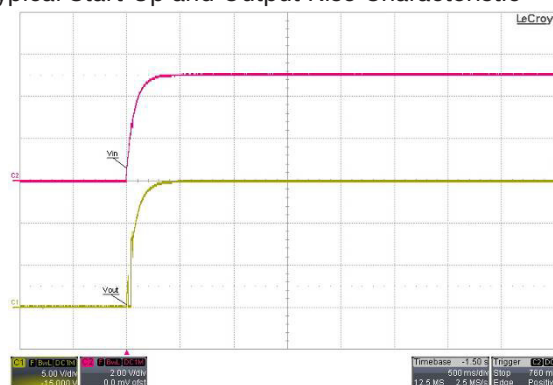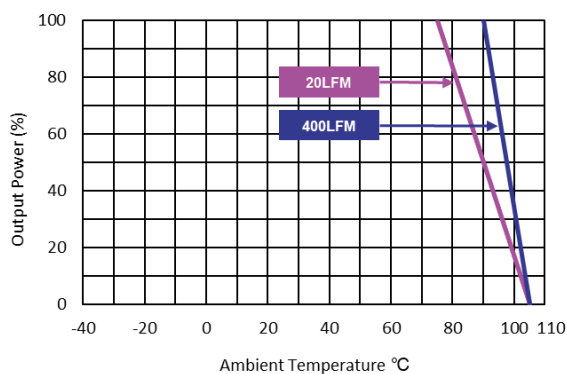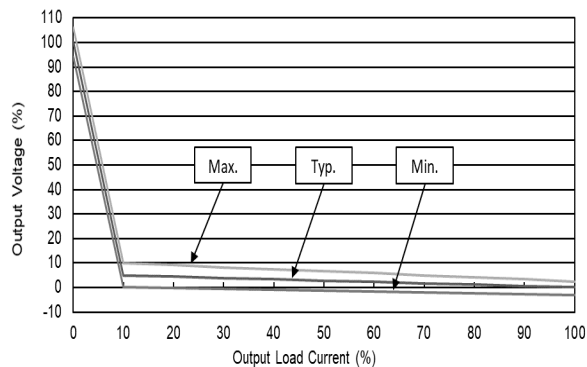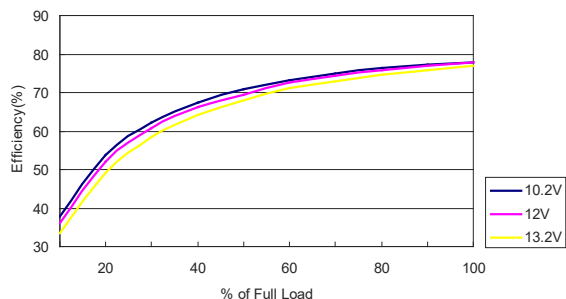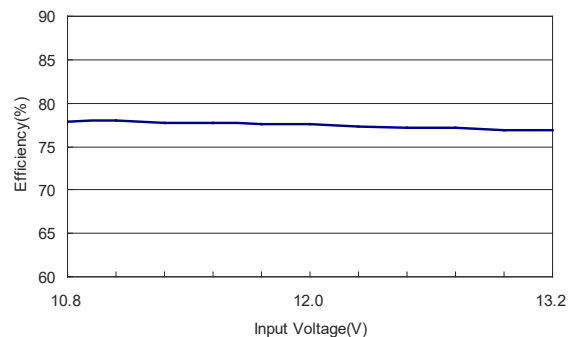


Load Variation versus Output Voltage

# TRACO POWER

## Characteristic Curves
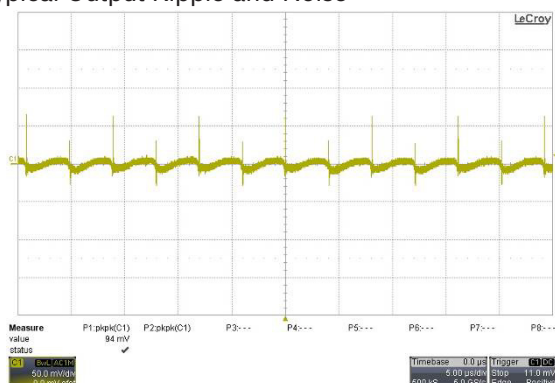
### TES 1-1219

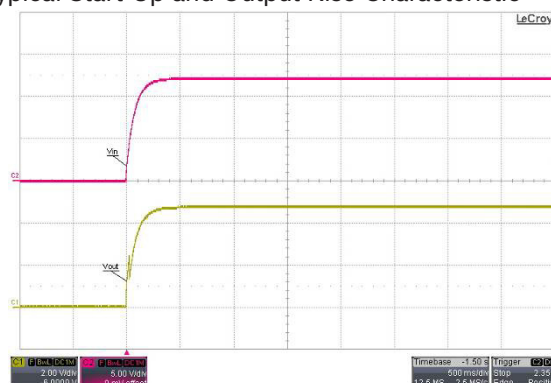Efficiency versus Output Load
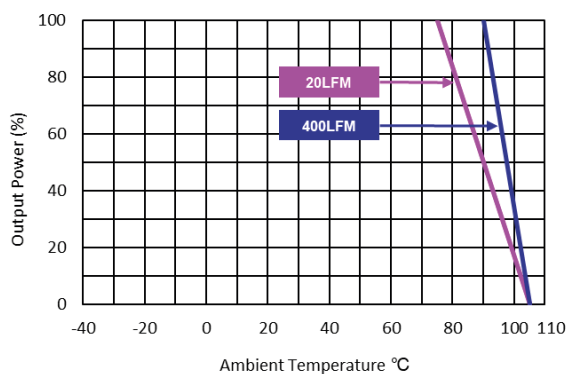


Efficiency versus Input Voltage
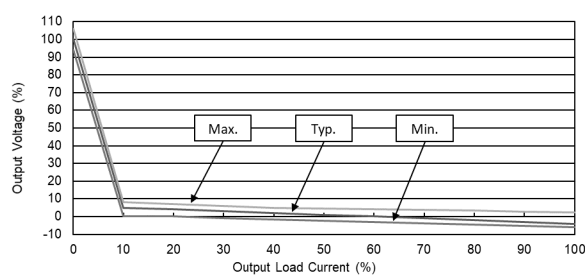


Typical Output Ripple and Noise



Typical Start-Up and Output Rise Characteristic
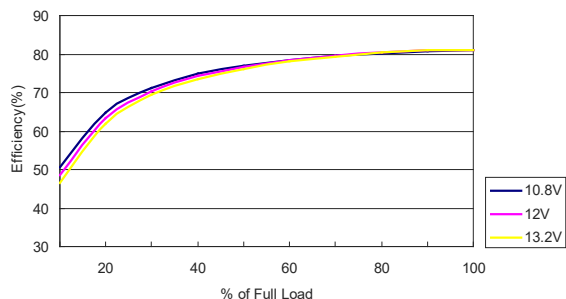


Derating Output Load versus Ambient Temperature


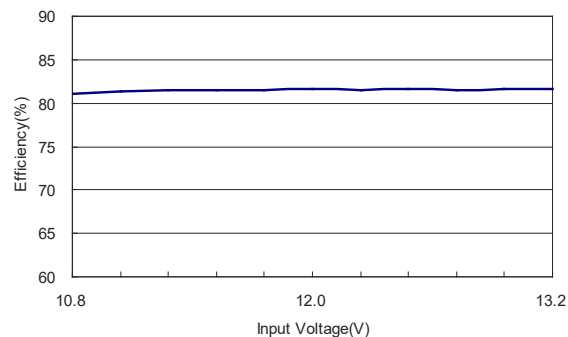
Load Variation versus Output Voltage

# TRACO POWER

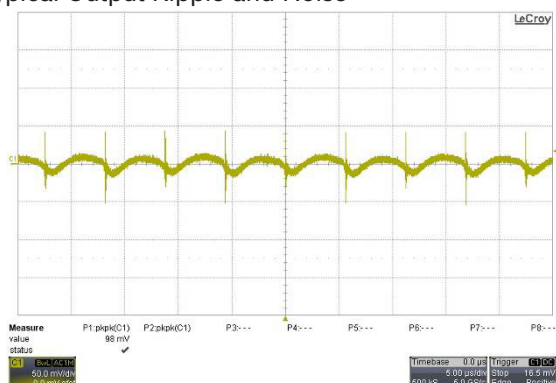## Characteristic Curves

### TES 1-1212
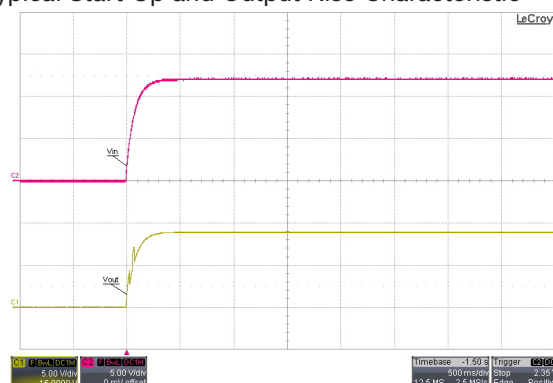
Efficiency versus Output Load
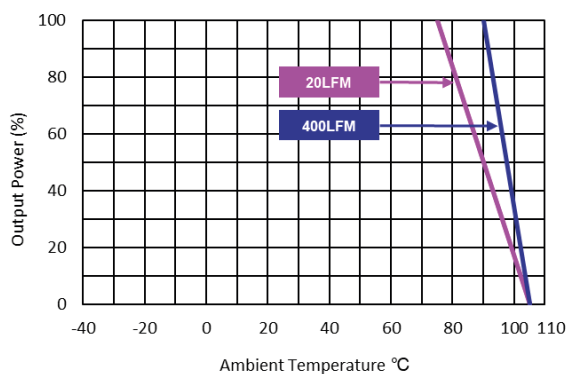


Efficiency versus Input Voltage
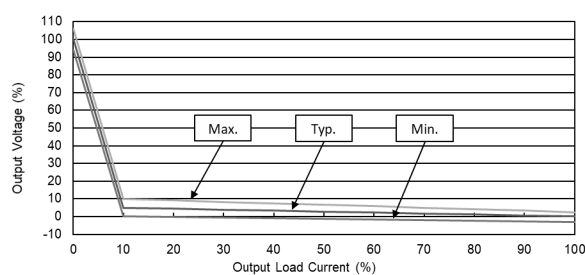


Typical Output Ripple and Noise



Typical Start-Up and Output Rise Characteristic
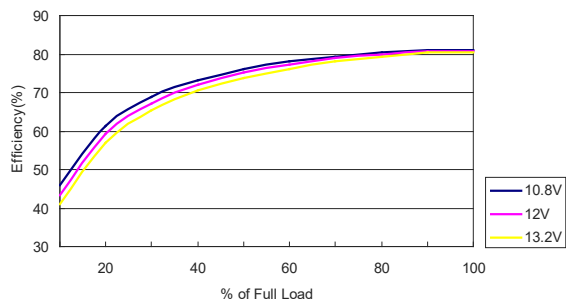


Derating Output Load versus Ambient Temperature


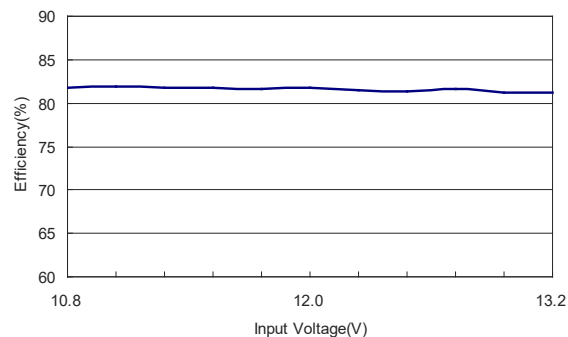
Load Variation versus Output Voltage

# TRACO POWER

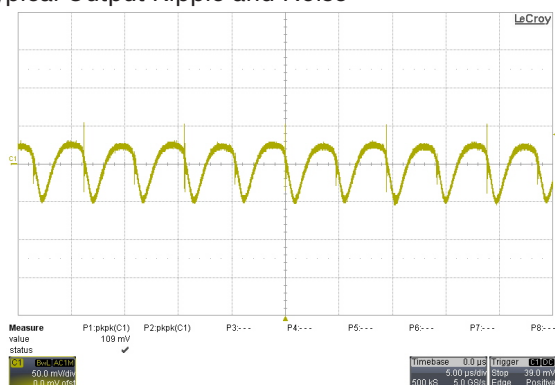## Characteristic Curves

### TES 1-1213
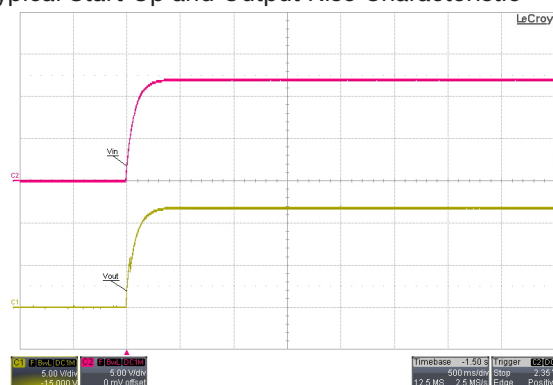
Efficiency versus Output Load
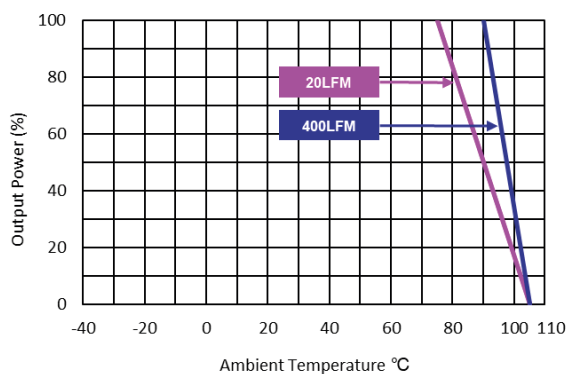


Efficiency versus Input Voltage
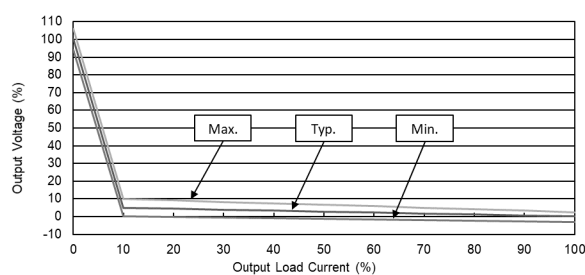


Typical Output Ripple and Noise



Typical Start-Up and Output Rise Characteristic
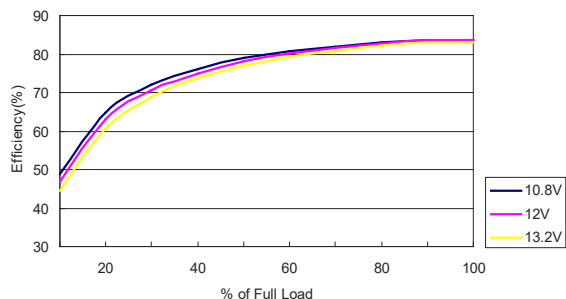


Derating Output Load versus Ambient Temperature


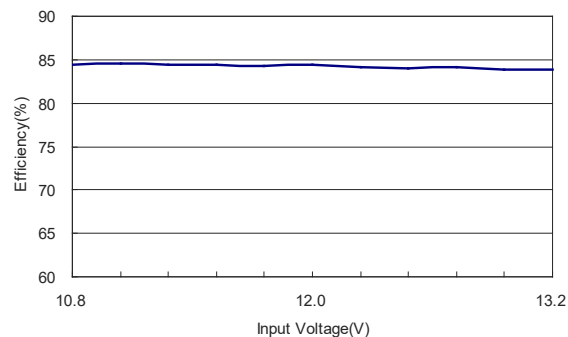
Load Variation versus Output Voltage

# TRACO POWER

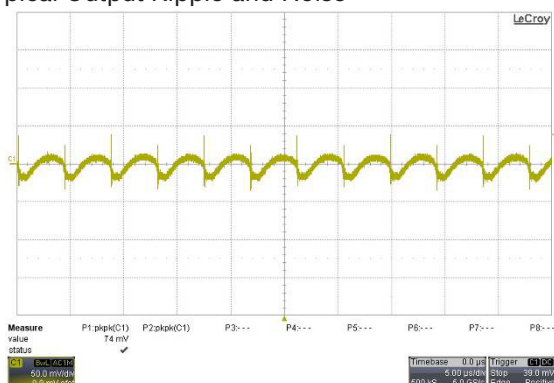## Characteristic Curves

### TES 1-1221
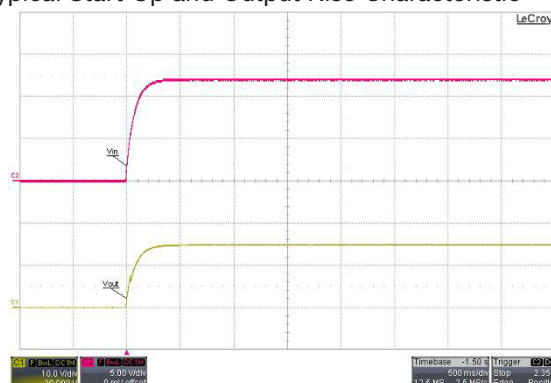
Efficiency versus Output Load
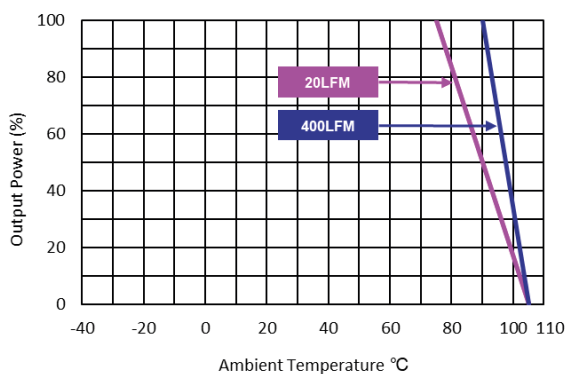


Efficiency versus Input Voltage
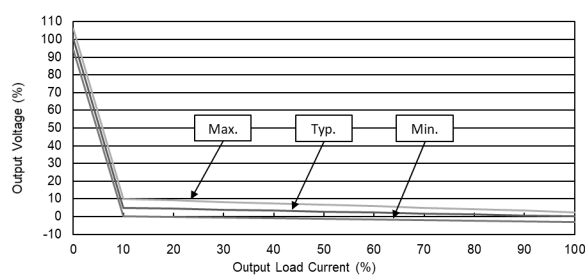


Typical Output Ripple and Noise



Typical Start-Up and Output Rise Characteristic
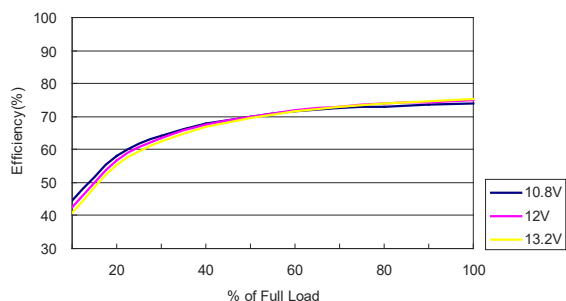


Derating Output Load versus Ambient Temperature


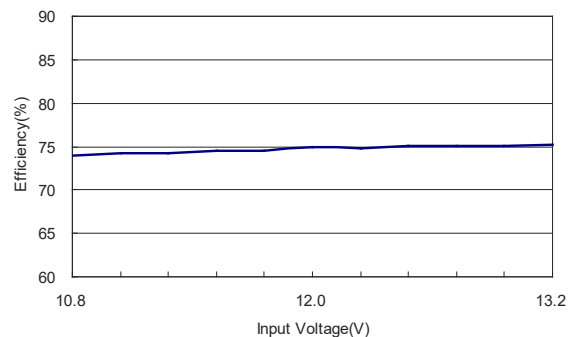
Load Variation versus Output Voltage

## Characteristic Curves
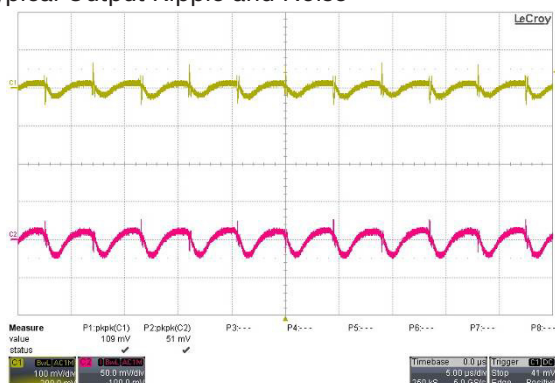
### TES 1-1222

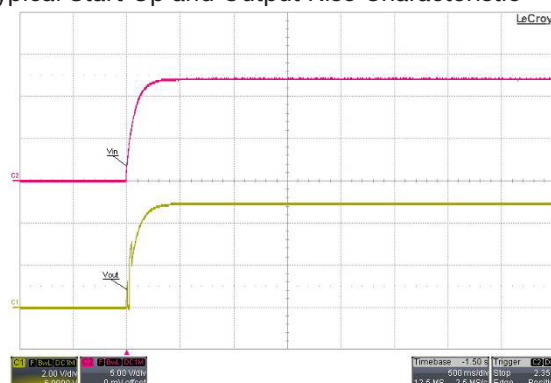Efficiency versus Output Load



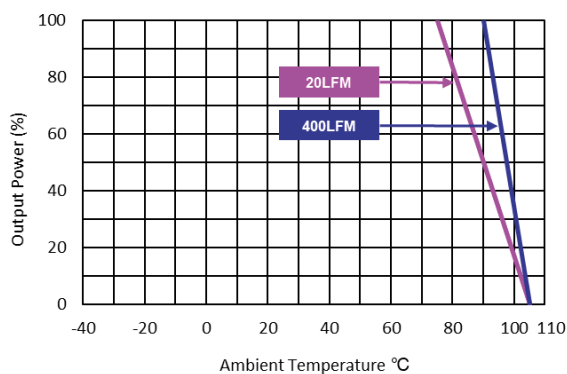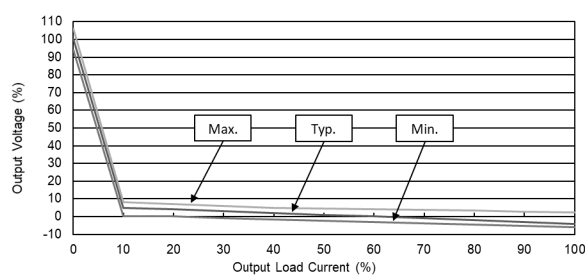Efficiency versus Input Voltage



Typical Output Ripple and Noise



Typical Start-Up and Output Rise Characteristic



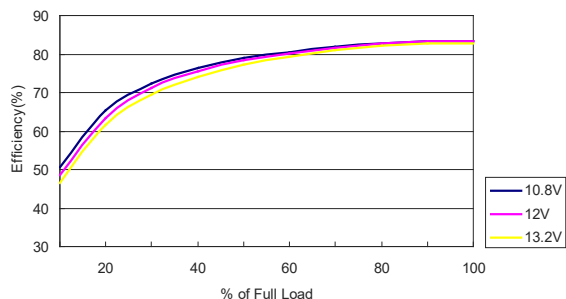Derating Output Load versus Ambient Temperature



Load Variation versus Output Voltage

# TRACO POWER

## Characteristic Curves

### TES 1-1223

Efficiency versus Output Load



Efficiency versus Input Voltage



Typical Output Ripple and Noise



Typical Start-Up and Output Rise Characteristic



Derating Output Load versus Ambient Temperature
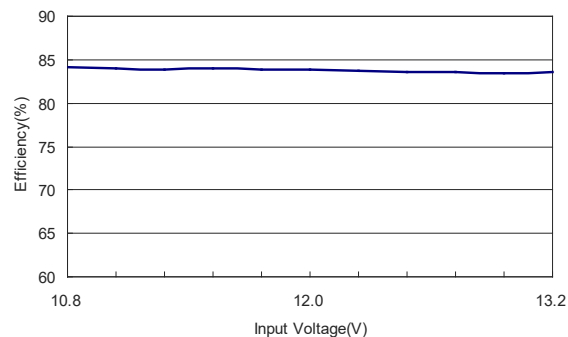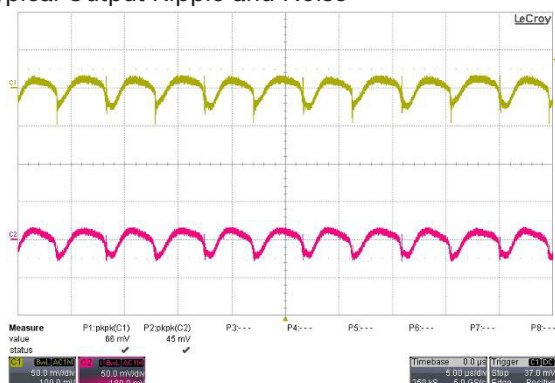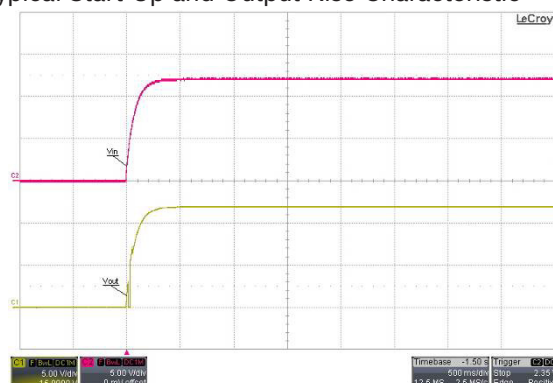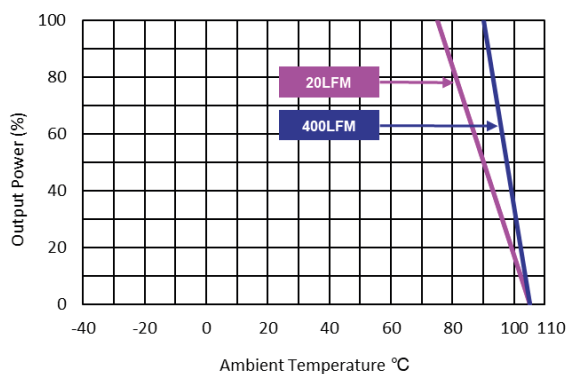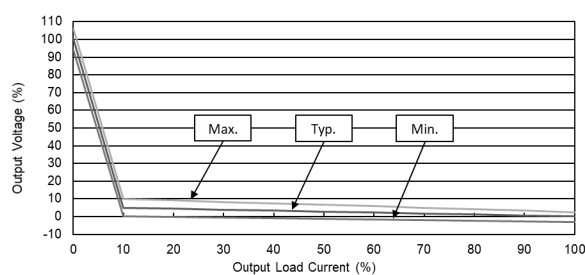


Load Variation versus Output Voltage

# TRACO POWER

## Characteristic Curves

### TES 1-2411

Efficiency versus Output Load



Efficiency versus Input Voltage



Typical Output Ripple and Noise



Typical Start-Up and Output Rise Characteristic
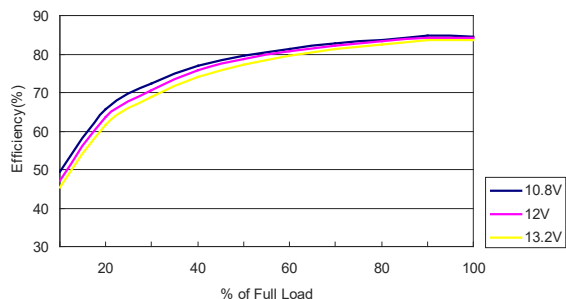


Derating Output Load versus Ambient Temperature


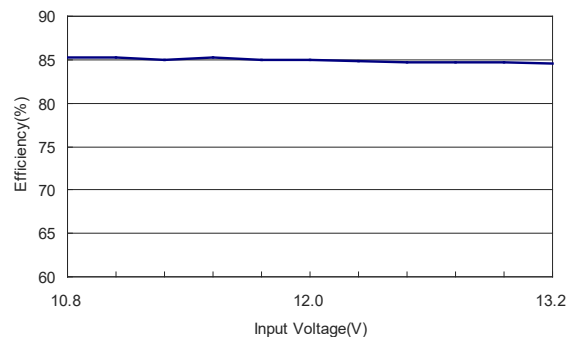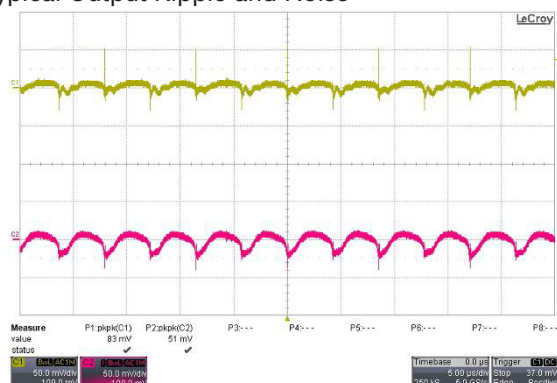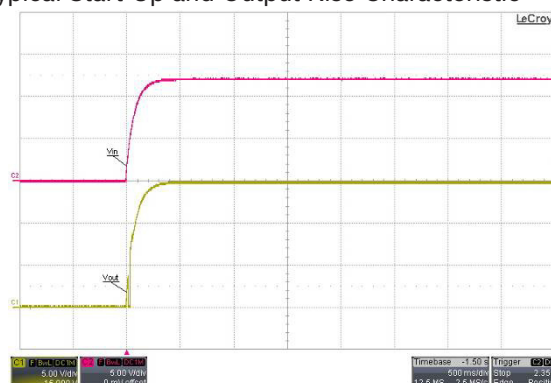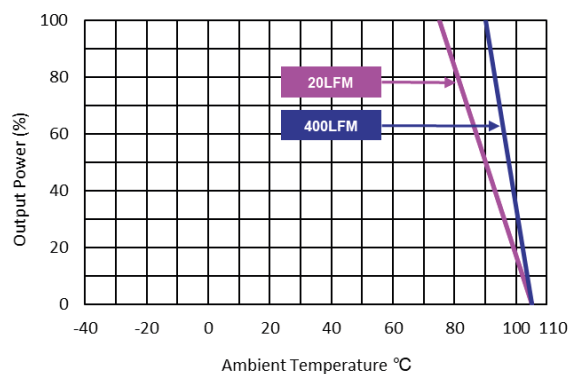
Load Variation versus Output Voltage

# **TRACO POWER**

## Characteristic Curves

### TES 1-2419

Efficiency versus Output Load



Efficiency versus Input Voltage
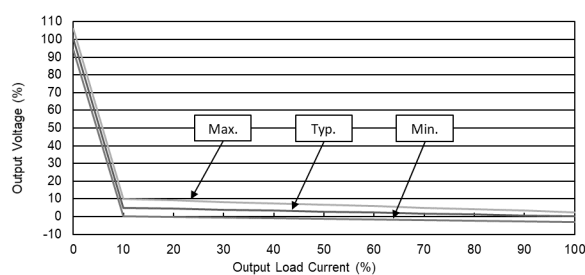


Typical Output Ripple and Noise



Typical Start-Up and Output Rise Characteristic



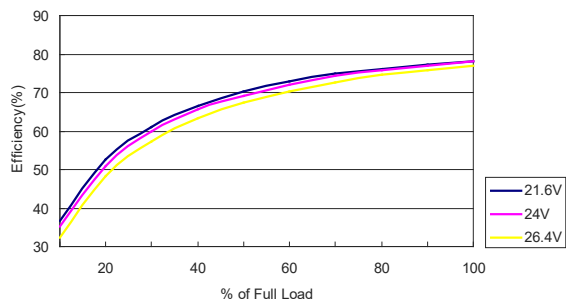Derating Output Load versus Ambient Temperature
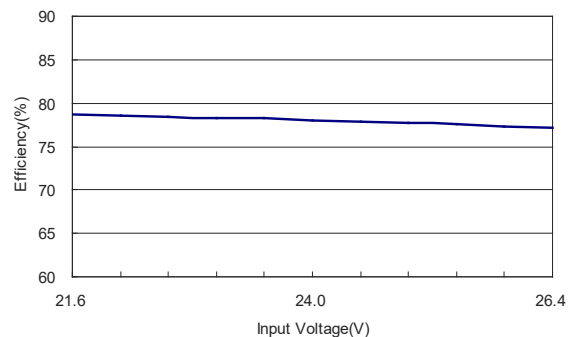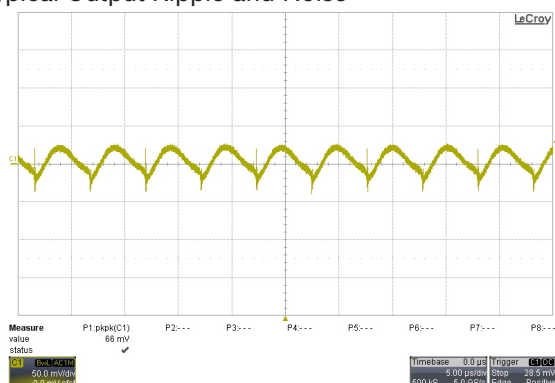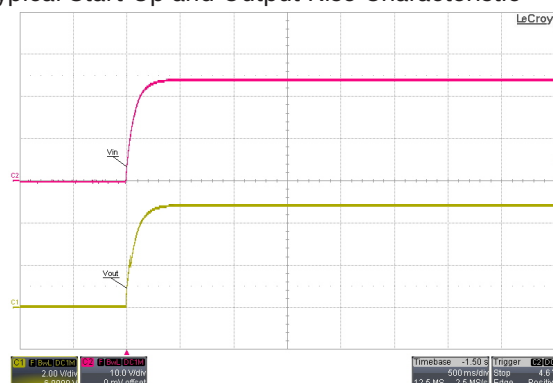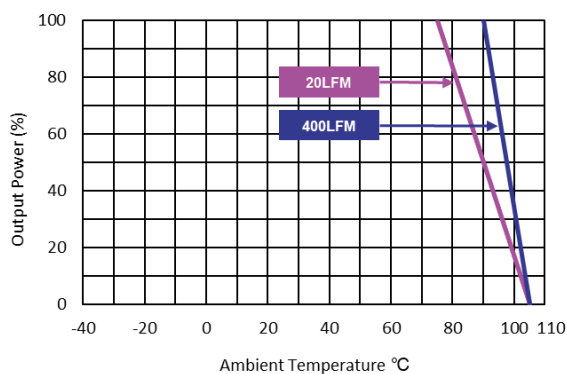


Load Variation versus Output Voltage

# TRACO POWER

## Characteristic Curves

### TES 1-2412

Efficiency versus Output Load



Efficiency versus Input Voltage
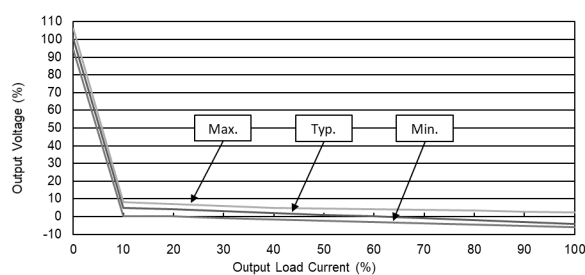


Typical Output Ripple and Noise



Typical Start-Up and Output Rise Characteristic



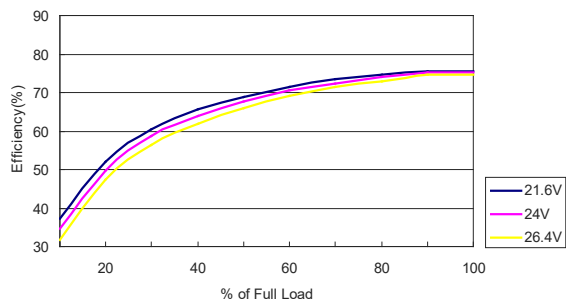Derating Output Load versus Ambient Temperature


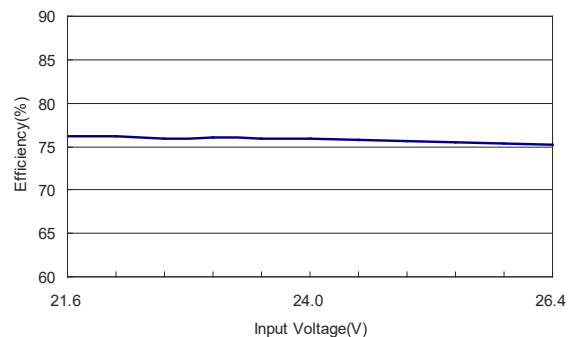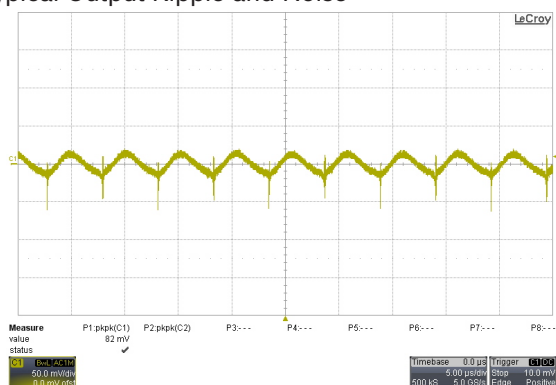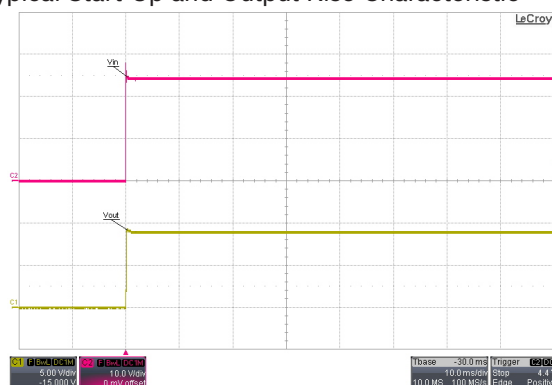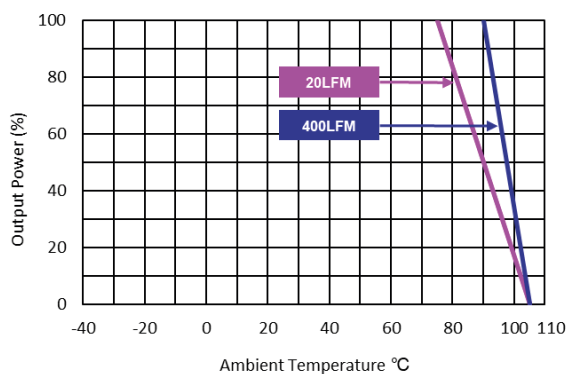
Load Variation versus Output Voltage

# TRACO POWER

## Characteristic Curves

### TES 1-2413

Efficiency versus Output Load



Efficiency versus Input Voltage
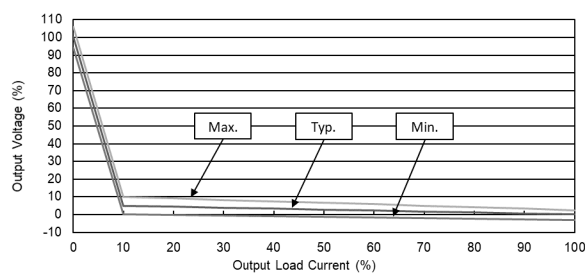


Typical Output Ripple and Noise



Typical Start-Up and Output Rise Characteristic
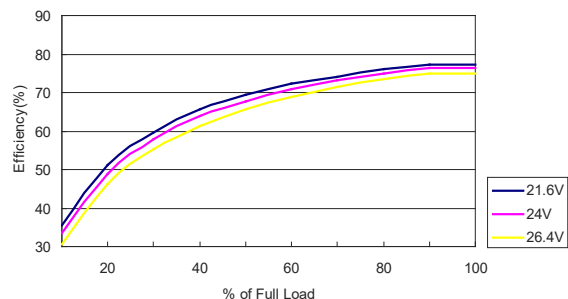


Derating Output Load versus Ambient Temperature


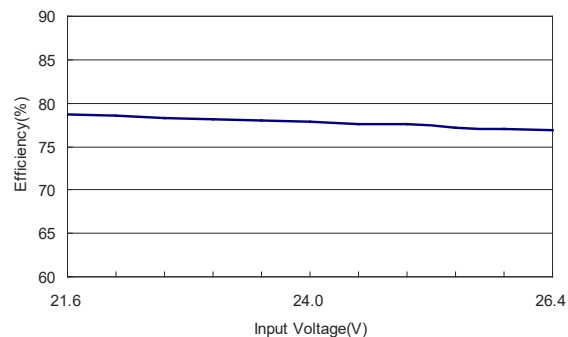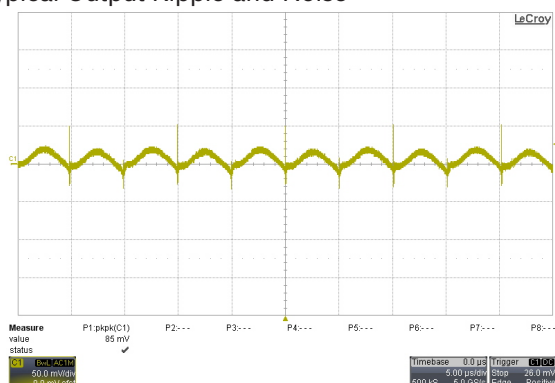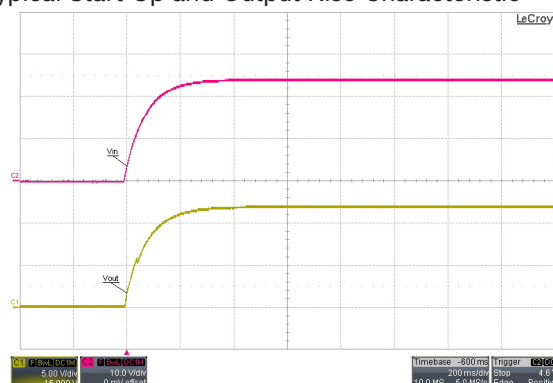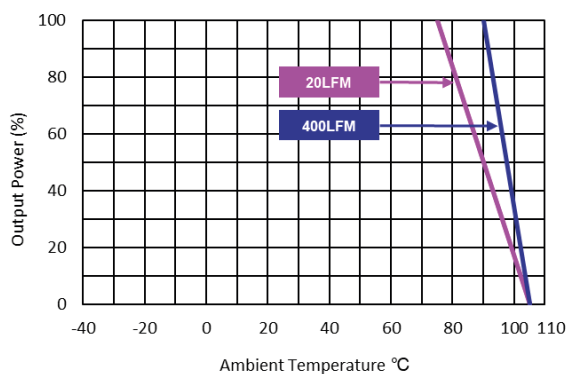
Load Variation versus Output Voltage

## Characteristic Curves

### TES 1-2421

Efficiency versus Output Load



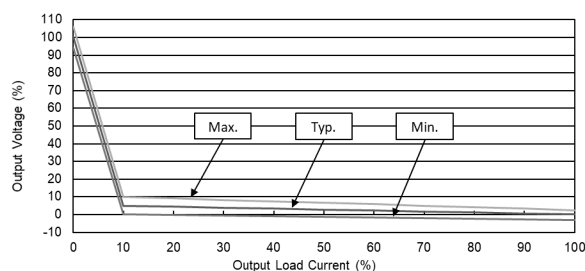Efficiency versus Input Voltage



Typical Output Ripple and Noise



Typical Start-Up and Output Rise Characteristic



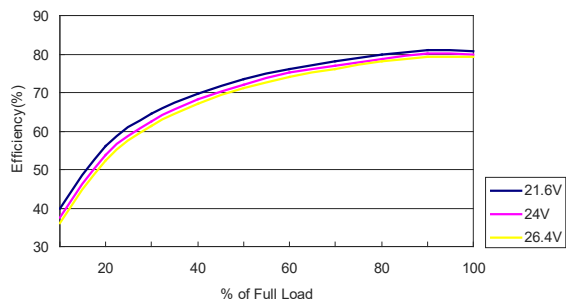Derating Output Load versus Ambient Temperature
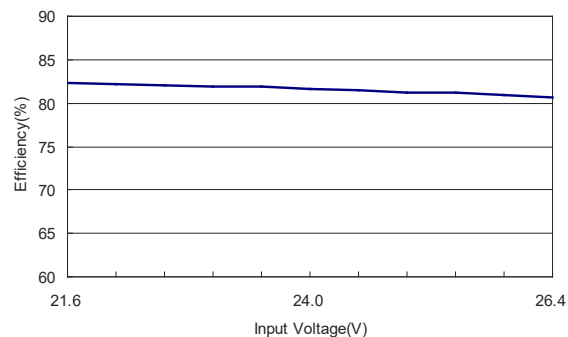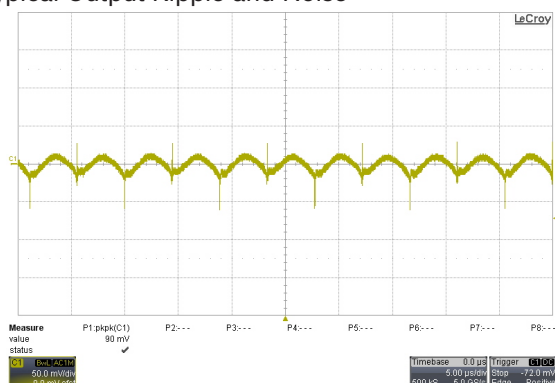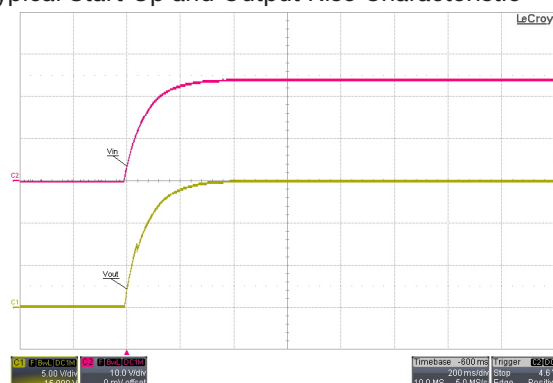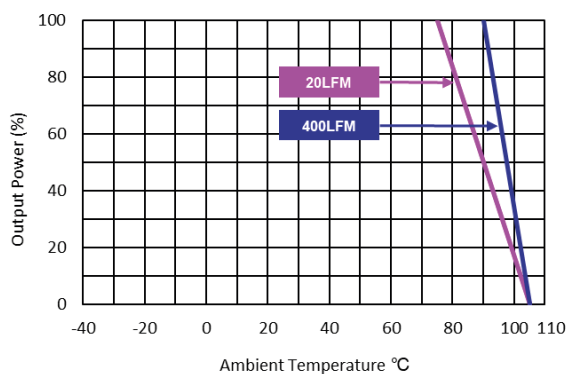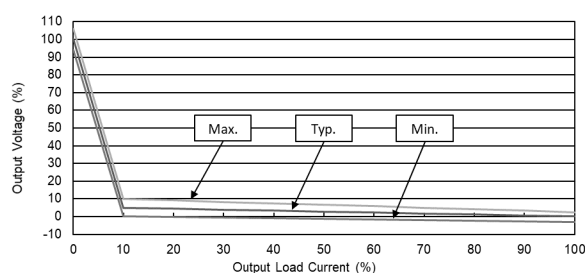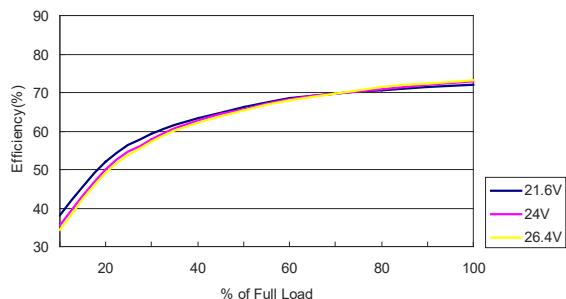

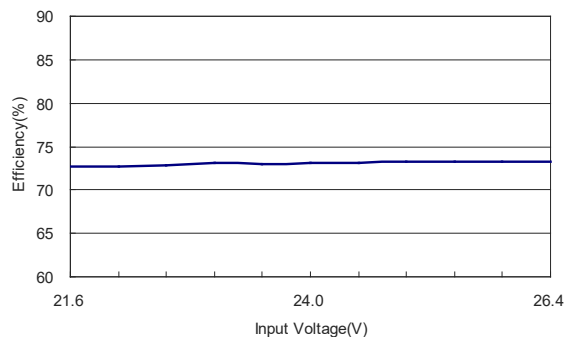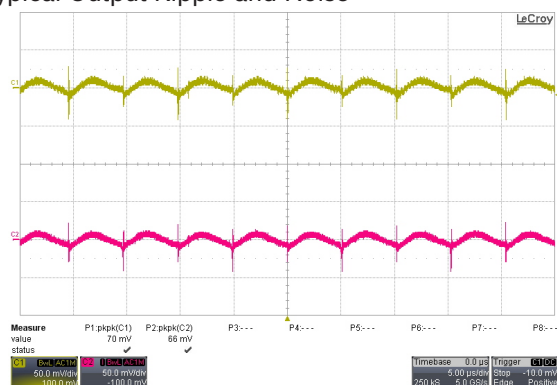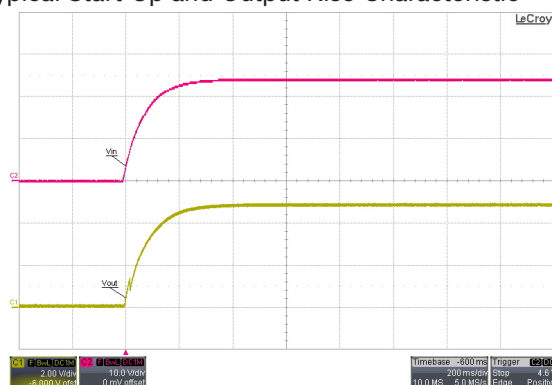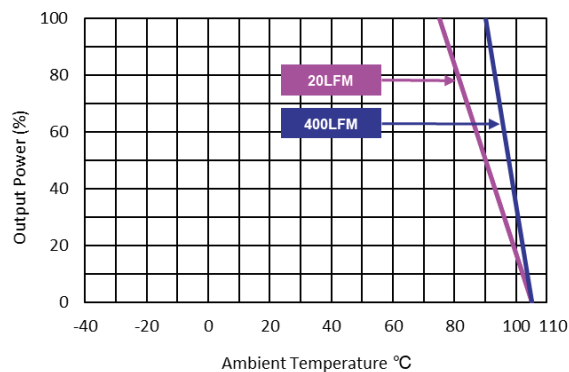
Load Variation versus Output Voltage

# TRACO POWER

## Characteristic Curves

### TES 1-2422

#### Efficiency versus Output Load



Legend:
- 21.6V
- 24V
- 26.4V

X-axis: % of Full Load
Y-axis: Efficiency(%)

#### Efficiency versus Input Voltage



X-axis: Input Voltage(V)
Y-axis: Efficiency(%)

#### Typical Output Ripple and Noise



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



#### Derating Output Load versus Ambient Temperature



Labels: 20LFM, 400LFM
X-axis: Ambient Temperature ℃
Y-axis: Output Power (%)

#### Load Variation versus Output Voltage



Labels: Max., Typ., Min.
X-axis: Output Load Current (%)
Y-axis: Output Voltage (%)

## Characteristic Curves

### TES 1-2423

Efficiency versus Output Load



Efficiency versus Input Voltage
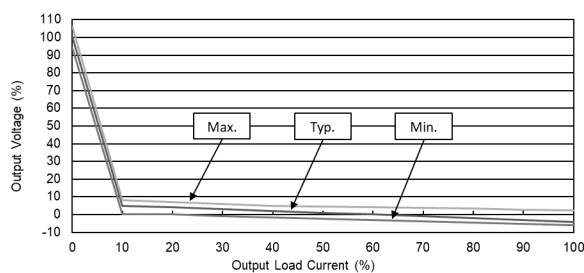


Typical Output Ripple and Noise



Typical Start-Up and Output Rise Characteristic



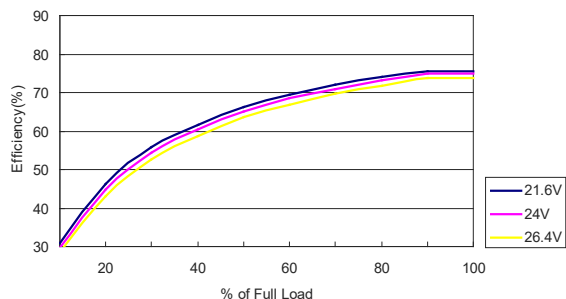Derating Output Load versus Ambient Temperature
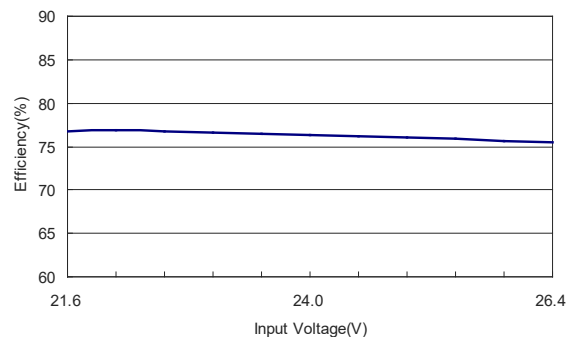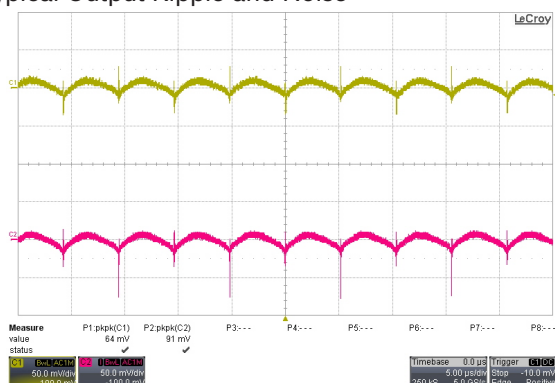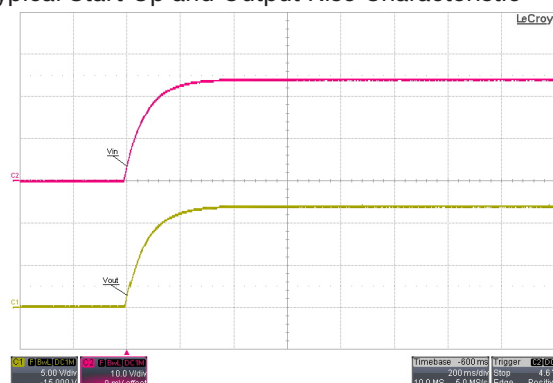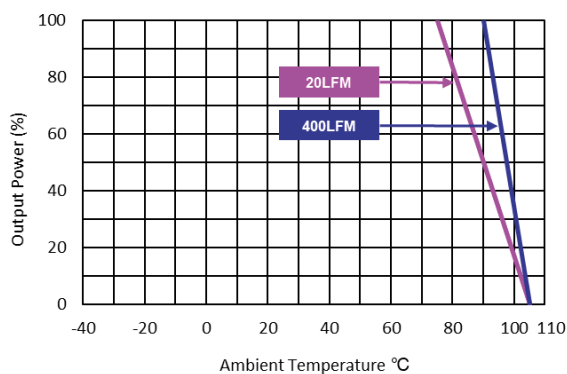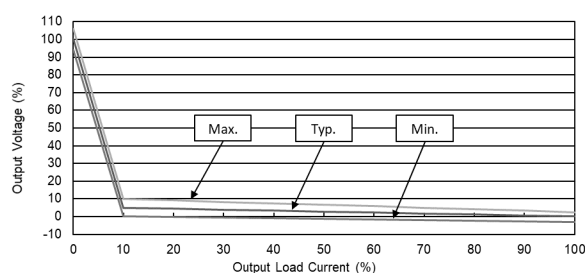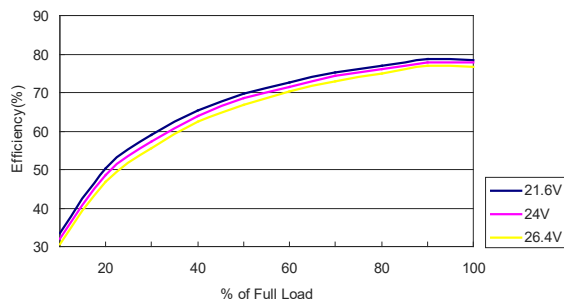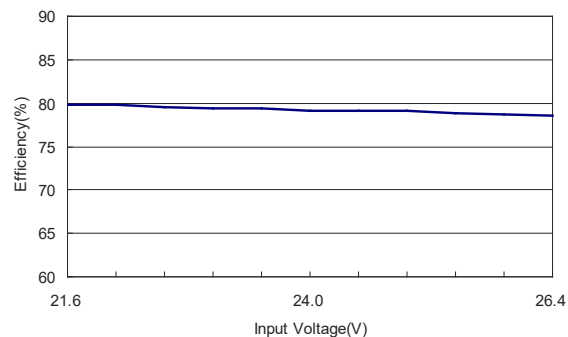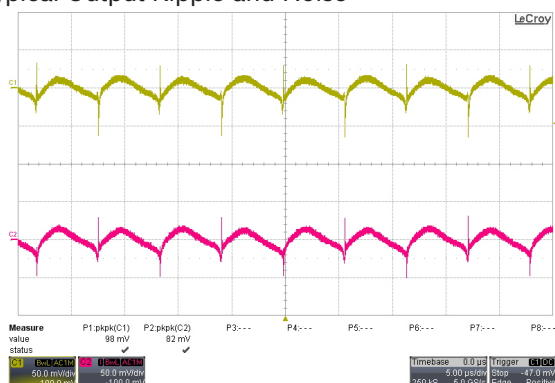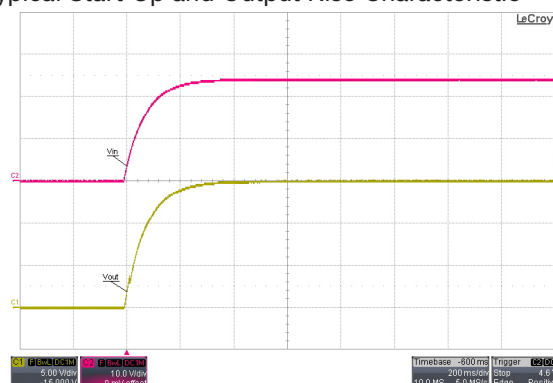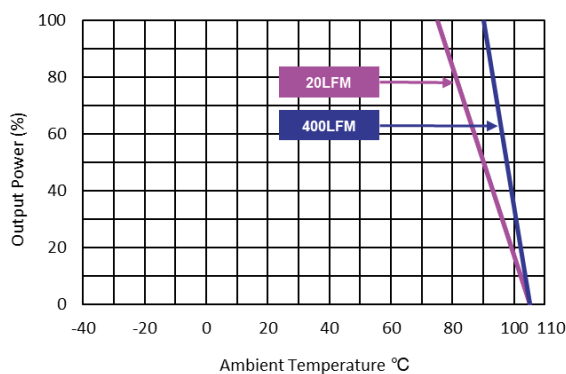


Load Variation versus Output Voltage

Specifications can be changed without notice!