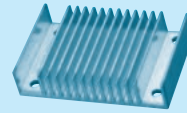


TUNS50F

TUN S 50 F 05 -□
 ① ② ③ ④ ⑤ ⑥



*Providing heat sink as option



- ① Series name
- ② Single output
- ③ Output wattage
- ④ Universal Input
- ⑤ Output voltage
- ⑥ Optional
- T : with Mounting hole (φ 3.4 thru)

*Avoid short circuit between +BC and -BC. It may cause the failure of inside components.
 *Keep TRM open, if output voltage adjustment is not necessary.

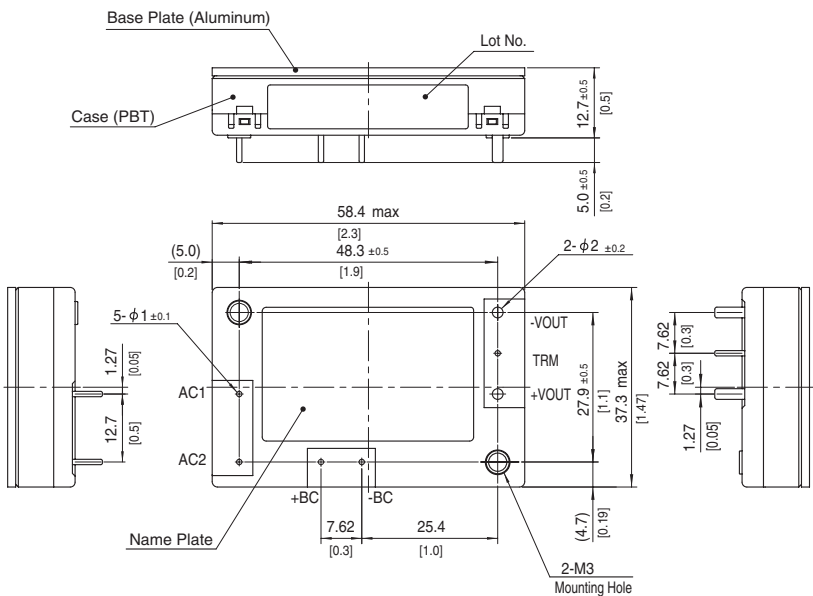
| MODEL | TUNS50F05 | TUNS50F12 | TUNS50F24 |
|-----------------------|-----------|-----------|-----------|
| MAX OUTPUT WATTAGE[W] | 50.0 | 50.4 | 50.4 |
| DC OUTPUT | 5V 10A | 12V 4.2A | 24V 2.1A |

SPECIFICATIONS

| | MODEL | TUNS50F05 | TUNS50F12 | TUNS50F24 | |
|------------------------------------|--|---|-------------------|---------------|--------|
| INPUT | VOLTAGE[V] | AC85 - 264 1 φ (Please refer to the instruction manual, 6.5 Derating) | | | |
| | CURRENT[A] | ACIN 100V | 0.67typ (Io=100%) | | |
| | | ACIN 200V | 0.35typ (Io=100%) | | |
| | FREQUENCY[Hz] | 50/60 (47 - 63) | | | |
| | EFFICIENCY[%] | ACIN 100V | 79typ | 83typ | 84typ |
| | | ACIN 200V | 81typ | 84typ | 86typ |
| | POWER FACTOR (Io=100%) | ACIN 100V | 0.95typ | | |
| | | ACIN 200V | 0.90typ | | |
| INRUSH CURRENT | Limited by external components (Thermistor) | | | | |
| LEAKAGE CURRENT[mA] | 0.75max (ACIN 240V 60Hz, Io=100%, According to IEC60950-1) | | | | |
| OUTPUT | VOLTAGE[V] | 5 | 12 | 24 | |
| | CURRENT[A] | 10 | 4.2 | 2.1 | |
| | LINE REGULATION[mV] | 10max | 24max | 48max | |
| | LOAD REGULATION[mV] | 10max | 24max | 48max | |
| | RIPPLE[mVp-p] | 0 to +100°C *1 | 80max | 120max | 120max |
| | | -40 to 0°C *1 | 120max | 150max | 150max |
| | | 0 to 15% Load *1 | 200max | 280max | 380max |
| | RIPPLE NOISE[mVp-p] | 0 to +100°C *1 | 120max | 150max | 150max |
| | | -40 to 0°C *1 | 200max | 200max | 250max |
| | | 0 to 15% Load *1 | 280max | 360max | 460max |
| | TEMPERATURE REGULATION[mV] | 0 to +65°C | 50max | 120max | 240max |
| | | -40 to +100°C | 100max | 240max | 480max |
| DRIFT[mV] | *2 | 20max | 40max | 90max | |
| OUTPUT VOLTAGE ADJUSTMENT RANGE[V] | Fixed (TRM pin open), adjustable by external resistor or external signal | | | | |
| OUTPUT VOLTAGE SETTING[V] | 4.50 - 6.00 | 10.80 - 13.20 | 21.60 - 26.40 | | |
| OUTPUT VOLTAGE SETTING[V] | 4.97 - 5.13 | 11.91 - 12.29 | 23.62 - 24.38 | | |
| PROTECTION CIRCUIT AND OTHERS | OVERCURRENT PROTECTION | Works over 105% of rating and recovers automatically | | | |
| | OVERVOLTAGE PROTECTION[V] | 6.30 - 7.00 | 13.90 - 16.35 | 27.60 - 32.40 | |
| | REMOTE SENSING | Not provided | | | |
| | REMOTE ON/OFF | Not provided | | | |
| ISOLATION | INPUT-OUTPUT | AC3,000V 1minute, Cutoff current = 10mA, DC500V 50MΩ min (20±15°C) | | | |
| | INPUT-FG | AC2,000V 1minute, Cutoff current = 10mA, DC500V 50MΩ min (20±15°C) | | | |
| | OUTPUT-FG | AC500V 1minute, Cutoff current = 100mA, DC500V 50MΩ min (20±15°C) | | | |
| ENVIRONMENT | OPERATING TEMP,HUMID.AND ALTITUDE | -40 to +100°C (On aluminum base plate), 20 - 95%RH (Non condensing) (Refer to DERATING CURVE), 3,000m (10,000 feet) max | | | |
| | STORAGE TEMP,HUMID.AND ALTITUDE | -40 to +100°C, 20 - 95%RH (Non condensing), 9,000m (30,000 feet) max | | | |
| | VIBRATION | 10 - 55Hz, 49.0m/s ² (5G), 3minutes period, 60minutes each along X, Y and Z axis | | | |
| | IMPACT | 196.1m/s ² (20G), 11ms, once each along X, Y and Z axis | | | |
| SAFETY AND NOISE REGULATIONS | AGENCY APPROVALS | UL60950-1, C-UL (CSA60950-1), EN60950-1, EN50178 | | | |
| | HARMONIC ATTENUATOR | Complies with IEC61000-3-2 (Class A) *3 | | | |
| OTHERS | CASE SIZE/WEIGHT | 58.4 X 12.7 X 37.3mm [2.3 X 0.5 X 1.47 inches] (W X H X D) / 80g max | | | |
| | COOLING METHOD | Conduction cooling (e.g. heat radiation from the aluminum base plate to the attached heat sink) | | | |

*1 Refer to instruction manual for measuring method of electric characteristics.
 *2 Drift is the change in DC output for an eight hour period after a half-hour warm-up at 25°C, with the input voltage held constant at the rated input/output.
 *3 Please contact us about another class.

External view

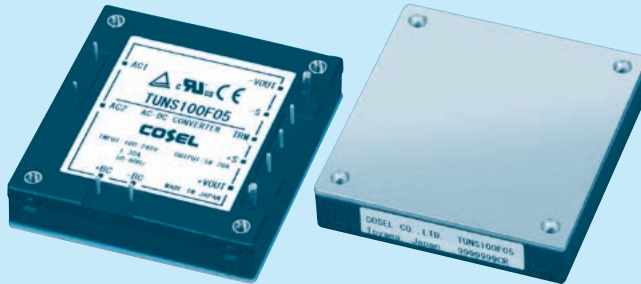


- ※ Tolerance : ± 0.3 [± 0.012]
- ※ Weight : 80g max
- ※ Dimensions in mm, []=inches
- ※ Mounting hole screwing torque : 0.49N · m (5.0kgf · cm) max

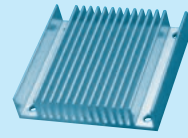
TUNS100F

TUN S 100 F 05 -□

① ② ③ ④ ⑤ ⑥



*Providing heat sink as option



- ① Series name
- ② Single output
- ③ Output wattage
- ④ Universal Input
- ⑤ Output voltage
- ⑥ Optional
- T : with Mounting hole (φ 3.4 thru)

- *Avoid short circuit between +BC and -BC. It may cause the failure of inside components.
- *Keep TRM open, if output voltage adjustment is not necessary.
- *If remote sensing is not necessary, connect between +Vout & +S and between -Vout & -S.

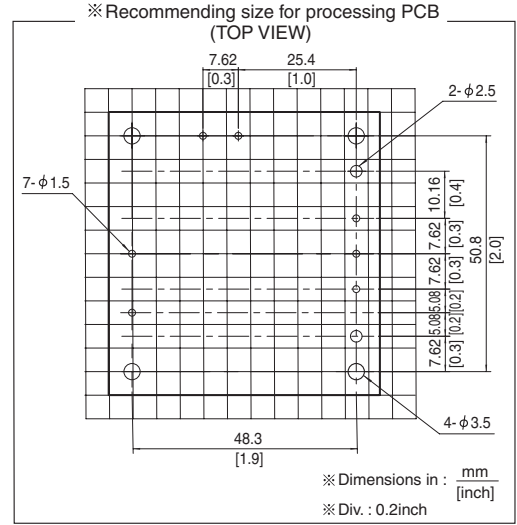
| MODEL | TUNS100F05 | TUNS100F12 | TUNS100F24 |
|-----------------------|------------|------------|------------|
| MAX OUTPUT WATTAGE[W] | 100.0 | 100.8 | 100.8 |
| DC OUTPUT | 5V 20A | 12V 8.4A | 24V 4.2A |

SPECIFICATIONS

| | MODEL | TUNS100F05 | TUNS100F12 | TUNS100F24 | |
|------------------------------------|--|---|------------------|---------------|--------|
| INPUT | VOLTAGE[V] | AC85 - 264 1 φ (Please refer to the instruction manual, 6.5 Derating) | | | |
| | CURRENT[A] | ACIN 100V | 1.3typ (Io=100%) | | |
| | | ACIN 200V | 0.7typ (Io=100%) | | |
| | FREQUENCY[Hz] | 50/60 (47 - 63) | | | |
| | EFFICIENCY[%] | ACIN 100V | 82typ | 83typ | 84typ |
| | | ACIN 200V | 85typ | 85typ | 86typ |
| | POWER FACTOR (Io=100%) | ACIN 100V | 0.95typ | | |
| | | ACIN 200V | 0.90typ | | |
| INRUSH CURRENT | Limited by external components (Thermistor) | | | | |
| LEAKAGE CURRENT[mA] | 0.75max (ACIN 240V 60Hz, Io=100%, According to IEC60950-1) | | | | |
| OUTPUT | VOLTAGE[V] | 5 | 12 | 24 | |
| | CURRENT[A] | 20 | 8.4 | 4.2 | |
| | LINE REGULATION[mV] | 10max | 24max | 48max | |
| | LOAD REGULATION[mV] | 10max | 24max | 48max | |
| | RIPPLE[mVp-p] | 0 to +100°C *1 | 80max | 120max | 120max |
| | | -40 to 0°C *1 | 120max | 150max | 150max |
| | | 0 to 15% Load *1 | 160max | 240max | 240max |
| | RIPPLE NOISE[mVp-p] | 0 to +100°C *1 | 120max | 150max | 150max |
| | | -40 to 0°C *1 | 200max | 200max | 250max |
| | | 0 to 15% Load *1 | 240max | 300max | 300max |
| | TEMPERATURE REGULATION[mV] | 0 to +65°C | 50max | 120max | 240max |
| | | -40 to +100°C | 100max | 240max | 480max |
| | DRIFT[mV] | *2 | 20max | 40max | 90max |
| OUTPUT VOLTAGE ADJUSTMENT RANGE[V] | Fixed (TRM pin open), adjustable by external resistor or external signal | | | | |
| OUTPUT VOLTAGE SETTING[V] | 4.50 - 6.00 | 10.80 - 13.20 | 21.60 - 26.40 | | |
| OUTPUT VOLTAGE SETTING[V] | 4.97 - 5.13 | 11.91 - 12.29 | 23.62 - 24.38 | | |
| PROTECTION CIRCUIT AND OTHERS | OVERCURRENT PROTECTION | Works over 105% of rating and recovers automatically | | | |
| | OVERVOLTAGE PROTECTION[V] | 6.30 - 7.00 | 13.90 - 16.35 | 27.60 - 32.40 | |
| | REMOTE SENSING | Provided | | | |
| | REMOTE ON/OFF | Not provided | | | |
| ISOLATION | INPUT-OUTPUT | AC3,000V 1minute, Cutoff current = 10mA, DC500V 50MΩ min (20±15°C) | | | |
| | INPUT-FG | AC2,000V 1minute, Cutoff current = 10mA, DC500V 50MΩ min (20±15°C) | | | |
| | OUTPUT-FG | AC500V 1minute, Cutoff current = 100mA, DC500V 50MΩ min (20±15°C) | | | |
| ENVIRONMENT | OPERATING TEMP., HUMID. AND ALTITUDE | -40 to +100°C (On aluminum base plate), 20 - 95%RH (Non condensing) (Refer to DERATING CURVE), 3,000m (10,000 feet) max | | | |
| | STORAGE TEMP., HUMID. AND ALTITUDE | -40 to +100°C, 20 - 95%RH (Non condensing), 9,000m (30,000 feet) max | | | |
| | VIBRATION | 10 - 55Hz, 49.0m/s ² (5G), 3minutes period, 60minutes each along X, Y and Z axis | | | |
| | IMPACT | 196.1m/s ² (20G), 11ms, once each along X, Y and Z axis | | | |
| SAFETY AND NOISE REGULATIONS | AGENCY APPROVALS | UL60950-1, C-UL (CSA60950-1), EN60950-1, EN50178 | | | |
| | HARMONIC ATTENUATOR | Complies with IEC61000-3-2 (Class A) *3 | | | |
| OTHERS | CASE SIZE/WEIGHT | 58.4 × 12.7 × 61.0mm [2.3 × 0.5 × 2.4 inches] (W × H × D) / 120g max | | | |
| | COOLING METHOD | Conduction cooling (e.g. heat radiation from the aluminum base plate to the attached heat sink) | | | |

*1 Refer to instruction manual for measuring method of electric characteristics.
 *2 Drift is the change in DC output for an eight hour period after a half-hour warm-up at 25°C, with the input voltage held constant at the rated input/output.
 *3 Please contact us about another class.

External view



- ※ Tolerance : ± 0.3 [± 0.012]
- ※ Weight : 120g max
- ※ Dimensions in mm, []=inches
- ※ Mounting hole screwing torque : $0.49\text{N} \cdot \text{m}$ (5.0kgf · cm) max

TUNS300F

TUN S 300 F 48 -□

① ② ③ ④ ⑤ ⑥



- ① Series name
- ② Single output
- ③ Output wattage
- ④ Universal Input
- ⑤ Output voltage
- ⑥ Optional
 - T : with Mounting hole (φ 3.4 thru)
 - Y1: Output voltage adjustment range ±20% (Only 48V)
 - R1: with Remote ON/OFF
 - R2: with Remote ON/OFF (Low standby power)

* Avoid short circuit between +BC/R and -BC. It may cause the failure of inside components.
 * Keep TRM open, if output voltage adjustment is not necessary.
 * If remote sensing is not necessary, connect between +Vout & +S and between -Vout & -S.

| MODEL | TUNS300F12 | TUNS300F28 | TUNS300F48 |
|-----------------------|------------|------------|------------|
| MAX OUTPUT WATTAGE[W] | 300 | 308 | 312 |
| DC OUTPUT | 12V 25A | 28V 11A | 48V 6.5A |

SPECIFICATIONS

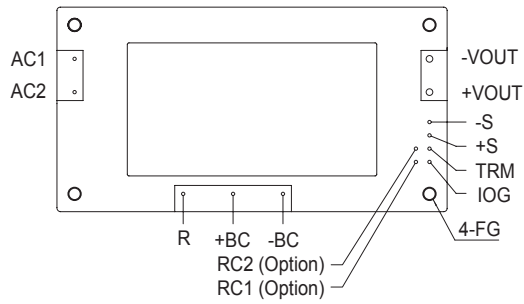
| | MODEL | TUNS300F12 | TUNS300F28 | TUNS300F48 | |
|------------------------------------|--|---|--|--|--------|
| INPUT | VOLTAGE[V] | AC85 - 264 1 φ | | | |
| | CURRENT[A] | ACIN 100V | 3.6typ (Io=100%) | | |
| | | ACIN 200V | 1.8typ (Io=100%) | | |
| | FREQUENCY[Hz] | 50/60 (47 - 63) | | | |
| | EFFICIENCY[%] | ACIN 100V | 84typ | 87typ | 87typ |
| | | ACIN 200V | 86typ | 89typ | 90typ |
| | POWER FACTOR (Io=100%) | ACIN 100V | 0.96typ | | |
| | | ACIN 200V | 0.93typ | | |
| | INRUSH CURRENT | Limited by external resistance | | | |
| | LEAKAGE CURRENT[ma] | 0.75max (ACIN 240V 60Hz, Io=100%, According to IEC60950-1) | | | |
| OUTPUT | VOLTAGE[V] | 12 | 28 | 48 | |
| | CURRENT[A] | 25 | 11 | 6.5 | |
| | LINE REGULATION[mV] | 24max | 56max | 96max | |
| | LOAD REGULATION[mV] | 24max | 56max | 96max | |
| | RIPPLE[mVp-p] | 0 to +100°C *1 | 120max | 180max | 250max |
| | | -40 to 0°C *1 | 150max | 200max | 300max |
| | RIPPLE NOISE[mVp-p] | 0 to +100°C *1 | 150max | 200max | 300max |
| | | -40 to 0°C *1 | 200max | 300max | 450max |
| | TEMPERATURE REGULATION[mV] | 0 to +65°C | 120max | 280max | 480max |
| | | -40 to +100°C | 240max | 560max | 960max |
| DRIFT[mV] | *2 | 40max | 90max | 180max | |
| OUTPUT VOLTAGE ADJUSTMENT RANGE[V] | Fixed (TRM pin open), adjustable by external resistor or external signal 9.60 - 14.40 | | | | |
| OUTPUT VOLTAGE SETTING[V] | 11.91 - 12.29 | 22.40 - 33.60 | 38.40 - 52.80 (-Y1 Option : 38.4 - 57.6) | | |
| PROTECTION CIRCUIT AND OTHERS | OVERCURRENT PROTECTION | Works over 105% of rating and recovers automatically | | | |
| | OVERVOLTAGE PROTECTION[V] | 15.00 - 16.80 | 35.00 - 39.20 | 55.20 - 64.80 (-Y1 Option : 60.0 - 67.2) | |
| | REMOTE SENSING | Provided | | | |
| | REMOTE ON/OFF | Optional (External power supply is required) | | | |
| ISOLATION | INPUT-OUTPUT · RC | *4 AC3,000V 1minute, Cutoff current = 10mA, DC500V 50MΩ min (20±15°C) | | | |
| | INPUT-FG | AC2,000V 1minute, Cutoff current = 10mA, DC500V 50MΩ min (20±15°C) | | | |
| | OUTPUT · RC-FG | *4 AC500V 1minute, Cutoff current = 100mA, DC500V 50MΩ min (20±15°C) | | | |
| | OUTPUT-RC | *4 AC100V 1minute, Cutoff current = 100mA, DC100V 10MΩ min (20±15°C) | | | |
| ENVIRONMENT | OPERATING TEMP., HUMID. AND ALTITUDE | -40 to +100°C (On aluminum base plate), 20 - 95%RH (Non condensing) (Refer to DERATING CURVE), 3,000m (10,000 feet) max | | | |
| | STORAGE TEMP., HUMID. AND ALTITUDE | -40 to +100°C, 20 - 95%RH (Non condensing), 9,000m (30,000 feet) max | | | |
| | VIBRATION | 10 - 55Hz, 49.0m/s ² (5G), 3minutes period, 60minutes each along X, Y and Z axis | | | |
| | IMPACT | 196.1m/s ² (20G), 11ms, once each along X, Y and Z axis | | | |
| SAFETY AND NOISE REGULATIONS | AGENCY APPROVALS | UL60950-1, C-UL (CSA60950-1), EN60950-1 | | | |
| | HARMONIC ATTENUATOR | Complies with IEC61000-3-2 (Class A) *3 | | | |
| OTHERS | CASE SIZE/WEIGHT | 117.3 × 12.7 × 61.5mm [4.62 × 0.5 × 2.42 inches] (W × H × D) / 190g max | | | |
| | COOLING METHOD | Conduction cooling (e.g. heat radiation from the aluminum base plate to the attached heat sink) | | | |

*1 Refer to instruction manual for measuring method of electric characteristics.
 *2 Drift is the change in DC output for an eight hour period after a half-hour warm-up at 25°C, with the input voltage held constant at the rated input/output.
 *3 Please contact us about another class.
 *4 "RC" is applicable when remote control (optional) is added.

External view



- ※ Tolerance : ± 0.3 [± 0.012]
- ※ Weight : 190g max
- ※ Dimensions in mm, []=inches
- ※ Mounting hole screwing torque : $0.49\text{N} \cdot \text{m}$ (5.0kgf · cm) max



TUNS500F

TUN S 500 F 48 -□

① ② ③ ④ ⑤ ⑥



- ① Series name
- ② Single output
- ③ Output wattage
- ④ Universal Input
- ⑤ Output voltage
- ⑥ Optional
 - T : with Mounting hole (φ 3.4 thru)
 - Y1: Output voltage adjustment range ±20% (Only 48V)
 - R1: with Remote ON/OFF
 - R2: with Remote ON/OFF (Low standby power)

* Avoid short circuit between +BC/R and -BC. It may cause the failure of inside components.
 * Keep TRM open, if output voltage adjustment is not necessary.
 * If remote sensing is not necessary, connect between +Vout & +S and between -Vout & -S.

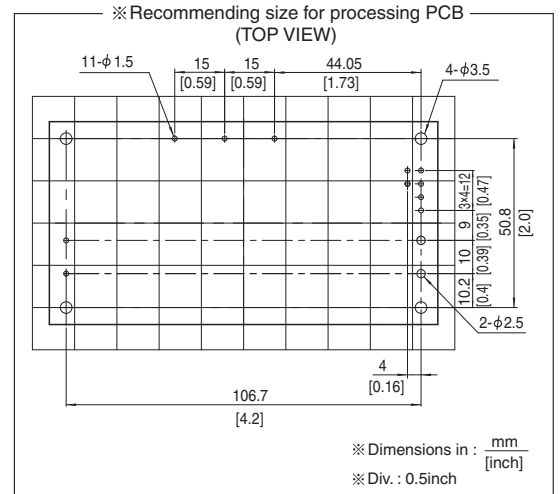
| MODEL | TUNS500F12 | TUNS500F28 | TUNS500F48 |
|-----------------------|--------------------|--------------------|----------------------|
| MAX OUTPUT WATTAGE[W] | 504 | 504 | 504 |
| DC OUTPUT | 12V 42A (Peak 55A) | 28V 18A (Peak 24A) | 48V 10.5A (Peak 14A) |

SPECIFICATIONS

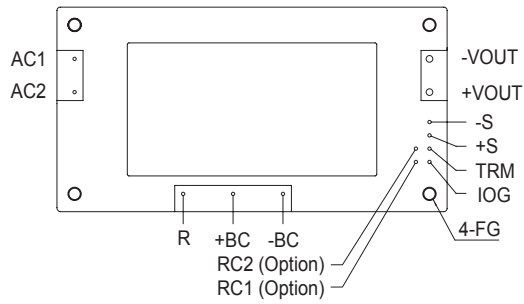
| | MODEL | TUNS500F12 | TUNS500F28 | TUNS500F48 | |
|-------------------------------|--|---|------------------|--|---------|
| INPUT | VOLTAGE[V] | AC85 - 264 1 φ | | | |
| | CURRENT[A] | ACIN 100V | 6.0typ (Io=100%) | | |
| | | ACIN 200V | 3.0typ (Io=100%) | | |
| | FREQUENCY[Hz] | 50/60 (47 - 63) | | | |
| | EFFICIENCY[%] | ACIN 100V | 84typ | 87typ | 88typ |
| | | ACIN 200V | 86typ | 90typ | 90.5typ |
| | POWER FACTOR (Io=100%) | ACIN 100V | 0.96typ | | |
| | | ACIN 200V | 0.93typ | | |
| | INRUSH CURRENT | Limited by external resistance | | | |
| | LEAKAGE CURRENT[ma] | 0.75max (ACIN 240V 60Hz, Io=100%, According to IEC60950-1) | | | |
| OUTPUT | VOLTAGE[V] | 12 | 28 | 48 | |
| | CURRENT[A] | *3 42 (Peak 55) | 18 (Peak 24) | 10.5 (Peak 14) | |
| | LINE REGULATION[mV] | 24max | 56max | 96max | |
| | LOAD REGULATION[mV] | 24max | 56max | 96max | |
| | RIPPLE[mVp-p] | 0 to +100°C *1 | 120max | 180max | 250max |
| | | -40 to 0°C *1 | 150max | 200max | 300max |
| | RIPPLE NOISE[mVp-p] | 0 to +100°C *1 | 150max | 200max | 300max |
| | | -40 to 0°C *1 | 200max | 300max | 450max |
| | TEMPERATURE REGULATION[mV] | 0 to +65°C | 120max | 280max | 480max |
| | | -40 to +100°C | 240max | 560max | 960max |
| | DRIFT[mV] | *2 40max | 90max | 180max | |
| | OUTPUT VOLTAGE ADJUSTMENT RANGE[V] | Fixed (TRM pin open), adjustable by external resistor or external signal 9.60 - 14.40 | | | |
| | OUTPUT VOLTAGE SETTING[V] | 11.91 - 12.29 | 27.56 - 28.44 | 38.40 - 52.80 (-Y1 Option : 38.4 - 57.6) | |
| PROTECTION CIRCUIT AND OTHERS | OVERCURRENT PROTECTION | Works over 101% of peak current and recovers automatically | | | |
| | OVERVOLTAGE PROTECTION[V] | 15.00 - 16.80 | 35.00 - 39.20 | 55.20 - 64.80 (-Y1 Option : 60.0 - 67.2) | |
| | REMOTE SENSING | Provided | | | |
| REMOTE ON/OFF | Optional (External power supply is required) | | | | |
| ISOLATION | INPUT-OUTPUT · RC | *5 AC3,000V 1minute, Cutoff current = 10mA, DC500V 50MΩ min (20±15°C) | | | |
| | INPUT-FG | AC2,000V 1minute, Cutoff current = 10mA, DC500V 50MΩ min (20±15°C) | | | |
| | OUTPUT · RC-FG | *5 AC500V 1minute, Cutoff current = 100mA, DC500V 50MΩ min (20±15°C) | | | |
| | OUTPUT-RC | *5 AC100V 1minute, Cutoff current = 100mA, DC100V 10MΩ min (20±15°C) | | | |
| ENVIRONMENT | OPERATING TEMP., HUMID. AND ALTITUDE | -40 to +100°C (On aluminum base plate), 20 - 95%RH (Non condensing) (Refer to DERATING CURVE), 3,000m (10,000 feet) max | | | |
| | STORAGE TEMP., HUMID. AND ALTITUDE | -40 to +100°C, 20 - 95%RH (Non condensing), 9,000m (30,000 feet) max | | | |
| | VIBRATION | 10 - 55Hz, 49.0m/s ² (5G), 3minutes period, 60minutes each along X, Y and Z axis | | | |
| | IMPACT | 196.1m/s ² (20G), 11ms, once each along X, Y and Z axis | | | |
| SAFETY AND NOISE REGULATIONS | AGENCY APPROVALS | UL60950-1, C-UL (CSA60950-1), EN60950-1 | | | |
| | HARMONIC ATTENUATOR | Complies with IEC61000-3-2 (Class A) *4 | | | |
| OTHERS | CASE SIZE/WEIGHT | 117.3 × 12.7 × 61.5mm [4.62 × 0.5 × 2.42 inches] (W × H × D) / 190g max | | | |
| | COOLING METHOD | Conduction cooling (e.g. heat radiation from the aluminum base plate to the attached heat sink) | | | |

*1 Refer to instruction manual for measuring method of electric characteristics.
 *2 Drift is the change in DC output for an eight hour period after a half-hour warm-up at 25°C, with the input voltage held constant at the rated input/output.
 *3 () means peak current. Avoid operating with peak current continuously. It may cause failure of the components inside the product. There are limitation of available condition of the peak current, such as peak time, duty etc. (Refer to the instruction manual in detail.)
 *4 Please contact us about another class.
 *5 "RC" is applicable when remote control (optional) is added.

External view



- ※ Tolerance : ±0.3 [±0.012]
- ※ Weight : 190g max
- ※ Dimensions in mm, []=inches
- ※ Mounting hole screwing torque : 0.49N · m (5.0kgf · cm) max



TUNS700F

TUN S 700 F 48 -□

① ② ③ ④ ⑤ ⑥



- ① Series name
- ② Single output
- ③ Output wattage
- ④ Universal Input
- ⑤ Output voltage
- ⑥ Optional
 - T : with Mounting hole (φ 3.4 thru)
 - Y1: Output voltage adjustment range ±20% (Only 48V)
 - R1: with Remote ON/OFF
 - R2: with Remote ON/OFF (Low standby power)
 - P : Parallel operation (Output voltage variable, Remote sensing disabled)

* Avoid short circuit between +BC/R and -BC. It may cause the failure of inside components.
 * Keep TRM open, if output voltage adjustment is not necessary.
 * If remote sensing is not necessary, connect between +Vout & +S and between -Vout & -S.

| MODEL | TUNS700F12 | TUNS700F28 | TUNS700F48 |
|-----------------------|------------|------------|------------|
| MAX OUTPUT WATTAGE[W] | 700.8 | 700.0 | 700.8 |
| DC OUTPUT | 12V 58.4A | 28V 25A | 48V 14.6A |

SPECIFICATIONS

| | MODEL | TUNS700F12 | TUNS700F28 | TUNS700F48 | |
|-------------------------------|--|--|------------------|--|--------|
| INPUT | VOLTAGE[V] | AC85 - 264 1 φ | | | |
| | CURRENT[A] | ACIN 100V | 8.6typ (Io=100%) | | |
| | | ACIN 200V | 4.1typ (Io=100%) | | |
| | FREQUENCY[Hz] | 50/60 (47 - 63) | | | |
| | EFFICIENCY[%] | ACIN 100V | 83typ | 86typ | 87typ |
| | | ACIN 200V | 86typ | 89typ | 90typ |
| | POWER FACTOR (Io=100%) | ACIN 100V | 0.96typ | | |
| | | ACIN 200V | 0.93typ | | |
| INRUSH CURRENT | Limited by external resistance | | | | |
| LEAKAGE CURRENT[ma] | 0.75max (ACIN 240V 60Hz, Io=100%, According to IEC60950-1) | | | | |
| OUTPUT | VOLTAGE[V] | 12 | 28 | 48 | |
| | CURRENT[A] | 58.4 | 25 | 14.6 | |
| | LINE REGULATION[mV] | 24max | 56max | 96max | |
| | LOAD REGULATION[mV] | 24max | 56max | 96max | |
| | RIPPLE[mVp-p] | 0 to +100°C *1 | 120max | 180max | 250max |
| | | -40 to 0°C *1 | 150max | 200max | 300max |
| | RIPPLE NOISE[mVp-p] | 0 to +100°C *1 | 150max | 200max | 300max |
| | | -40 to 0°C *1 | 200max | 300max | 450max |
| | TEMPERATURE REGULATION[mV] | 0 to +65°C | 120max | 280max | 480max |
| | | -40 to +100°C | 240max | 560max | 960max |
| | DRIFT[mV] | *2 40max | 90max | 180max | |
| | OUTPUT VOLTAGE ADJUSTMENT RANGE[V] | Fixed (TRM pin open), adjustable by external resistor or external signal | | | |
| | OUTPUT VOLTAGE SETTING[V] | 9.60 - 14.40 | 22.40 - 33.60 | 38.40 - 52.80 (-Y1 Option : 38.4 - 57.6) | |
| | 11.91 - 12.29 | 27.56 - 28.44 | 47.24 - 48.76 | | |
| PROTECTION CIRCUIT AND OTHERS | OVERCURRENT PROTECTION | Works over 105% of rating and recovers automatically | | | |
| | OVERVOLTAGE PROTECTION[V] | 15.00 - 16.80 | 35.00 - 39.20 | 55.20 - 64.80 (-Y1 Option : 60.0 - 67.2) | |
| | REMOTE SENSING | Provided | | | |
| | REMOTE ON/OFF | Optional (External power supply is required) | | | |

| MODEL | TUNS700F12-P | TUNS700F28-P | TUNS700F48-P |
|-----------------------|--------------|--------------|--------------|
| MAX OUTPUT WATTAGE[W] | 700.8 | 700.0 | 700.8 |
| DC OUTPUT | 12V 58.4A | 28V 25A | 48V 14.6A |

SPECIFICATIONS

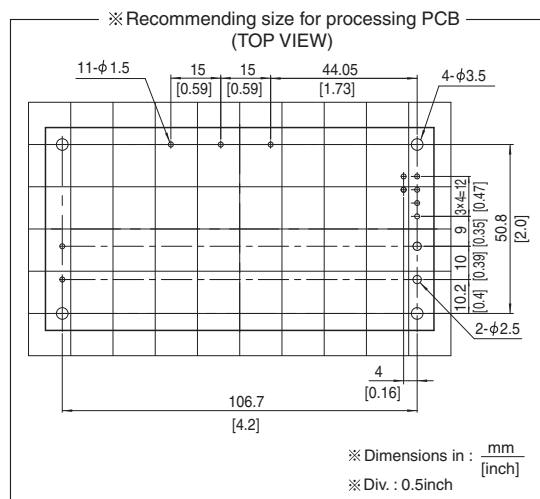
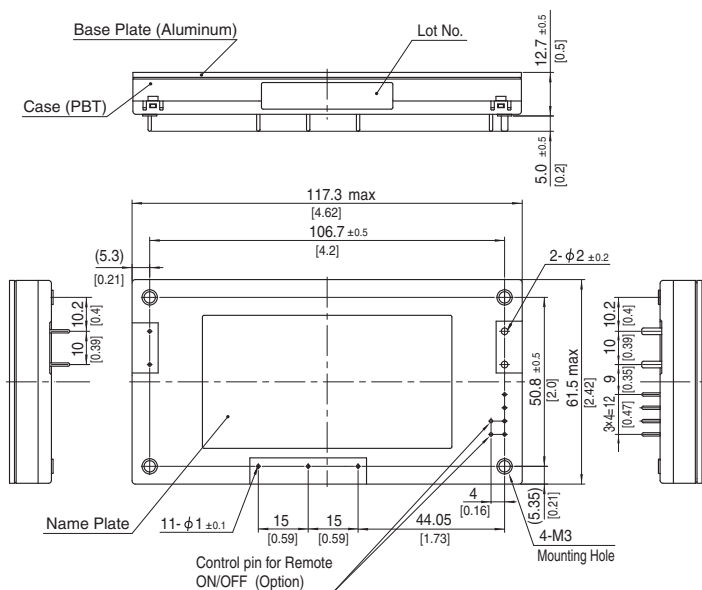
| | MODEL | TUNS700F12-P | TUNS700F28-P | TUNS700F48-P | |
|---------------------|--|---------------------------|--|---------------|---------------|
| INPUT | VOLTAGE[V] | AC85 - 264 1 φ | | | |
| | CURRENT[A] | ACIN 100V | 8.6typ (Io=100%) | | |
| | | ACIN 200V | 4.1typ (Io=100%) | | |
| | FREQUENCY[Hz] | 50/60 (47 - 63) | | | |
| | EFFICIENCY[%] | ACIN 100V | 83typ | 86typ | 87typ |
| | | ACIN 200V | 86typ | 89typ | 90typ |
| | POWER FACTOR (Io=100%) | ACIN 100V | 0.96typ | | |
| | | ACIN 200V | 0.93typ | | |
| INRUSH CURRENT | Limited by external resistance | | | | |
| LEAKAGE CURRENT[ma] | 0.75max (ACIN 240V 60Hz, Io=100%, According to IEC60950-1) | | | | |
| OUTPUT | VOLTAGE[V] | 12 | 28 | 48 | |
| | CURRENT[A] | 58.4 | 25 | 14.6 | |
| | VOLTAGE ACCURACY[%] | +5, -3 | +5, -3 | +5, -3 | |
| | RIPPLE[mVp-p] | 0 to +100°C *1 | 240max | 360max | 600max |
| | | -40 to 0°C *1 | 300max | 400max | 700max |
| | RIPPLE NOISE[mVp-p] | 0 to +30% Load *1 | 360max | 540max | 900max |
| | | 0 to +100°C *1 | 300max | 400max | 700max |
| | RIPPLE NOISE[mVp-p] | -40 to 0°C *1 | 400max | 600max | 1000max |
| | | 0 to +30% Load *1 | 450max | 600max | 1000max |
| | PROTECTION CIRCUIT AND OTHERS | OVERCURRENT PROTECTION | Works over 105% of rating and recovers automatically | | |
| | | OVERVOLTAGE PROTECTION[V] | 15.00 - 16.80 | 35.00 - 39.20 | 55.20 - 64.80 |
| | | REMOTE ON/OFF | Optional (External power supply is required) | | |

GENERAL SPECIFICATIONS

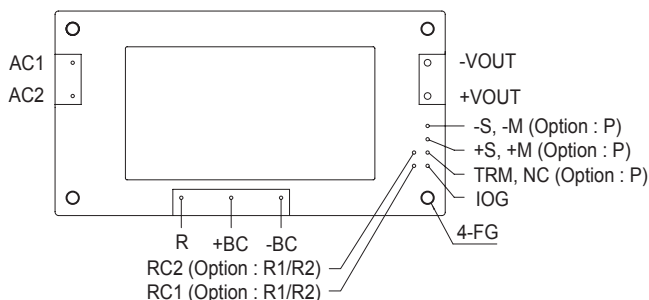
| | | |
|------------------------------|--------------------------------------|---|
| ISOLATION | INPUT-OUTPUT · RC | *4 AC3,000V 1minute, Cutoff current = 10mA, DC500V 50MΩ min (20±15°C) |
| | INPUT-FG | AC2,000V 1minute, Cutoff current = 10mA, DC500V 50MΩ min (20±15°C) |
| | OUTPUT · RC-FG | *4 AC500V 1minute, Cutoff current = 100mA, DC500V 50MΩ min (20±15°C) |
| | OUTPUT-RC | *4 AC100V 1minute, Cutoff current = 100mA, DC100V 10MΩ min (20±15°C) |
| ENVIRONMENT | OPERATING TEMP., HUMID. AND ALTITUDE | -40 to +100°C (On aluminum base plate), 20 - 95%RH (Non condensing) (Refer to DERATING CURVE), 3,000m (10,000 feet) max |
| | STORAGE TEMP., HUMID. AND ALTITUDE | -40 to +100°C, 20 - 95%RH (Non condensing), 9,000m (30,000 feet) max |
| | VIBRATION | 10 - 55Hz, 49.0m/s ² (5G), 3minutes period, 60minutes each along X, Y and Z axis |
| | IMPACT | 196.1m/s ² (20G), 11ms, once each along X, Y and Z axis |
| SAFETY AND NOISE REGULATIONS | AGENCY APPROVALS | UL60950-1, C-UL (CSA60950-1), EN60950-1 |
| | HARMONIC ATTENUATOR | Complies with IEC61000-3-2 (Class A) *3 |
| OTHERS | CASE SIZE/WEIGHT | 117.3×12.7×61.5mm [4.62×0.5×2.42 inches] (W×H×D) / 190g max |
| | COOLING METHOD | Conduction cooling (e.g. heat radiation from the aluminum base plate to the attached heat sink) |

- *1 Refer to instruction manual for measuring method of electric characteristics.
- *2 Drift is the change in DC output for an eight hour period after a half-hour warm-up at 25°C, with the input voltage held constant at the rated input/output.
- *3 Please contact us about another class.
- *4 "RC" is applicable when remote control (optional) is added.

External view



- ※ Tolerance : ±0.3 [±0.012]
- ※ Weight : 190g max
- ※ Dimensions in mm, []=inches
- ※ Mounting hole screwing torque : 0.49N · m (5.0kgf · cm) max



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Компания «Океан Электроники» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

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- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- При необходимости вся продукция военного и аэрокосмического назначения проходит испытания и сертификацию в лаборатории (по согласованию с заказчиком);
- Поставка специализированных компонентов военного и аэрокосмического уровня качества (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Actel, Aeroflex, Peregrine, VPT, Syfer, Eurofarad, Texas Instruments, MS Kennedy, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

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JONHON

«JONHON» (основан в 1970 г.)

Разъемы специального, военного и аэрокосмического назначения:

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«FORSTAR» (основан в 1998 г.)

ВЧ соединители, коаксиальные кабели, кабельные сборки и микроволновые компоненты:

(Применяются в телекоммуникациях гражданского и специального назначения, в средствах связи, РЛС, а так же военной, авиационной и аэрокосмической отраслях промышленности).



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