

TUNS50F

Ordering information

TUN S 50 F 05 -□

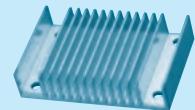
① ② ③ ④ ⑤ ⑥ ⑦ ⑧



RoHS



* 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

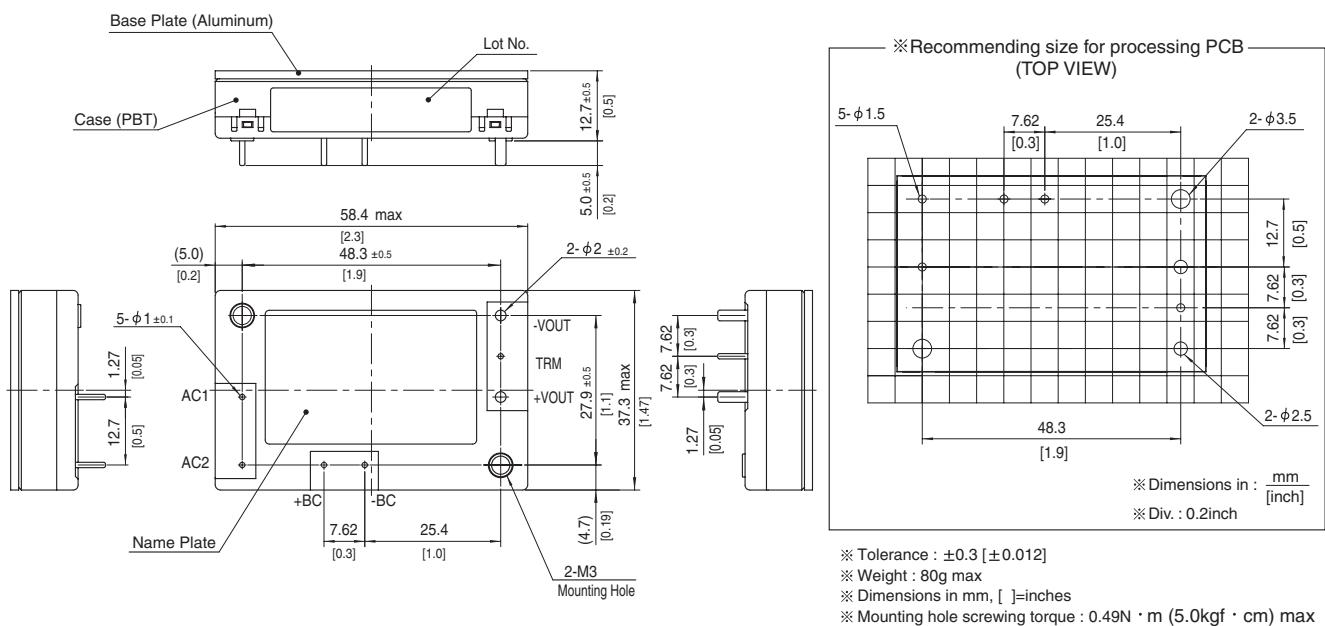
	MODEL	TUNS50F05	TUNS50F12	TUNS50F24
INPUT	VOLTAGE[V]	AC85 - 264 1φ (Please refer to the instruction manual, 6.5 Derating)		
	CURRENT[A]	ACIN 100V 0.67typ (Io=100%) ACIN 200V 0.35typ (Io=100%)		
	FREQUENCY[Hz]	50/60 (47 - 63)		
	EFFICIENCY[%]	ACIN 100V 79typ ACIN 200V 81typ	83typ 84typ	84typ 86typ
	POWER 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)		
	VOLTAGE[V]	5	12	24
	CURRENT[A]	10	4.2	2.1
	LINE REGULATION[mV]	10max	24max	48max
TUNS OUTPUT	LOAD REGULATION[mV]	10max	24max	48max
	0 to +100°C *1	80max	120max	120max
	-40 to 0°C *1	120max	150max	150max
	0 to 15% Load *1	200max	280max	380max
	0 to +100°C *1	120max	150max	150max
	-40 to 0°C *1	200max	200max	250max
	0 to 15% Load *1	280max	360max	460max
	0 to +65°C	50max	120max	240max
	-40 to +100°C	100max	240max	480max
	DRIFT[mV] *2	20max	40max	90max
PROTECTION CIRCUIT AND OTHERS	OUTPUT VOLTAGE ADJUSTMENT RANGE[V]	Fixed (TRM pin open), adjustable by external resistor or external signal		
	4.50 - 6.00	10.80 - 13.20	21.60 - 26.40	
	4.97 - 5.13	11.91 - 12.29	23.62 - 24.38	
ISOLATION	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		
ENVIRONMENT	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)		
	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		
SAFETY AND NOISE REGULATIONS	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		
OTHERS	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	58.4×12.7×37.3mm [2.3×0.5×1.47 inches] (W×H×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



TUNS100F

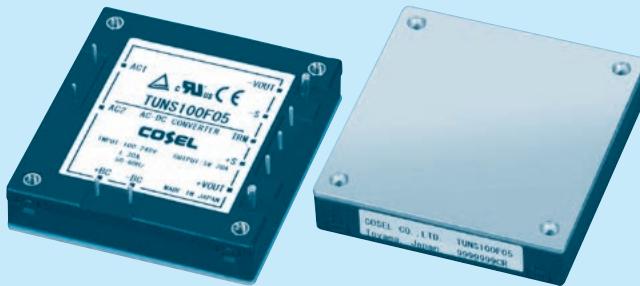
Ordering information

TUN S 100 F 05 -□

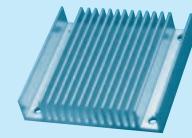
① ② ③ ④ ⑤ ⑥ ⑦ ⑧



RoHS



* 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

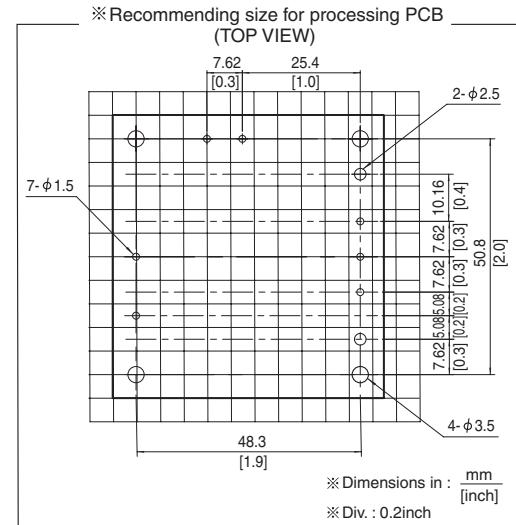
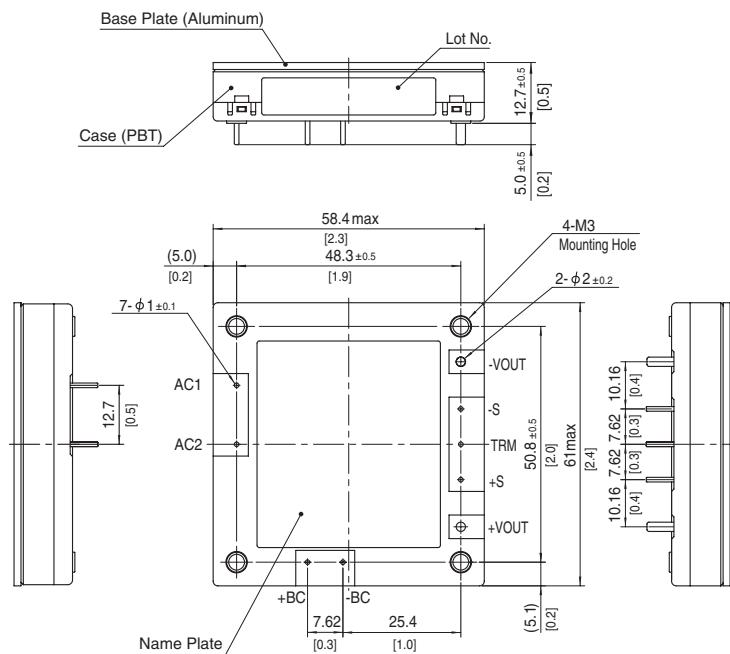
	TUNS100F05	TUNS100F12	TUNS100F24
INPUT			
VOLTAGE[V]	AC85 - 264 1φ (Please refer to the instruction manual, 6.5 Derating)		
CURRENT[A]	ACIN 100V 1.3typ (Io=100%) ACIN 200V 0.7typ (Io=100%)		
FREQUENCY[Hz]	50/60 (47 - 63)		
EFFICIENCY[%]	ACIN 100V 82typ ACIN 200V 85typ	83typ 85typ	84typ 86typ
POWER FACTOR (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]	20	8.4	4.2
LINE REGULATION[mV]	10max	24max	48max
LOAD REGULATION[mV]	10max	24max	48max
	0 to +100°C *1	80max	120max
RIPPLE[mVp-p]	-40 to 0°C *1	120max	150max
	0 to 15% Load *1	160max	240max
	0 to +100°C *1	120max	150max
RIPPLE NOISE[mVp-p]	-40 to 0°C *1	200max	250max
	0 to 15% Load *1	240max	300max
	0 to +65°C	50max	120max
TEMPERATURE REGULATION[mV]	-40 to +100°C	100max	240max
	*2	40max	90max
DRIFT[mV]			
OUTPUT VOLTAGE ADJUSTMENT RANGE[V]	Fixed (TRM pin open), adjustable by external resistor or external signal		
	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 : 0.49N · m (5.0kgf · cm) max

TUNS

TUNS300F

Ordering information

TUN S 300 F 48 - ① ② ③ ④ ⑤ ⑥ ⑧

RoHS



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 $\pm 20\%$ (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

	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 ACIN 200V 86typ	87typ 89typ	87typ 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)		
TUNS			
OUTPUT			
VOLTAGE[V]	12	28	48
CURRENT[A]	25	11	6.5
LINE REGULATION[mV]	24max	56max	96max
LOAD REGULATION[mV]	24max	56max	96max
RISSLE[mVp-p]	0 to +100 $^{\circ}$ C *1 120max -40 to 0 $^{\circ}$ C *1 150max	180max 200max	250max 300max
RISSLE NOISE[mVp-p]	0 to +100 $^{\circ}$ C *1 150max -40 to 0 $^{\circ}$ C *1 200max	200max 300max	300max 450max
TEMPERATURE REGULATION[mV]	0 to +65 $^{\circ}$ C 120max -40 to +100 $^{\circ}$ C 240max	280max 560max	480max 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	22.40 - 33.60	38.40 - 52.80 (-Y1 Option : 38.4 - 57.6)
OUTPUT VOLTAGE SETTING[V]	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)		
ISOLATION			
INPUT-OUTPUT · RC	*4 AC3,000V 1minute, Cutoff current = 10mA, DC500V 50M Ω min (20 \pm 15 $^{\circ}$ C)		
INPUT-FG	AC2,000V 1minute, Cutoff current = 10mA, DC500V 50M Ω min (20 \pm 15 $^{\circ}$ C)		
OUTPUT · RC-FG	*4 AC500V 1minute, Cutoff current = 100mA, DC500V 50M Ω min (20 \pm 15 $^{\circ}$ C)		
OUTPUT-RC	*4 AC100V 1minute, Cutoff current = 100mA, DC100V 10M Ω min (20 \pm 15 $^{\circ}$ C)		
ENVIRONMENT			
OPERATING TEMP., HUMID. AND ALTITUDE	-40 to +100 $^{\circ}$ 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 $^{\circ}$ 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 X 12.7 X 61.5mm [4.62 X 0.5 X 2.42 inches] (W X H X D) / 190g max		
COOLING METHOD	Conduction cooling (e.g. heat radiation from the aluminum base plate to the attached heat sink)		

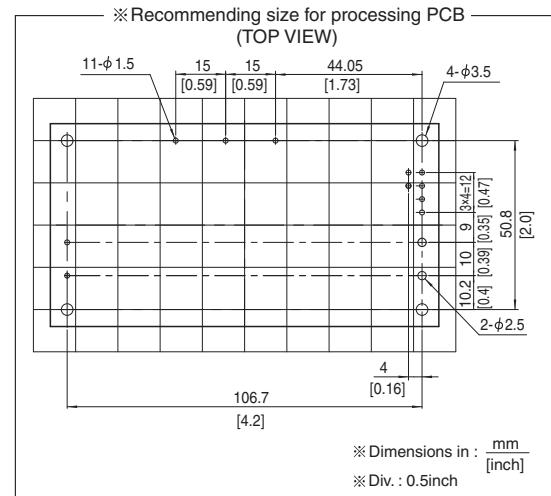
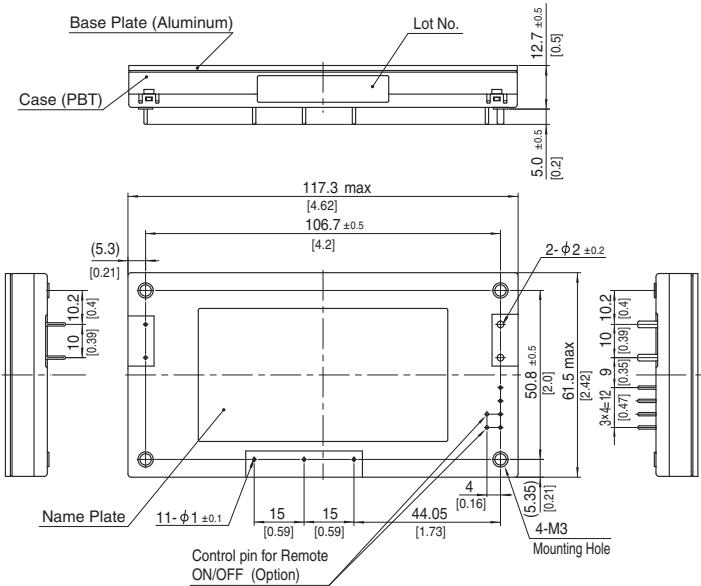
*1 Refer to instruction manual for measuring method of electric characteristics.

*2 Drift is the change in DC output for an eight hour period after a half-hour warm-up at 25 $^{\circ}$ 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

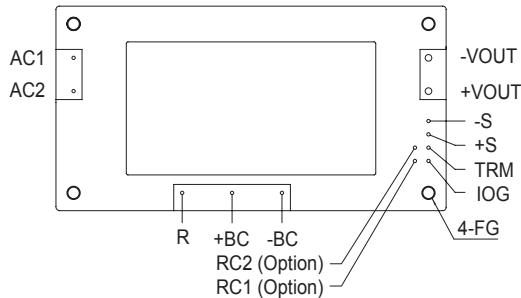


※ Tolerance : ±0.3 [± 0.012]

※ Weight : 190g max

※ Dimensions in mm, []=inches

※ Mounting hole screwing torque : 0.49N · m (5.0kgf · cm) max



TUNS500F

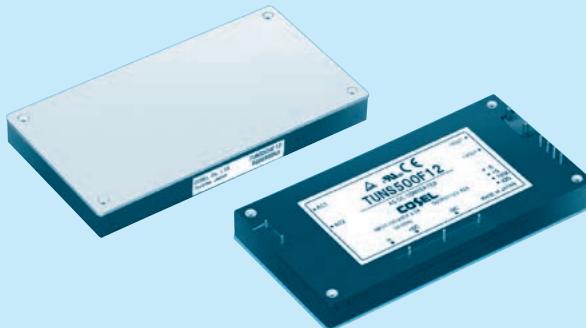
Ordering information

TUN S 500 F 48 -

① ② ③ ④ ⑤ ⑥ ⑦ ⑧



RoHS



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 $\pm 20\%$ (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

	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 ACIN 200V 86typ	87typ 90typ	88typ 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)		
TUNS			
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 $^{\circ}$ C *1 120max -40 to 0 $^{\circ}$ C *1 150max	180max 200max	250max 300max
RIPPLE NOISE[mVp-p]	0 to +100 $^{\circ}$ C *1 150max -40 to 0 $^{\circ}$ C *1 200max	200max 300max	300max 450max
TEMPERATURE REGULATION[mV]	0 to +65 $^{\circ}$ C 120max -40 to +100 $^{\circ}$ C 240max	280max 560max	480max 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	22.40 - 33.60	38.40 - 52.80 (-Y1 Option : 38.4 - 57.6)
OUTPUT VOLTAGE SETTING[V]	11.91 - 12.29	27.56 - 28.44	47.24 - 48.76
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 50M Ω min (20 \pm 15 $^{\circ}$ C)		
INPUT-FG	AC2,000V 1minute, Cutoff current = 10mA, DC500V 50M Ω min (20 \pm 15 $^{\circ}$ C)		
OUTPUT · RC-FG	*5 AC500V 1minute, Cutoff current = 100mA, DC500V 50M Ω min (20 \pm 15 $^{\circ}$ C)		
OUTPUT-RC	*5 AC100V 1minute, Cutoff current = 100mA, DC100V 10M Ω min (20 \pm 15 $^{\circ}$ C)		
ENVIRONMENT			
OPERATING TEMP, HUMID, AND ALTITUDE	-40 to +100 $^{\circ}$ 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 $^{\circ}$ 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 X 12.7 X 61.5mm [4.62 X 0.5 X 2.42 inches] (W X H X 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 $^{\circ}$ C, with the input voltage held constant at the rated input/output.

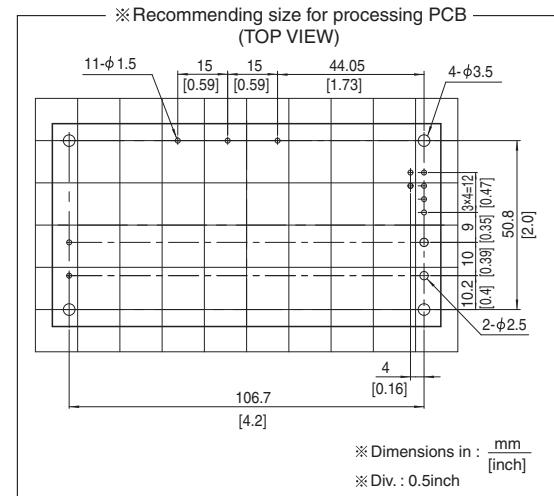
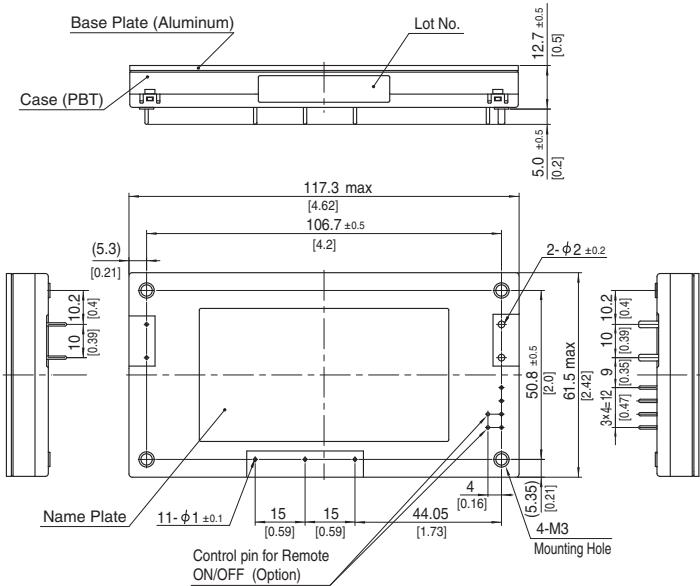
*3 () means peak current. Avoid operating with peak current continuously. It may cause failure of the components inside the product.

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

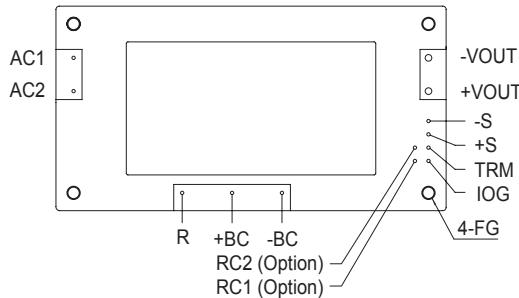


※ Tolerance : ±0.3 [± 0.012]

※ Weight : 190g max

※ Dimensions in mm, []=inches

※ Mounting hole screwing torque : 0.49N · m (5.0kgf · cm) max



TUNS700F

Ordering information

TUN S 700 F 48 -□

① ② ③ ④ ⑤ ⑥ ⑦ ⑧



RoHS



* 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.

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 $\pm 20\%$ (Only 48V)

R1: with Remote ON/OFF

R2: with Remote ON/OFF
(Low standby power)P: Parallel operation
(Output voltage variable,
Remote sensing disabled)

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 1φ		
	CURRENT[A]	ACIN 100V 8.6typ (Io=100%) ACIN 200V 4.1typ (Io=100%)		
	FREQUENCY[Hz]	50/60 (47 - 63)		
	EFFICIENCY[%]	ACIN 100V 83typ ACIN 200V 86typ	86typ 89typ	87typ 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 -40 to 0°C *1 150max	180max 200max	250max 300max
	RIPLINE NOISE[mVp-p]	0 to +100°C *1 150max -40 to 0°C *1 200max	200max 300max	300max 450max
	TEMPERATURE REGULATION[mV]	0 to +65°C 120max -40 to +100°C 240max	280max 560max	480max 960max
	DRIFT[mV]	*2 40max	90max	180max
	OUTPUT VOLTAGE ADJUSTMENT	Fixed (TRM pin open), adjustable by external resistor or external signal		
	RANGE[V]	9.60 - 14.40	22.40 - 33.60	38.40 - 52.80 (-Y1 Option : 38.4 - 57.6)
OUTPUT VOLTAGE SETTING[V]	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

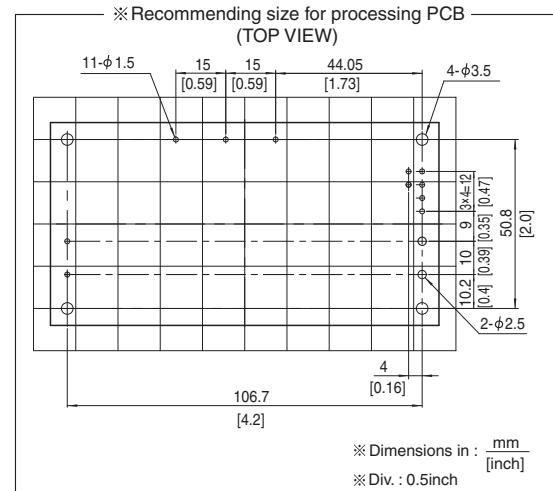
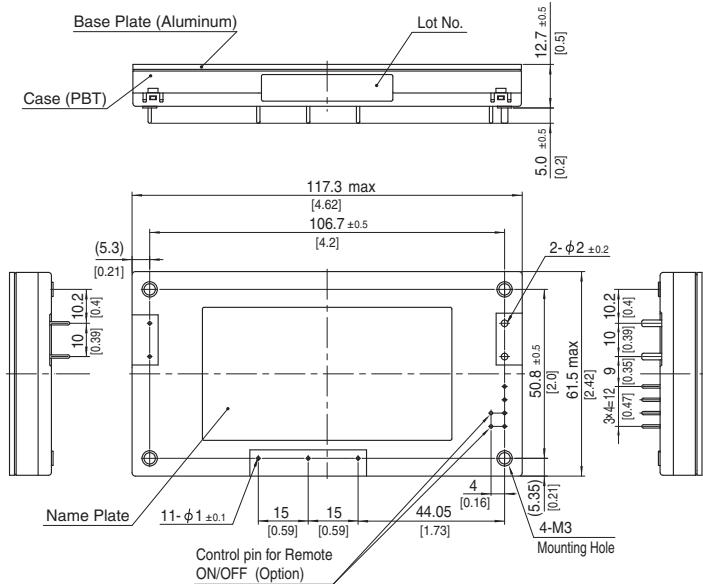
	MODEL	TUNS700F12-P	TUNS700F28-P	TUNS700F48-P	
INPUT	VOLTAGE[V]	AC85 - 264 1φ			
	CURRENT[A]	ACIN 100V 8.6typ (Io=100%) ACIN 200V 4.1typ (Io=100%)			
	FREQUENCY[Hz]	50/60 (47 - 63)			
	EFFICIENCY[%]	ACIN 100V 83typ ACIN 200V 86typ	86typ 89typ	87typ 90typ	
	POWER FACTOR (Io=100%)	ACIN 100V 0.96typ ACIN 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 -40 to 0°C *1 300max 0 to +30% Load *1 360max 0 to +100°C *1 300max -40 to 0°C *1 400max 0 to +30% Load *1 450max	360max 400max 540max 400max 600max 600max	600max 700max 900max 700max 1000max 1000max	
	RIPLINE NOISE[mVp-p]				
	PROTECTION CIRCUIT AND OTHERS	OVERCURRENT PROTECTION OVERVOLTAGE PROTECTION[V]	Works over 105% of rating and recovers automatically 15.00 - 16.80	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/s² (5G), 3minutes period, 60minutes each along X, Y and Z axis
	IMPACT		196.1m/s² (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

