

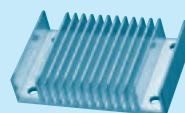
# TUNS50F

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

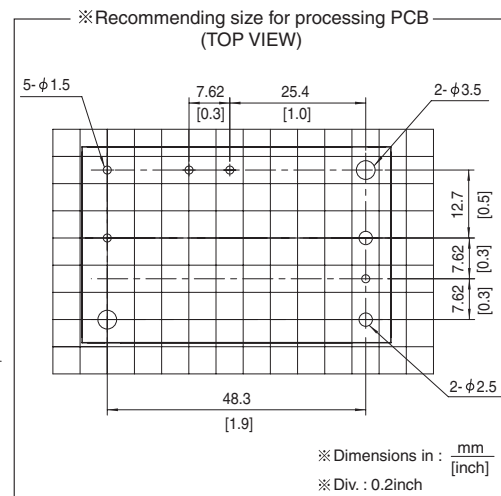
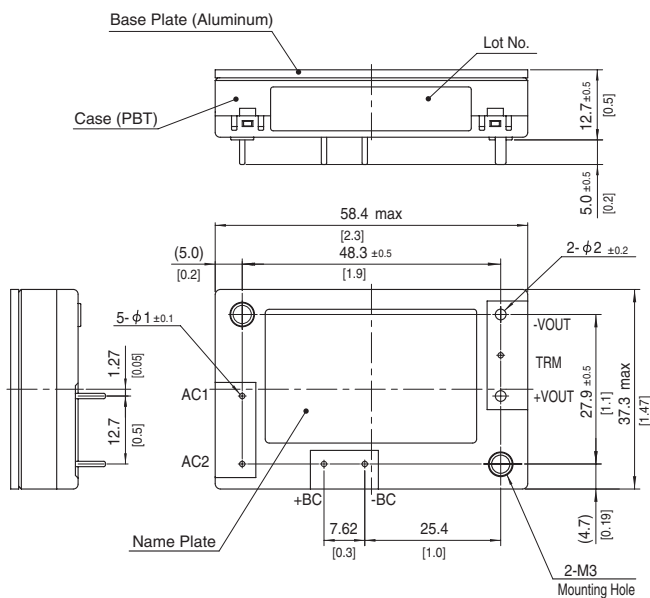
	MODEL		TUNS50F05	TUNS50F12	TUNS50F24
INPUT	VOLTAGE[V]		AC85 - 264 1 φ (Please refer to the instruction manual, 6.5 Derating)		
	CURRENT[A]	ACIN 100V	0.67typ (Io=100%)		
		ACIN 200V	0.35typ (Io=100%)		
	FREQUENCY[Hz]		50/60 (47 - 63)		
	EFFICIENCY[%]	ACIN 100V	79typ	83typ	84typ
		ACIN 200V	81typ	84typ	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		
		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/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, 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 :  $\pm 0.3$  [ $\pm 0.012$ ]
- ※ Weight : 80g max
- ※ Dimensions in mm, [ ]=inches
- ※ Mounting hole screwing torque : 0.49N · m (5.0kgf · cm) max