

## AC-DC Power Supplies PCB Mount Type

# TUHS15

## Ordering information

**TUH S 15 F 12**

① ② ③ ④ ⑤

- ① Series name
- ② Single output
- ③ Output wattage
- ④ Universal Input
- ⑤ Output voltage


 Class II

- \* Avoid short circuit between +BC and -BC. It may cause the failure of inside components.
- \* To use TUHS, external components are required. Refer to the instruction manual for details.

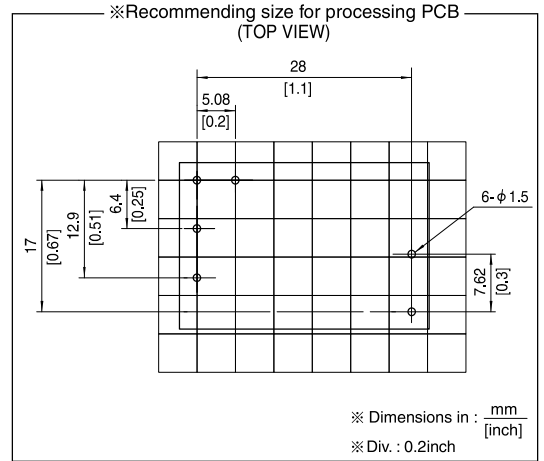
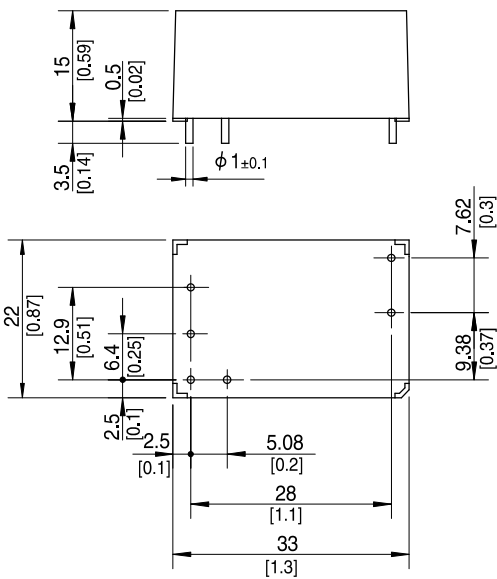
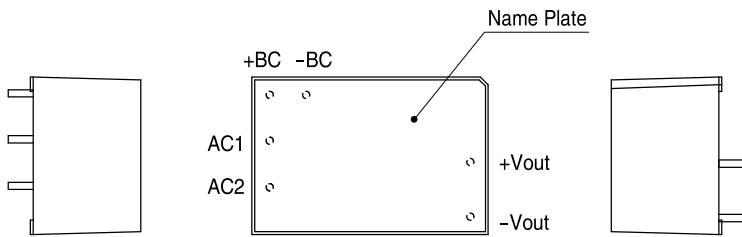
MODEL	TUHS15F12	TUHS15F15	TUHS15F24
MAX OUTPUT WATTAGE[W]	15.00	15.00	15.12
DC OUTPUT	12V 1.25A	15V 1A	24V 0.63A

## SPECIFICATIONS

	MODEL	TUHS15F12	TUHS15F15	TUHS15F24	
INPUT	VOLTAGE[V]	AC85 - 264 1 φ DC120 - 370			
	CURRENT[A]	ACIN 100V	0.35typ (I <sub>o</sub> =100%)		
		ACIN 200V	0.18typ (I <sub>o</sub> =100%)		
	FREQUENCY[Hz]	50/60 (47 - 63)			
	EFFICIENCY[%]	ACIN 100V	85typ	85typ	86typ
		ACIN 200V	85typ	85typ	87typ
INRUSH CURRENT	Limited by external components				
OUTPUT	VOLTAGE[V]	12	15	24	
	CURRENT[A]	1.25	1	0.63	
	LINE REGULATION[mV]	48max	60max	96max	
	LOAD REGULATION[mV]	100max	120max	150max	
	RIPPLE[mVp-p]	30 to 100% Load *1	160max	160max	200max
		0 to 30% Load AC85V - 240V *1	480max	480max	580max
	RIPPLE NOISE[mVp-p]	30 to 100% Load *1	200max	200max	240max
		0 to 30% Load AC85V - 240V *1	560max	560max	660max
	TEMPERATURE REGULATION[mV]	0 to +50°C	180max	240max	360max
		-40 to +50°C	270max	360max	480max
DRIFT[mV]	*2	48max	60max	96max	
OUTPUT VOLTAGE SETTING[V]	11.40 - 12.60	14.25 - 15.75	23.00 - 25.00		
PROTECTION CIRCUIT AND OTHERS	OVERCURRENT PROTECTION	Works over 105% of rating and recover automatically			
	OVERVOLTAGE PROTECTION[V]	13.20 - 19.20	16.50 - 24.00	26.40 - 38.40	
ISOLATION	INPUT-OUTPUT	AC3,000V 1minute, Cutoff current = 10mA, DC500V 50MΩ min (20±15°C)			
ENVIRONMENT	OPERATING TEMP., HUMID. AND ALTITUDE	-40 to +85°C, 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 <sup>2</sup> (5G), 3minutes period, 60minutes each along X, Y and Z axis			
	IMPACT	196.1m/s <sup>2</sup> (20G), 11ms, once each along X, Y and Z axis			
SAFETY AND NOISE REGULATIONS	AGENCY APPROVALS	UL60950-1, C-UL (CSA60950-1), EN60950-1			
	CONDUCTED NOISE	Complies with FCC-B, VCCI-B, CISPR-B, EN55022-B *3			
	HARMONIC ATTENUATOR	Complies with IEC61000-3-2 (Class A) (Not built-in to active filter)			
OTHERS	CASE SIZE/WEIGHT	33.0 X 15.0 X 22.0mm [1.3 X 0.59 X 0.86 inches] (W X H X D) / 25g max			
	COOLING METHOD	Convection / Forced air			

- \*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 value.
- \*3 Do not ground secondly circuit, in case of a standard adapted.
- \* Measured with 68μF capacitor as Cbc.

## External view



- ※ Tolerance :  $\pm 0.5$  [ $\pm 0.02$ ]
- ※ Weight : 25g max
- ※ Case material : PBT
- ※ Pin material : Copper
- ※ Plating treatment of pin : Lead free plating
- ※ Dimensions in mm, [ ]=inches