

TPSPU10 SERIES

10W Wall Mount Switching Power Supplies For I.T.E.

Description:

The 10 series of AC/DC switching mode power supplies provide 10 Watts of continuous output power. All supplies are UL 94V-0 min compliant, include a 2 prong plug-in mains connector for certain applications. All models All models meet FCC class B and are designed to comply with UL/c-UL requirements. All units are 100% burned in and tested.



Features:

- Wide Input Voltage 90 to 264 VAC, 47 to 63 Hz
- 2 Prong Plug-In Mains Connector
- Output Voltage Available From 5VDC Thru 40VDC
- Optional Output Connector (See appendix)
- Single Output
- Class II
- 2 year warranty

Safety Approvals:



Electrical Characteristics:

Sym.	Parameter	Test Conditions	Min.	Typ.	Max.	Unit
V _{in}	Input Voltage	Operating Voltage	90		264	VAC
f _{in}	Input Frequency		47		63	Hz
P _o	Output Power Range	V _{in} =90 to 264VAC	0		10	W
V _o	Output Voltage Range		See rating chart			V
I _o	Output Current Range		See rating chart			A
I _{il}	Input Current (Low Line)	I _o =Full load, V _{in} =115VAC			0.3	A
I _{ih}	Input Current (High Line)	I _o =Full load, V _{in} =230VAC			0.2	A
I _{rl}	Low Line Inrush Current	I _o =Full load, 25°C, Cool start, V _{in} =115VAC		20	30	A
I _{rh}	High Line Inrush Current	I _o =Full load, 25°C, Cool start, V _{in} =230VAC		45	60	A
Eff	Efficiency	I _o =Full Load, V _{in} =230VAC	75	80	85	%
REG-i	Line Regulation	I _o =Full Load		0.5	1	%
REG-o	Load Regulation	V _{in} =230VAC		3	5	%
OVP	Over Voltage Protection		Nil			%
OCP	Over Current Protection	Nil But, Output protected to short circuit conditions				%
T _{tr}	Time of Transient Response	I _o =Full Load to Half Load, V _{in} =100VAC			4	mS
T _{hold}	Hold-Up Time	I _o =Full Load, V _{in} =100VAC	5	10		mS
T _s	Start Up Time	I _o =Full Load, V _{in} =100VAC	0.3	1	2	S
V _{rn}	Ripple & Noise (Peak to Peak)	Full Load, V _{in} =90VAC		0.5	1	%
I _{lk}	Safety Ground Leakage Current	I _o =Full Load, V _{in} =240VAC		0.2	0.25	mA
TC	Temperature Coefficient	All output	-0.04		0.04	%/°C

Environmental :

Sym.	Parameter	Test Conditions	Min.	Typ.	Max.	Unit
T _{oper}	Operating Temperature		0		70	°C
T _{stg}	Storage Temperature		-40		85	°C
H _r	Relative Humidity	No-Condensing	5		95	%
MTBF	Operating Temperature at 25°C, Calculated per MIL-HDBK-217F		0.1			M Hrs
P _d	Derate linearly from 100% load at 40°C to 50% load at 70°C					

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Safety Specifications:

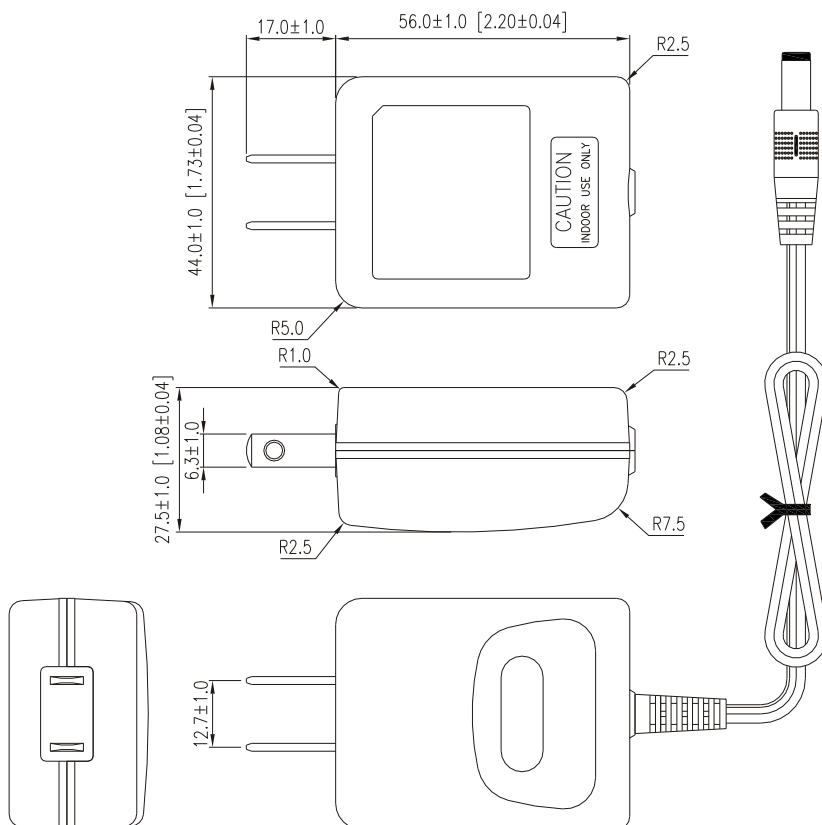
Sym.	Parameter	Test Conditions	Min.	Typ.	Max.	Unit
Vps	Dielectric Withstanding Voltage for Primary to secondary	Primary to secondary	4242			VDC
CISPR	EMI requirements for CISPR-22	Vin=220VAC	B			CLASS
FCC	EMI requirements for FCC PART-15	Vin=110VAC	B			CLASS

Output Voltage And Current Rating Chart (Single Output) :

Model Number	Output Voltage	Output Current	Total Regulation ^①	Maximum Output Power
TPSPU10-102	5 ~ 6 VDC	1.60 ~ 1.33 A	5%	8W
TPSPU10-103	6 ~ 8 VDC	1.33 ~ 1.00 A	5%	8W
TPSPU10-104	8 ~ 11 VDC	1.25 ~ 0.91 A	5%	10W
TPSPU10-105	11 ~ 13 VDC	0.91 ~ 0.77 A	5%	10W
TPSPU10-106	13 ~ 16 VDC	0.77 ~ 0.63 A	5%	10W
TPSPU10-107	16 ~ 21 VDC	0.63 ~ 0.48 A	3%	10W
TPSPU10-108	21 ~ 27 VDC	0.48 ~ 0.37 A	3%	10W
TPSPU10-109	27 ~ 33 VDC	0.37 ~ 0.30 A	3%	10W
TPSPU10-110	33 ~ 40 VDC	0.30 ~ 0.25 A	3%	10W

- ① The total regulation on model 102~105 is required to use AWG#20 / 4FT output cable.
 The total regulation on model 106~110 is required to use AWG#24 / 4FT output cable.
 The regulation and efficiency will be changed by modified output cable.

Mechanical Specifications:



Note:

1. Dimensions are shown in mm.
2. Weight: 90gs approx.
3. Optional output connector: See page Appendix.