

Topstek AC Current Sensors TX7P-5A .. TX7P-20A

TX7P-5A~20A

Features

- ◆ High reliability AC current measurement device
- ◆ Quick response speed, very low phase lag
- ◆ High isolation voltage between the measuring circuit and the current-carrying conductor (AC4KV)
- ◆ All materials used are RoHS compliant
- ◆ Flame-Retardant plastic case and silicone encapsulant, using UL 94V0 classified materials, protect against environmental contaminants and vibration over a wide temperature and humidity range

Applications

- ◆ ADC inputs
- ◆ Power meters
- ◆ Over current detection
- ◆ Ground Fault detection
- ◆ Isolated AC current monitoring
- ◆ AC current sensing for switching power supply



Specifications

Parameter	Symbol	Unit	TX7P-5A	TX7P-10A	TX7P-15A	TX7P-20A
Nominal Input Current	I_{FN}	A_{RMS}	5	10	15	20
Linear Range	I_{FS}	A_{RMS}	60	60	60	60
Output Voltage $I_F = I_{FN}$ ($R_L = 100\Omega$)	V_{FN}	V_{RMS}	0.5	1	1.5	2
Secondary Turns *1	N	-	1000 nominal			
Secondary DC Resistance	R_{DC}	Ω	< 30 Ω , $T_A = 25^\circ C$			
Accuracy Over Working Range *1		%	Within $\pm 2\%$ $I_F = 0.1 I_{FN} \rightarrow 3.0 I_{FN}$			
Dielectric Strength	-	V	AC4KV X 60 sec			
Isolation Resistance @ 1000 VDC	R_{IS}	$M\Omega$	> 500 $M\Omega$			
Operating Temperature	T_a	$^\circ C$	-20 $^\circ C$ to 120 $^\circ C$			
Storage Temperature	T_s	$^\circ C$	-20 $^\circ C$ to 125 $^\circ C$			
Mass	W	g	16g			

*1. The number of secondary turns for each part model might be adjusted for the best accuracy of output voltage at nominal input current level.

Appearance, dimensions and pin identification

All dimensions in mm ± 0.1 , holes $-0, +0.2$ except otherwise noted

Test Circuit

