



# DATA SHEET

## High Accuracy Current Sensor

P/N: CFB60TP15D60

$I_{PN}=60A$

### Feature

- It is a current sensor, based on the principle of fluxgate principle.
- Electrostatic shield between primary and secondary circuit
- It provides accurate electronic measurement of DC, AC or pulsed voltage.
- Supply voltage:  $\pm 11 \sim \pm 16$  V

### Advantages

- High accuracy
- Wide frequency bandwidth
- Low temperature drift
- Very good linearity
- Optimized response time

### Applications

- Metrological verification and calibration
- Laboratory current measurement
- Instrumentation (e.g. power analyzer)
- Medical equipment (e.g. MRI)
- Battery pack detection
- Power control



RoHS



### Electrical data: ( $T_A=25^\circ C \pm 5^\circ C$ )

Parameters	Type	CFB60TP15D60		
Rated Input $I_{PN}(A)$		$\pm 60$		
Measuring Range $I_{PM}(A)$ 1Min/Hour		$\pm 72$		
Current consumption $I_C$ (mA) $I_{PM}$ Range	Minimum	Standard	Maximum	
	$\pm 20$	$\pm 80$	$\pm 92$	
Power Supply $V_C$	$\pm 11$	--	$\pm 16$	
Current change Input:Output $K_N$		1000:1		
Rated Output Current( $I_{SN}$ )mA	--	60	--	



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Measuring Resistance( $\Omega$ ) R <sub>M</sub>	0	30	50
Accuracy Xe (A) @0%~67%I <sub>PN</sub>	--	--	0.004
Accuracy Xe (V) RD% @67%I <sub>PN</sub> ~I <sub>PM</sub>	--	--	0.01
Ratio error X <sub>Ge</sub> (A) @0%~67%I <sub>PN</sub>	--	--	0.004
Ratio error X <sub>Ge</sub> RD% @67%I <sub>PN</sub> ~I <sub>PM</sub>	--	--	0.01
Angle error X <sub>Pe</sub> crad	--	--	0.01
Linearity $\varepsilon_L$ (ppm)	--	--	50
Temperature drift coefficient TCI ppm/K	--	--	2
Time drift coefficient TT ppm/month	--	--	2
Power supply anti interference TV ppm/V	--	--	5
Zero offset current I <sub>0</sub> (mA) 25±10°C	--	--	±0.004
Zero offset current I <sub>0T</sub> (mA) Within the full operating temperature range	--	--	±0.008
Ripple current I <sub>n</sub> DC-10Hz (ppm)	--	--	2
Dynamic response time t <sub>r</sub> (us) di/dt=100A/us rise to 90%I <sub>PN</sub>	--	--	1
Bandwidth(-3dB) F ( kHz)	0	--	100

## Insulation Coordination:

Item	Symbol	Test condition	Value	Unit
RMS voltage for AC insulation test	V <sub>d</sub>	50Hz/1Min between primary and secondary	2.5	KV
Impulse withstand voltage	V <sub>w</sub>	50us between primary and secondary	5	KV

## General data:

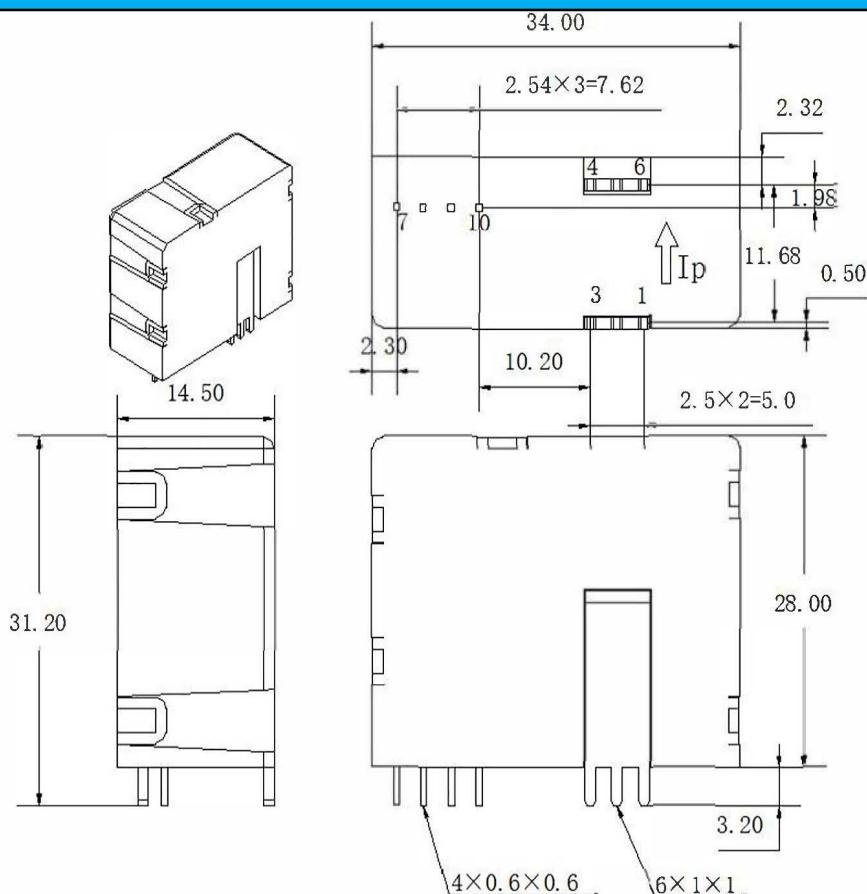
Parameter	Value
Operating temperature TA(°C)	-40 ~ +85
Storage temperature TS(°C)	-45 ~ +85
Mass M(g)	20g±5g



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Standards	IEC60950-1:2001
	EN50155:2007; EN50121:2006
	SJ20790-2000
	UL94-V0
	EN60947-1:2004

Dimensions(mm):



Connection definition					
1. .3	Ip+	7	OUT	8	+15V
4. .6	Ip-	9	-15V	10	GND

Remarks:

1. All dimensions are in mm.
2. General tolerance  $\pm 0.5$ mm.

Connector:2510-4P



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## Remarks:

- Before using the product, please make sure to carefully read the user manual. When moving the product, please make sure to turn off the power first and unplug all the connecting cables that are connected to it. If any damage is found to the casing, firmware, power cord, connecting cable, or connected equipment, please immediately disconnect the device from the power supply. and If there are any concerns about the safe operation of the equipment, please immediately shut down the equipment and its related accessories, and contact our company's technical support department as soon as possible to communicate and resolve the issue.
- When the direction of the input current IP is consistent with the direction indicated by the arrow in the outline drawing, the output current IS is in the forward direction.
- Please try to locate the primary conductor at the center of the probe aperture as much as possible.
- The through-hole is made of metal material, so the through-hole wire cannot be an exposed cable. The through-hole wire must be insulated.
- This module is a standard sensor, please contact us for special applications.
- We reserve the right to modify this sensor manual without prior notice.

**WARNING : Incorrect wiring may cause damage to the sensor.**



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