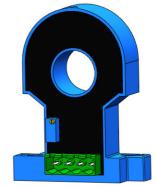
DC Leakage Current Sensor

SCD6



Product description

Features

- SCD series DC leakage current sensor, using the principle of magnetic modulation closed-loop, for isolated measurement of DC milliampere small current.
- The isolation voltage between primary and secondary is greater than 3000VAC.
- Temperature compensation circuit control, zero drift, accurate measurement.
- Perforated input, unplugging terminals, screw fastening flat mounting.
- Overall size(mm): $53(L) \times 16(W) \times 70(H)$; Aperture: 18mm
- Comply with UL94-V0 flame retardant rating.

Applications

• Widely used in emerging industries and fields such as electric power, industrial automation, solar photovoltaic, etc.

Implementation standards

- GB/T 7665-2005
- JB/T 25480-2010
- JB/T 11205-2011
- SJ 20790-2000

Implementation standards:



Technical Parameters

Model	SCD6-				
Parameters $(25^{\circ}C)$	10mA	20mA	50mA	100mA	1A
Primary Current I _{PN} (DC)	10mA	20mA	50mA	100mA	1A
Primary Current Max. Peak Value I _{PM} (DC)	±12mA	±24mA	±60mA	±120mA	±1.2A
Output voltage V_{out} @ $\pm I_{PN}$, $R_L=10K\Omega$			±5V±1%		

Electrical Data

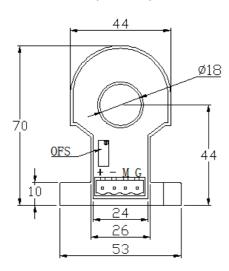
Item	Min.	Typical	Max.	Unit
Input power supply voltage range Vc (±5%) (Remark 1)	±11	±12	±18	V _{DC}
Current consumption Ic	-	±10	-	mA
Withstand resistance R _{INS} @500V DC	1000	-	-	ΜΩ
Output voltage Vout $@I_{PN}$, R _L =10K Ω , T _A =25°C	4.950	5.000	5.050	V
Output internal resistance R _{OUT}	-	100	-	Ω
Load Resistance R _L	-	10	-	KΩ
Accuracy X $@I_{PN}$, $T_A = 25^{\circ}C$	-	±1	-	%
Linearity ε_L @R _L =10K Ω , T _A = 25 °C	-	±0.5	-	%
Offset voltage $V_{OE} @T_A = 25 °C$	-	±50	-	mV
Temperature coefficient of offset voltage TCV_{OE}	-	±1	±2	mV/℃
Response Time $t_D @ 0 \rightarrow I_{PN}$	-	500	900	ms
Operating ambient temperature range T_A	-10	25	75	°C
Storage ambient temperature range T _s	-25	25	85	°C
Insulation withstand voltage VD@50Hz, 60s, 0.1mA		3000		V _{AC}
Weight m		60		g

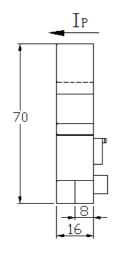
Remark:

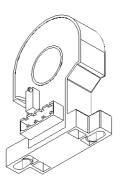
1. If VC is less than the minimum value, the measurement will be inaccurate. If VC is greater than the maximum value, it may cause permanent failure of the measuring device.

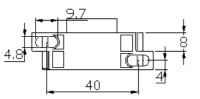
$$V_{OUT} = 5.05 * \frac{R_L}{100 + R_L} * \frac{I_P}{I_{PN}} + V_{OE}$$

Dimensions (in mm):









序号	标识	说明
1	+	+12V
2	-	-12V
3	M	Output
4	G	OV

单位: ㎜

Notes:

- 1. Size error: ±0.5mm;
- 2. Primary aperture: φ18mm;
- 3. Fastening hole: O 4.8*4.9mm*2;
- 4. Output terminal: 2EDGVC-5.08-4P;
- 5. The IP indication direction is the positive direction of the current, and the OFS is the zero adjustment;
- 6. Incorrect wiring may cause damage to the sensor;
- 7. The zero voltage of the sensor can be adjusted appropriately according to the needs of users;

SoCan is committed to continuously improving product quality, and the company reserves the right to update its products.