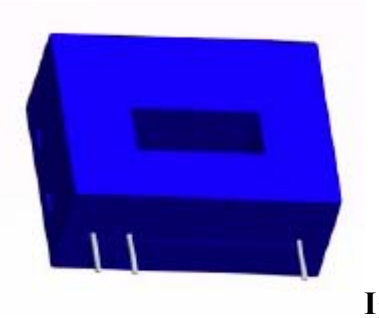


I_{PN} = 50A

Features

- Hall effect measuring principle
- Galvanic isolation between primary and secondary circuit
- Low power consumption
- Extended measuring range
- Insulated plastic case recognized according to UL 94-V0

Advantages

- Very good linearity
- Excellent accuracy
- Low temperature drift
- Wide frequency bandwidth
- Optimized response time
- No insertion losses
- High immunity against external Interference
- Excellent performance and price

Industrial applications

- AC variable speed drives
- Battery supplied applications
- Uninterruptible Power Supplies (UPS)
- Power supplies for welding applications
- Static converters for DC motor drives
- Switched-Mode Power Supplies (SMPS)

TYPES OF PRODUCTS				
Type	**Primary nominal current r. m. s I_{PN} (A)**	**Primary current measuring range I_P (A)**	**Measuring resistance (@70℃) R_M (Ω)**	
SICDS50V6	50	0~±70	10~100	with±12V@±50Amax
			10 ~ 50	with±12V@±70Amax
			50~160	with±15V@±50Amax
			50 ~ 90	with±15V@±70Amax

General Description

For the electronic measurement of currents: DC, AC, pulsed, mixed, with a galvanic isolation between the primary circuit (high power) and the secondary circuit (electronic circuit)

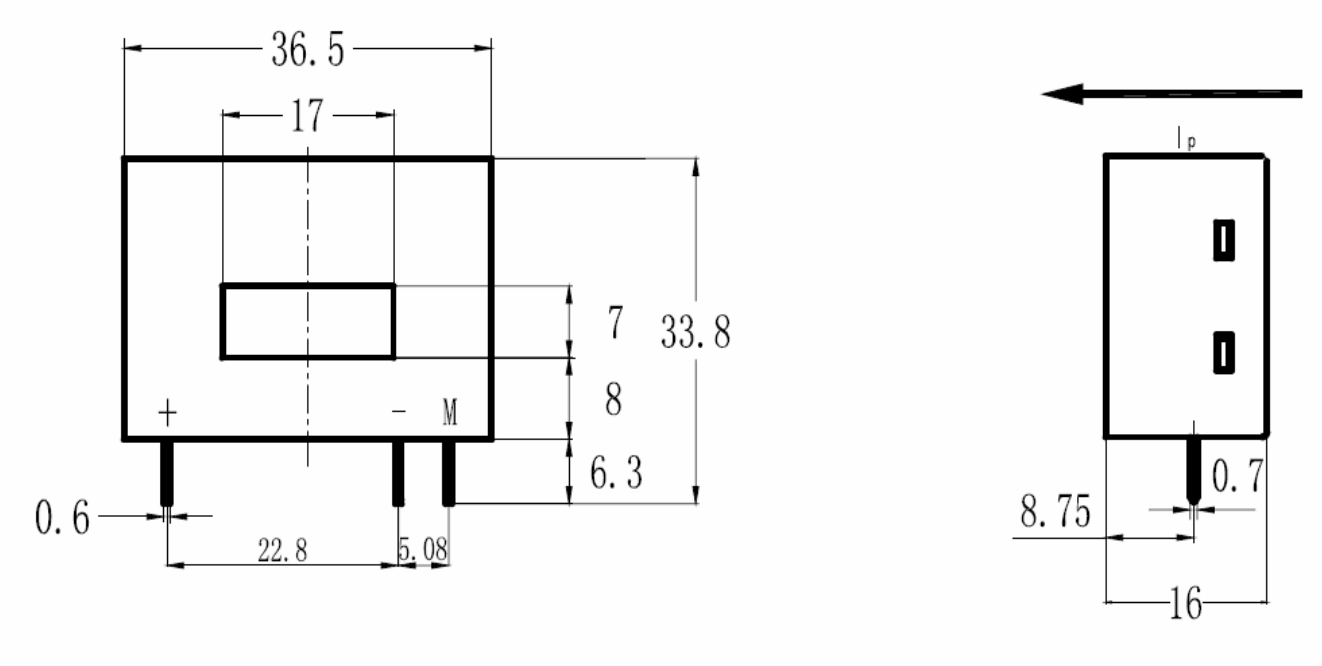
Parameters Table

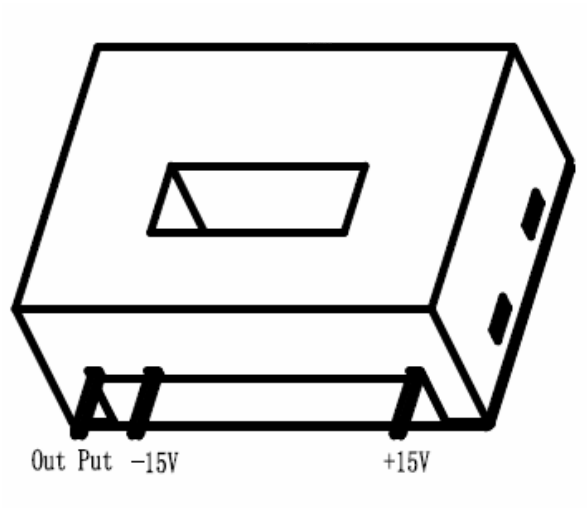
PARAMETERS	SYMBOL	UNIT	VALUE	CONDITIONS
Electrical data				
Supply voltage(±5%)	V_C	V	±12…15	
Current consumption	I_C	mA	10(@±15)+I_s	
Secondary nominal r.m.s. current	I_{SN}	mA	50	@I_{PN}
Conversion ratio	K_N		1:1000	
Accuracy - Dynamic performance data				
Linearity	ε_L	%	<±0.15	
Accuracy	X_G	%	<±0.65	@ I_{PN} , V_C = ±15V, T_A = 25°C
			<±0.90	@ I_{PN} , V_C = ±12…15V, T_A = 25°C
Offset current	I_O	mA	<±0.20	@ I_P = 0,T_A = 25°C
Thermal drift of Io	I_{OT}	mA	Typ / Max	
			±0.1 / ±0.6	@ I_P = 0,-25°C～+85°C
			±0.2 / ±1.0	@ I_P = 0,-40°C～-25°C
Response time	t_r	μS	<1	@ 90% of I_{PN} step
di/dt accurately followed	d_i/dt	A/μS	>200	
Frequency bandwidth (1)	BW	kHz	DC~200	@-1dB
General data				
Ambient operating temperature	T_A	℃	-40 ~ +85	
Ambient storage temperature	T_S	℃	-40 ~ +90	
Secondary coil resistance	Rs	Ω	80	@ T_A = 70°C
Isolation characteristics				
R. m. s voltage for AC isolation test	V_d	KV	2.5	@50Hz, 1 min
Impulse withstand voltage 1.2/50us	V_w	KV	5.7	
Creepage distance	dCp	mm	5	
Clearance distance	dCI	mm	5	
Comparative Tracking Index	CTI		175	Group IIIa

Notes:

Please refer to derating curves in the technical file to avoid excessive core heating at high frequency.

Dimensions SICDS50V6 (in mm. 1 mm = 0.0394 inch)





Instructions of use

1 When the test current passes through the sensor, you can get the size of the output current. (Warning: wrong connection may lead to sensors damage.)

2 I_s is positive when I_p flows in the direction of the arrow.

3 In order to achieve the best magnetic coupling, the primary windings have to be wound over the top edge of the device.

4 According to user needs, different rated input currents and output currents of the sensors can be customized.

RESTRICTIONS ON PRODUCT USE

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