

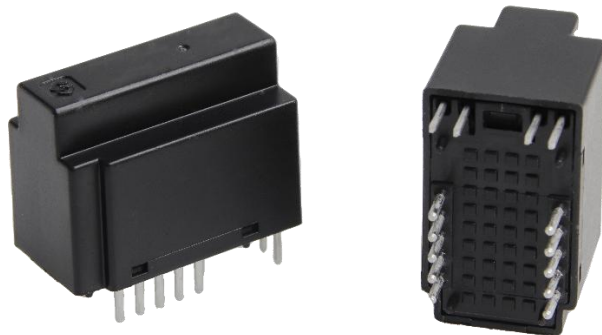
## CURRENT SENSOR

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PRODUCT SERIES: SFG-MOD/M1

PRODUCT PART NUMBER: SFG-50MOD/M1

VERSION: Ver 1.2



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Web site: [www.sinomags.com](http://www.sinomags.com)

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## CONTENT

1.	Description .....	2
2.	Electrical parameters .....	3
3.	Dimensions: .....	4

## 1. Description

- Closed loop (compensation) Current Sensor with magnetic field probe
- Printed circuit board mounting

### Typical application

- Static converters for DC motor drives
- Battery supplied applications
- UPS
- AC variable speed and servo motor drives
- Switched model power supplies (SMPS)
- Power Supplies for welding applications

### General parameters

Parameter	Symbol	Unit	Value
Sensor operating temperature	$T_A$	°C	-40 ~ 105
Storage temperature	$T_S$	°C	-40 ~ 105
Mass	m	g	18

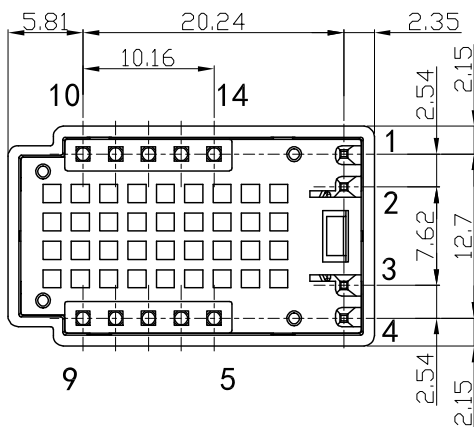
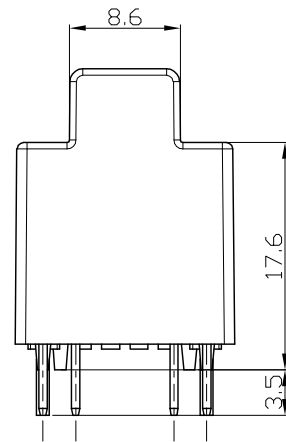
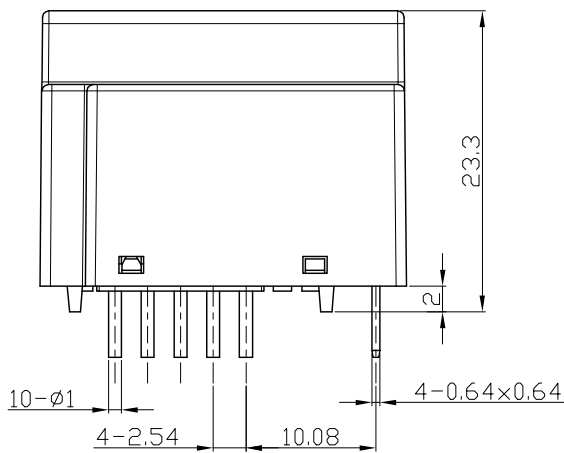
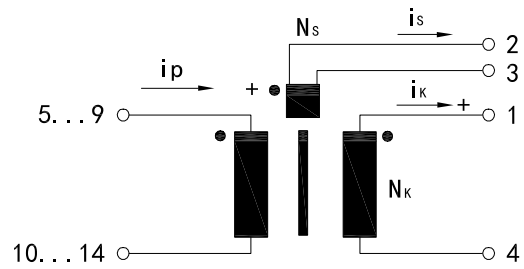
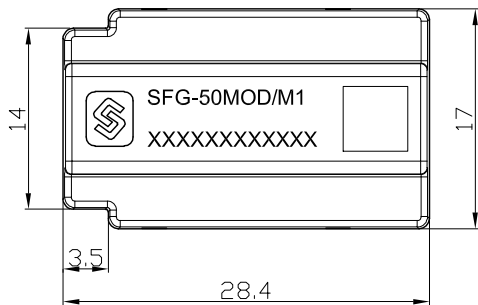
### Isolation parameters

Parameter	Symbol	Unit	Value	Remark
Case material	-	-	V0	According to UL 94
Comparative tracking index	CTI		600	
RMS voltage for AC test 50Hz/1 min	Ud	kV	3.5	Pin 1 - 10 to Pin 11 - 13

## 2. Electrical parameters

Parameters	Symbol	Unit	Min	Typ	Max
Primary nominal RMS current	$I_{PN}$	A		50	
Measuring resistance	$R_M$	$\Omega$	0		200
Secondary nominal output RMS current	$I_{SN}$	mA		50	
Resistance of secondary winding @ $T_A=85^\circ\text{C}$	$R_S$	$\Omega$			23
Primary coil resistance per turn @ $T_A=25^\circ\text{C}$	$R_P$	m $\Omega$			1.1
Turns ratio	$K_N$	NT		1...5:1000	
Measuring accuracy @ $I_{PN}, T_A=25^\circ\text{C}$	X	%			0.5
Linearity error	$\xi_L$	% of $I_{PN}$			0.2
Hysteresis	$I_{OH}$	mA		0.05	0.1
Response time	$t_r$	$\mu\text{s}$			1
Frequency range	f	kHz	DC...200		

### 3. Dimensions:



Material : Fit UL94V-0 & RoHS requirements ;  
General tolerance :  $\pm 0.5$   
Unit :mm

