

**Specifications** 

# Hall Effect Current Sensor S22P006S05M2



### Features:

- Closed Loop type
- Voltage output
- Unipolar power supply
- Configurable integrated primary
- Improved dv/dt immunity
- Printed circuit board mounting
- UL recognised plastic case material UL94V0

### Advantages:

- Excellent accuracy and linearity
- Low temperature drift
- Wide frequency bandwidth
- No insertion loss
- High Immunity to external interferences

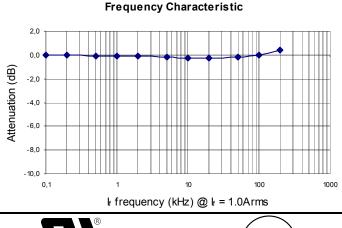
 $T_A=25^{\circ}C$ ,  $V_{CC}=+5V$ ,  $R_L=10k\Omega$ 

- Optimised response time
- Current overload capability

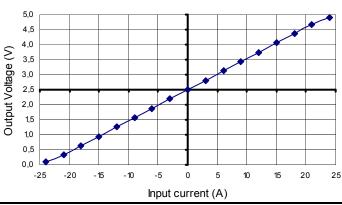
#### Parameters Symbol S22P006S05 Rated Current lf 6A Saturation Current ±18A Ifmax Output Voltage Vout V<sub>OE</sub> ±0.625V @ I<sub>f</sub> 2.5V±50mV Offset Voltage @ If=0 VOE Output Voltage Accuracy Х 0.625V±10mV @ If εL Output Linearity ±0.2% @ If +5V±5% Supply Voltage $V_{cc}$ Consumption Current Typ. 12.5mA @ I<sub>f</sub>=0 lcc Response Time<sup>1</sup> ≤ 1.0µs @ di/dt = I<sub>f</sub> / µs tr TCV<sub>OUT</sub> Output Temperature Characteristic < ±0.05mV/°C -10°C~25°C : ±1.6mV/°C Offset Temperature Characteristic TCVOE 25°C~85°C : ±0.8mV/°C Hysteresis allowance ≤0.5mV (0A ⇔ I<sub>f</sub>) V<sub>OH</sub> Insulation Withstanding $V_{d}$ AC 3kV for 1minute (Sensing current 0.5mA) Primary $\Leftrightarrow$ Secondary Insulation Resistance > 500MΩ (@ DC500V) Primary ⇔ Secondary Ris Frequency Bandwidth f DC ... 200 kHz **Operating Temperature** -40°C~+85°C TA -40°C~+90°C Storage Temperature Ts

<sup>1</sup> Time between 10% input current full scale and 90% of sensor output full scale

### **Electrical Performances**



#### Saturation Characteristic





Tamura reserve the right to modify its products in order to improve them without prior notice

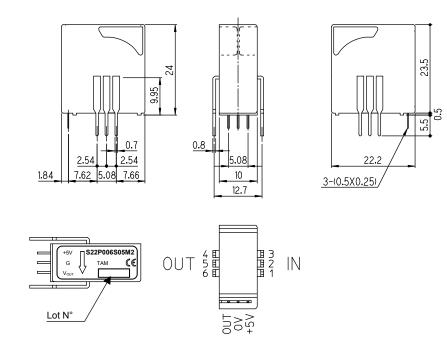
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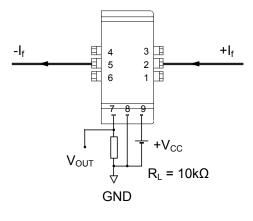


# Hall Effect Current Sensor S22P006S05M2

### Mechanical dimensions in mm



## **Electrical connection diagram**



Connection diagram

+I <sub>f</sub> / 3	6 5 4 C C OUT
	$IN \circ \circ \circ$
	1 2 3
+I <sub>f</sub> / 2	6 5 4 O
	IN 0-0 0 1 2 3
	6 5 4 OOUT
+I <sub>f</sub>	IN O-O-O 1 2 3

### Package & Weight Information

Weight	Pcs/box	Pcs/carton	Pcs/pallet
8g	100	400	9600







