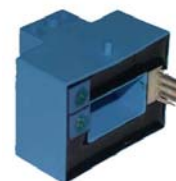


# Hall Current Sensor- TS501-OCS

**$I_{PN}=50..500A$**

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



RoHS COMPLIANT



## ● Operating performance ( AT= 25°C )

Performance	Model	TS500 OCS	TS101 OCS	TS201 OCS	TS301 OCS	TS401 OCS	TS501 OCS
Primary nominal r.m.s. current	$I_{PN}$ (A)	50	100	200	300	400	500
Primary current measuring range	$I_P$ (A)	0~±150	0~±300	0~±600	0~±900	0~±1000	0~±1000
Supply voltage	$V_{CC}$	±15V ( ±5% )					
Output voltage	$V_{OUT}$	4V ±1% @± $I_{PN}$ , $R_L=10K\Omega$					
Current consumption	$I_C$	≤±20mA @ ± $I_{PN}$					
Offset voltage	$V_O$	<±0.03V @ $I_P=0, T_A=25^\circ C$					
Linearity	$\epsilon_L$	≤±0.5% @0~± $I_{PN}$					
Accuracy	X	±1% @ $I_{PN}$					
Response time	$t_r$	< 5µs					
di/dt accurately followed	di/dt	> 50A/µs					
Thermal drift of $V_O$	$V_{OT}$	≤±0.5mV/°C					
Thermal drift of $V_{OUT}$	$TC\epsilon_G$	<±0.05%/°C					
Hysteresis offset voltage	$V_{OH}$	≤±20mV @±3 $I_{PN} \rightarrow 0$					
Isolation voltage	$V_d$	2.5KV @50(60)HZ/1min					
Isolation resistance	$R_{IS}$	500MΩ @500V					
Frequency bandwidth	f	0~50KHz					

## ● General data

Operating temperature	$T_O$	-25 ~ +85°C
Storage temperature	$T_S$	-40 ~ +85°C
Mass	m	55g
Note	Insulated plastic case recognized according to UL 94-V0	

## ● Applications

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

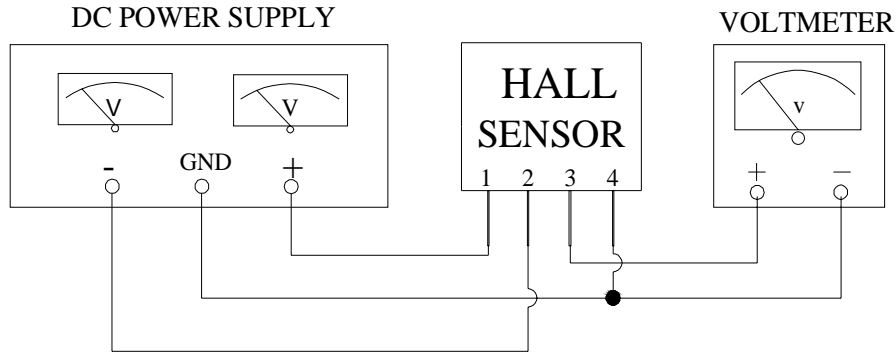
## ● Advantages

- |                        |   |
|------------------------|---|
| ◆No insertion losses   | ◆Only one design for wide current ratings range |
| ◆Low temperature drift | ◆High immunity to external interference         |
| ◆Low power consumption | ◆Current overload capability                    |

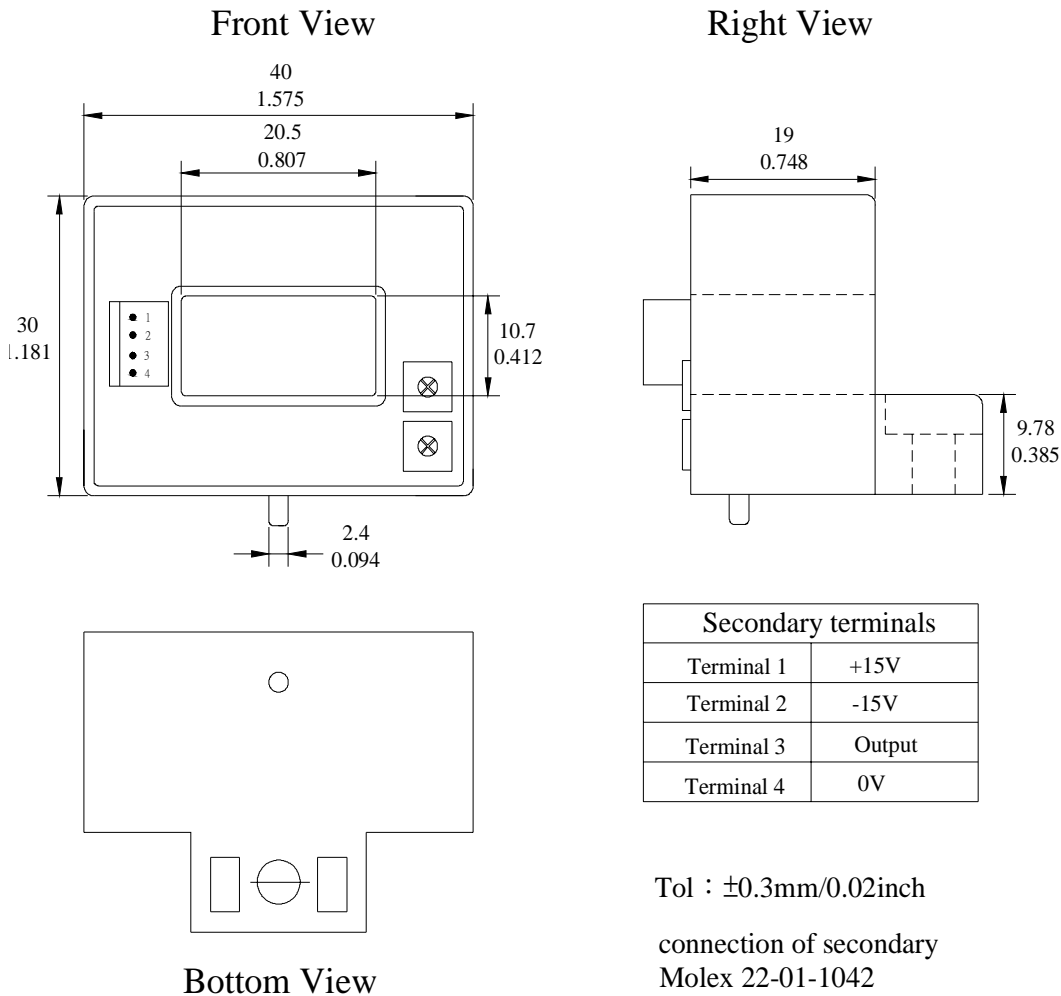
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$I_{PN}=50..500A$

## ● Connection



## ● Dimensions ( Unit:mm/inch )



## ● Remarks

- ◆  $V_{OUT}$  is positive when  $I_P$  flows in the direction of the arrow.
- ◆ Temperature of the primary conductor should not exceed  $100^\circ\text{C}$ .
- ◆ These are standard models. For different versions (supply voltages, secondary connections, unidirectional measurements, operating temperatures, etc.) please contact us.