

Hall Current Sensor- TA500-OCS

$I_{PN}=5..50A$

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	TA5R0 OCS	TA100 OCS	TA120 OCS	TA150 OCS	TA200 OCS	TA250 OCS	TA500 OCS
Primary nominal r.m.s. current	I_{PN} (A)	5	10	12.5	15	20	25	50
Primary current measuring range	I_P (A)	0~±15	0~±30	0~±37.5	0~±45	0~±60	0~±75	0~±150
Supply voltage	V_{CC}	±15 V (±5%)						
Output voltage	V_{OUT}	4 V±1% @± I_{PN} , $R_L=10K\Omega$						
Current consumption	I_C	≤±10mA @ ± I_{PN}						
Offset voltage	V_O	< ±0.03V @ $I_P=0, T_A=25^\circ C$						
Thermal drift of V_O	V_{OT}	≤±1.5mV/°C						
Thermal drift of V_{OUT}	$TC\epsilon_G$	< ±0.1%/°C						
Response time	t_r	< 3µs						
Linearity	ϵ_L	≤±1% @0~± I_{PN}						
Accuracy	X	±1% @ I_{PN}						
Hysteresis offset voltage	V_{OH}	≤±20mV @±3 $I_{PN} \rightarrow 0$						
Isolation voltage	V_d	2.5KV @50(60)HZ/1min						
Frequency bandwidth	f	0~50KHz						

● General data

Operating temperature	T_O	-25~+85°C
Storage temperature	T_S	-40~+85°C
Mass	m	17g
Note		Insulated plastic case recognized according to UL 94-V0

● Applications

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

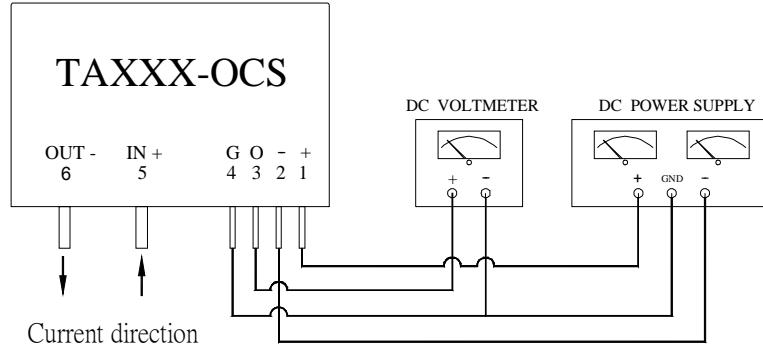
● Advantages

- | | |
|--|--|
| ◆ No insertion losses | ◆ Optimized response time |
| ◆ Easy to mount with automatic handling system | ◆ High immunity to external interference |
| ◆ Small size and space saving | ◆ Only one desing for wide curretn ratings range |

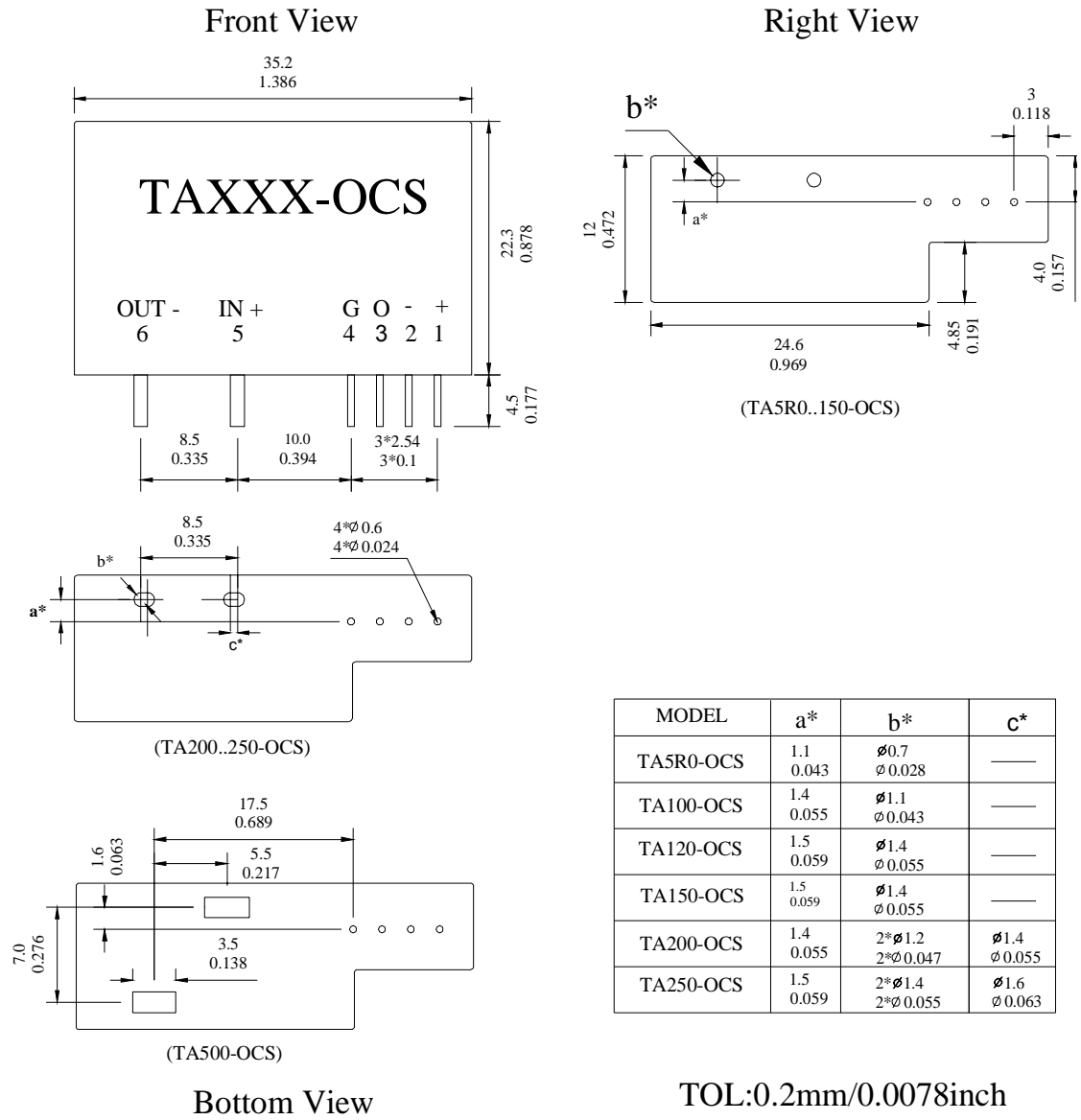
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● Connection



● Dimensions (Unit:mm/inch)



MODEL	a*	b*	c*
TA5R0-OCS	1.1 0.043	∅0.7 ∅0.028	—
TA100-OCS	1.4 0.055	∅1.1 ∅0.043	—
TA120-OCS	1.5 0.059	∅1.4 ∅0.055	—
TA150-OCS	1.5 0.059	∅1.4 ∅0.055	—
TA200-OCS	1.4 0.055	2*∅1.2 2*∅0.047	∅1.4 ∅0.055
TA250-OCS	1.5 0.059	2*∅1.4 2*∅0.055	∅1.6 ∅0.063

TOL:0.2mm/0.0078inch

● PIN ARRANGEMENT

PIN1 +15V, PIN2 -15V, PIN3 OUTPUT, PIN4 GND, PIN 5 PRIMARY IN