

Hall Current Sensor TD500..101-OCA $I_{PN}=50\ldots100A$

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)

Model	TD500-OCA	TD101-OCA
Primary nominal r.m.s. current I_{PN} (A)	50	100
Primary current measuring I_P (A)	0~ \pm 50	0~ \pm 100
Supply voltage V_{CC}	4.5~10.5	VDC
Offset voltage V_O	($V_{CC}/2$) \pm 3% @ $I_P=0, T_A=25^\circ C$	V
Output voltage V_{OUT}	4.5 @ $+I_{PN}, V_{CC}=5V, R_L= 10K\Omega$ 0.5 @ $-I_{PN}, V_{CC}=5V, R_L= 10K\Omega$	V
Supply current I_C	7.2 type 8.5 max@5V, $T_A=25^\circ C$	mA
Output linearity ε_L	$\leq \pm 1$ @ $0\sim \pm I_{PN}$	%
Sensitivity tolerance X	± 1 @ I_{PN}	%
Thermal drift of V_{OUT} $TC\varepsilon_G$	$< \pm 0.06$	%/ $^\circ C$
Isolation voltage V_d	4 @ 50(60)HZ/1min	KV
Rise time t_r	< 5 @ 90% I_P	μs
Fall time t_f	< 3 @ 10% I_P	μs
Frequency bandwidth f	0~50 @ $V_{CC}=5V$	KHz

● General data

Operating temperature T_O	-40~+85°C
Storage temperature T_S	-40~+100°C
Mass m	< 12g
Note	Insulated plastic case recognized according to UL 94-V0

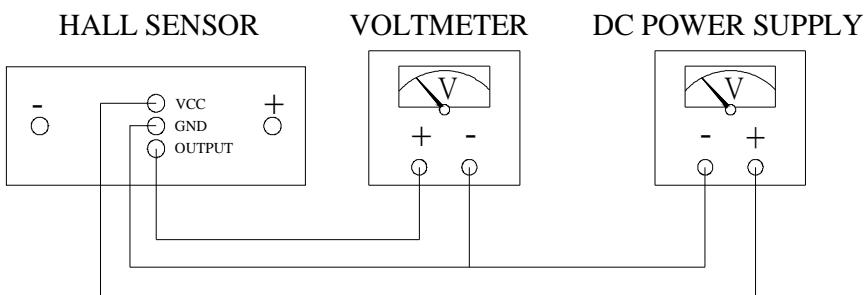
● Applications

- ◆ 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

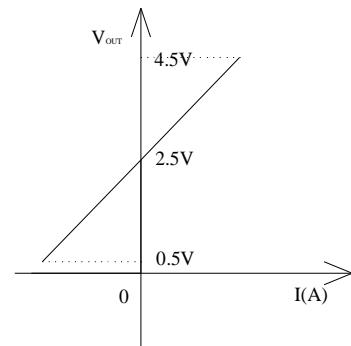
● Advantages

- ◆ Output voltage is isolated from the input
- ◆ Low power consumption
- ◆ Good linearity
- ◆ Excellent temperature stability
- ◆ Very low insertion losses

● Connection

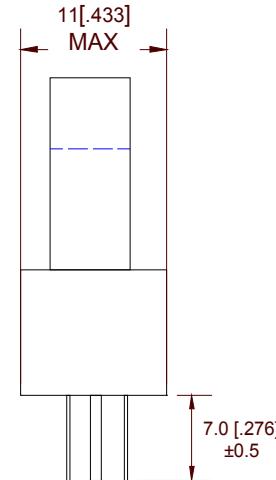
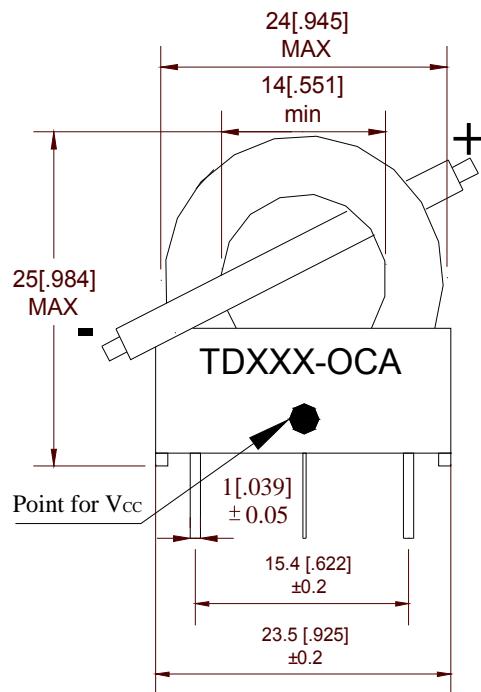


● Characteristic

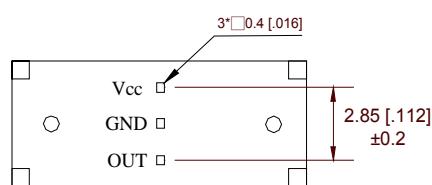


● Dimensions (unit: mm/inch)

Front View



Right View



Bottom View

NOTE : V_{OUT} is forward when I_P flows from "+" to "-".