

Hall Current Sensor DHS50-4

$I_{PN}=50A$

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.



● Operating performance ($T_A=25\text{ }^\circ\text{C}$)

Primary nominal r.m.s. current	I_{PN} (A)	50
Primary current measuring range	I_P (A)	0~±150
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	<±20mV @ $I_P=0, T_A=25\text{ }^\circ\text{C}$
Linearity	ϵ_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}	<±1mV/°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	-10~+80°C
Storage temperature	T_S	-25~+85°C
Mass	m	55g
Note	Insulated plastic case recognized according to UL 94-V0	

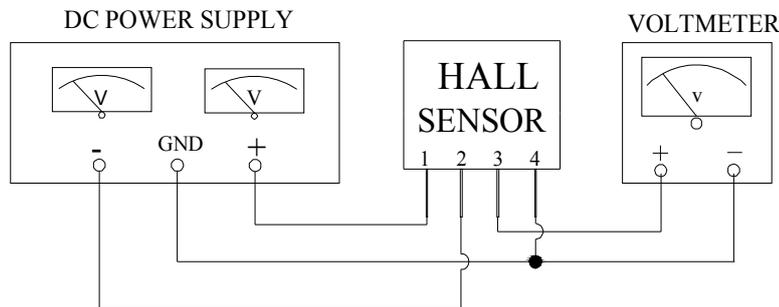
● Applications

◆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

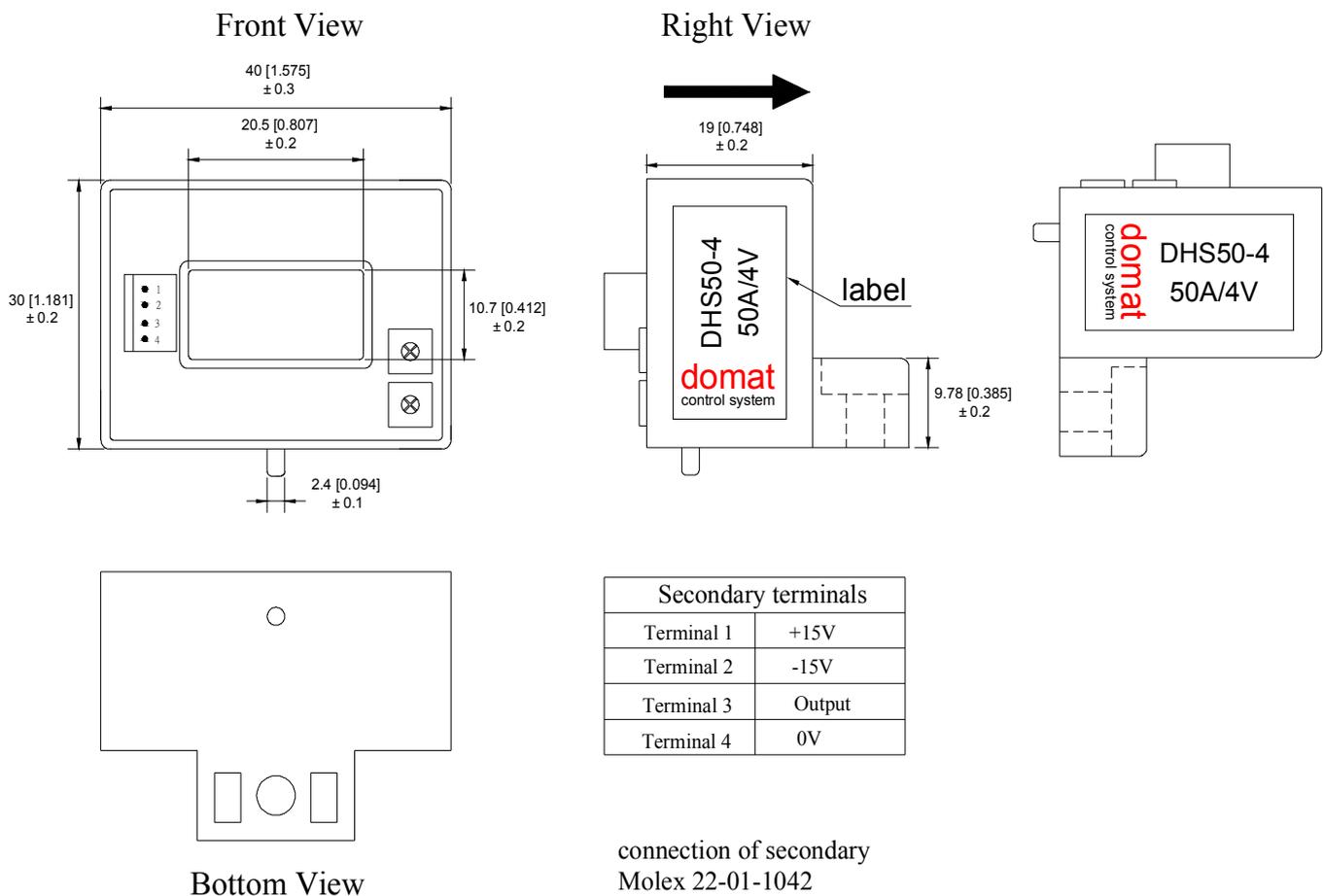
● Advantages

◆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

● 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 $100\text{ }^{\circ}\text{C}$.
- ◆ These are standard models. For different versions (supply voltages, secondary connections, unidirectional measurements, operating temperatures, etc.) please contact us.