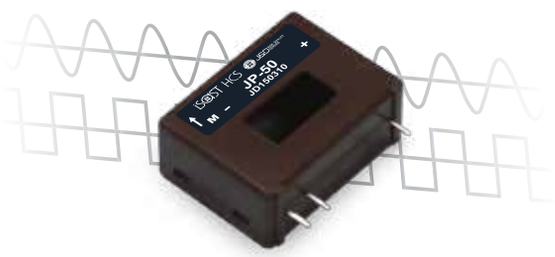
PCB
Mounting

CLOSED-LOOP CURRENT SENSOR
JP-50



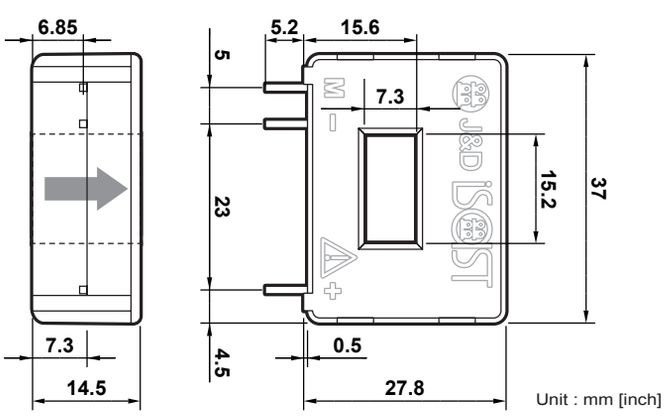
Features

- Closed loop (compensated) current transducer using the Hall effect
- Printed circuit board mounting
- Insulated plastic case recognized according to UL 94-V0.

Electrical Properties

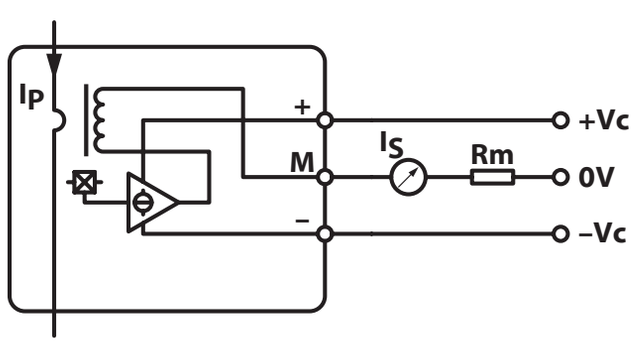
Model		JP-50
Primary nominal current	I_f	50A
Measuring resistance	R_L	Vcc=±12V @ ±50A : 60Ω ~ 95Ω @ ±60A : 60Ω Vcc=±15V @ ±50A : 135Ω ~ 155Ω @ ±55A : 135Ω
Rated output current	I_o	50mA (Turn ratio 1 ： 1000)
Output current accuracy	V	±0.45 (±15V, +25˚C)
Offset current	I_{of}	≤ ±0.1mA (at If=0A)
Output linearity	ε_L	≤ ±0.15%(at If)
Power supply voltage	V_{CC}	±12V ±5% ~ ±15V ±5% (Rated output current is restricted by Vcc)
Response time	tr	≤ 1μS(at di/dt=If/μs)
Frequency characteristics	f	DC…200kHz (-1 dB)
Thermal drift of gain	TCI_o	≤ ± 0.01%/˚C(Without Tclof)
Thermal drift of offset	TCI_{Of}	≤ ± 0.5mA
Hysteresis error	I_{oH}	≤ 0.3mA (at If=0A → If → If=0A)
Insulation voltage	V_D	AC3000V for 1 minute (Sensing current 0.5mA) inside of through hole ⇔ terminal
Insulation resistance	R_{IS}	≥500MΩ (at DC500V) inside of through hole ⇔ terminal
Ambient Operating temperature	T_A	-40˚C ~ +85˚C
Ambient storage temperature	T_S	-40˚C ~ +90˚C
Secondary coil resistance	R_S	80Ω(@Ta=70˚C) 85Ω(@Ta=85˚C)

Dimension



Unit : mm [inch]

Connection



Unless otherwise specified,
tolerances shall be ±0.5mm