OSWELL
www.eoswell.com

CSPV-LTSH Closed Loop Hall Transducer

CSPV-LTSH series is a current transducer developed based on Hall effect principle, which can measure DC, AC, pulse and various irregular waveform currents under electrical isolation conditions. The sensor is current output mode and can be converted to voltage signals by external resistance according to customer requirements.

Features:
- High Accuracy
- Good Linearity
- Low Temperature Drift
- Short Response Time
- Strong Anti-interference
- Strong Current Overload Capacity

Applications:
- Static DC Motor Drive
- Variable Speed Drive
- Current Monitoring & Battery Applications
- Switching Power Supply
- UPS
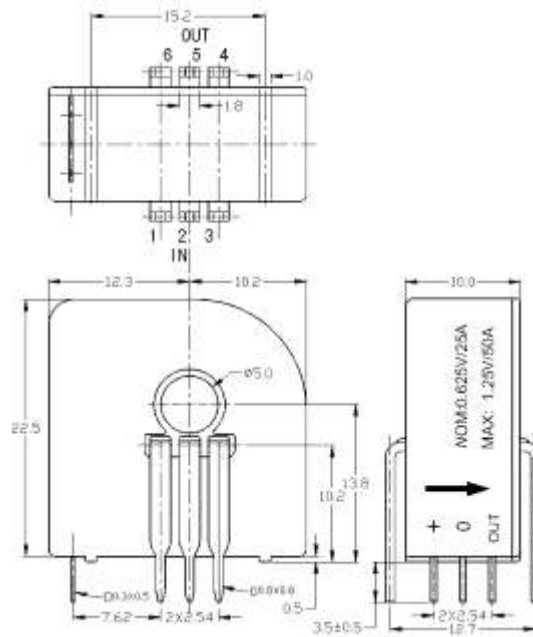- Inverter Power & Welding Power Supply

Dynamic Characteristics

Accuracy	±0.2	%
Zero Point Voltage(No input), T=25℃	2.5	V
Zero Offset Voltage, T=25℃	10	mV
Offset Voltage Temperature Drift	≤±0.2	mV/℃
Linearity εr	≤0.1	%FS
di/dt Following Accuracy	>50	A/μs
Response Time tr	< 1	μs
Bandwidth (-1db)	DC ~ 100	kHz
Creepage Distance(Housing)	15.4	mm

OSWELL E-GROUP LIMITED
ADD:RM.701-703,738 DONG FANG ROAD
SHANGHAI 200122,CHINA
TEL:+86 21 6875 6810/90 FAX:+86 21 6867 1885-16

www.eoswell.com

Electrical Characteristics

TYPE	CSPV-LTSH-6A	CSPV-LTSH-15A	CSPV-LTSH-25A	CSPV-LTSH-50A
Rated Current I_{PN}(A)	6	15	25	50
Measurement Range IP(A)	21.6	54	90	180
Load Resistance R_M (Ω)	30	15	7.5	3.75
Ratio (T) -Np/Ns	1:1152±1	1:1440±1	1:1200±1	1:1200±1
Rated Output Voltage	0.625V±0.5%			
Operating Voltage	+5VDC±5%			
Dielectric Strength	50Hz, 1min, 3kV			
Impulse withstand Voltage@1.2/50μs	8kV			
Operating Temperature	-40℃~85℃			
Storage Temperature	-40℃~125℃			
Operating Humidity	20~90% Non condensing			
Current Consumption	15 mA			
Weight	7g			
REACH Compliant				

OSWELL E-GROUP LIMITED
ADD:RM.701-703,738 DONG FANG ROAD
SHANGHAI 200122,CHINA
TEL:+86 21 6875 6810/90 FAX:+86 21 6867 1885-16

OSWELL
www.eoswell.com

Dimensions (mm) ±0.3mm

Wiring diagram

Primary Winding	Primary Current (A)	Output Voltage (V)	Primary Resistance (mΩ)	Primary Inductance (µH)	PIN
1	±6 (±15,±25,±50)	2.5±0.625	0.18	0.013	
2	±3 (±7.5,±12.5,±25)	2.5±0.625	0.81	0.05	
3	±2 (±5,±8.3, ±16.6)	2.5±0.625	1.62	0.12	

1. Cable perforation input and PCB input modes cannot be used at the same time.
2. PCB input mode. There are three connection modes for inputting PIN: 1T, 2T, 3T; The corresponding input rated current is 6A, 3A, 2A; See the wiring diagram table for the specific connection mode.

Nots：

1. When IP flows in the arrow direction, IS is positive;
2. The temperature of primary conductor shall not exceed 100 ℃;
3. The dynamic performance (di/dt and response time) is the best when the bus is fully filled with primary perforation;
4. In order to achieve the best magnetic coupling, the primary wire turn should be wound around the top of the transducer;