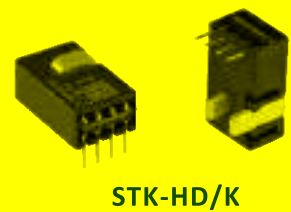


Product Series: STK-HD



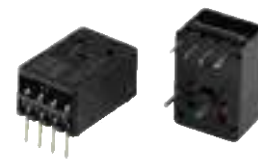
STK-HD/K



STK-HD/P



STK-HD/Q



STK-HD/S

Features

- Open loop design
- Fast response time of 1 μ s
- Wide frequency band width of 600 kHz
- Ferrite magnetic core
- TMR sensing technology
- High isolation voltage

Application

- Solar energy
- Uninterruptible power supply
- Motor driver
- Switching Mode Power Supply
- EV charger

◎ **Absolute parameters**

Parameter	Symbol	Unit	Value
Working temperature	T _A	°C	-40 ~ 105
Supply voltage	V _{cc}	V	6
ESD rating(HBM)	U _{ESD}	kV	4

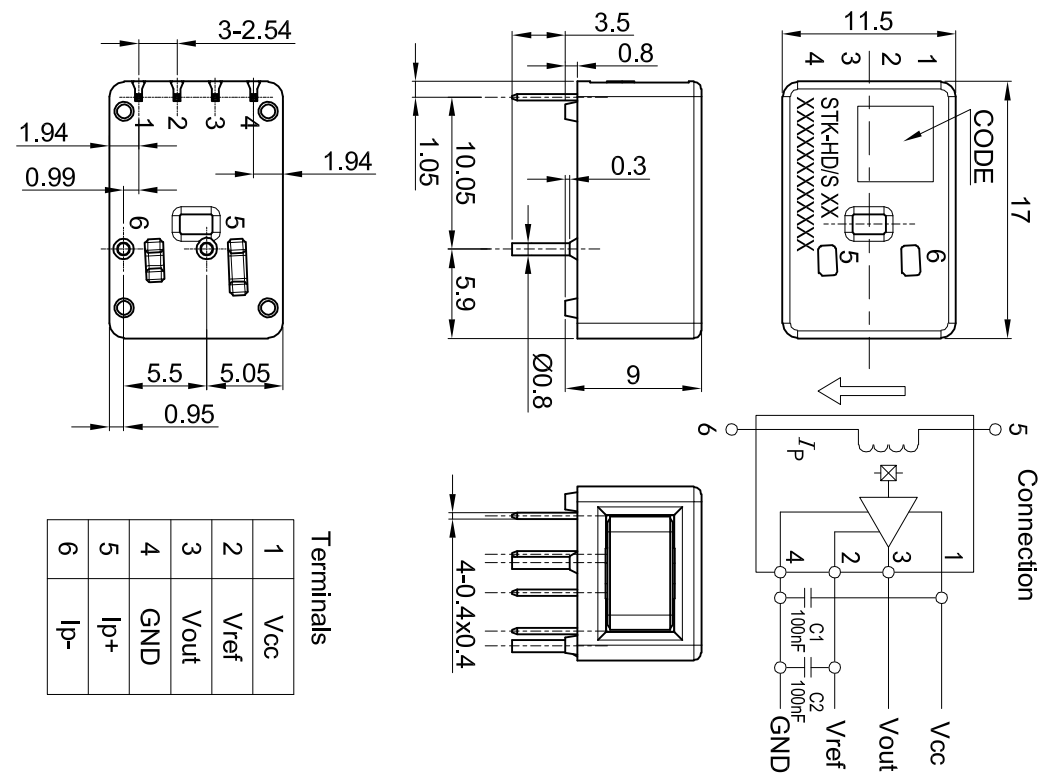
◎ **Isolation parameter**

Paramete	Symbol	Unit	Value	Remark
RMS voltage for isolation test	U _d	kV	4	AC test 50Hz/1 min
Impulse withstand voltage 1.2/50 μ s	Ū _w	kV	6	
Clearance (pri. -sec)	D _{cl}	mm	9.6	See note ①
Creepage (pri. -sec)	D _{cp}	mm	9.6	See note ②
Case material			V0	According to UL 94
Comparative tracking index	CTI	V	≥600	

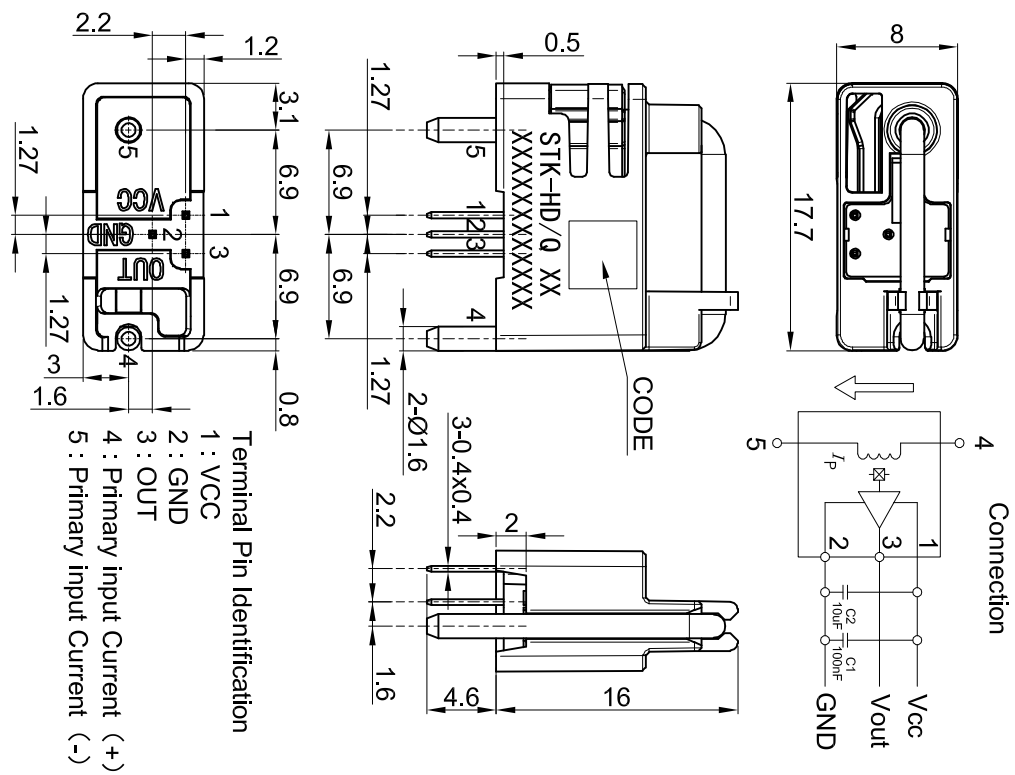
◎ **Electrical parameters**

Product	Partnumber	Out		Normal Current I _{pn} (A)	Current detection range I _{pm} (A)	Supply Voltage V _{cc} (V)	Offset V _{off} , I _{off} (V, mA)	Reference Voltage V _{ref} (V)	Sensitivity Gain (mV/A, mA/A)	Frequency Bandwidth f _{band} (kHz)	Step response time t _r (μ s)	Accuracy Error Acc. (%FS)	Fluxgate	Close-loop	Open-loop
		Voltage	Current												
STK-HD/K	STK-20HD/K	○		20	±50	5	2.5	2.5	40	600	1	1.5			○
	STK-32HD/K	○		32	±80	5	2.5	2.5	25	600	1	1.5			○
	STK-40HD/K	○		40	±100	5	2.5	2.5	20	600	1	1.5			○
	STK-50HD/K	○		50	±125	5	2.5	2.5	16	600	1	1.5			○
STK-HD/P	STK-05HD/P2	○		5	±12.5	5	2.5	2.5	160	600	1	3			○
	STK-10HD/P1	○		10	±10	5	2.5	2.5	200	600	1	3			○
	STK-10HD/P2	○		10	±25	5	2.5	2.5	80	600	1	3			○
	STK-15HD/P1	○		15	±15	5	2.5	2.5	133	600	1	3			○
	STK-15HD/P2	○		15	±37.5	5	2.5	2.5	53	600	1	3			○
	STK-20HD/P1	○		20	±20	5	2.5	2.5	100	600	1	3			○
	STK-20HD/P2	○		20	±50	5	2.5	2.5	40	600	1	3			○
	STK-25HD/P2	○		25	±62.5	5	2.5	2.5	32	600	1	3			○
	STK-30HD/P2	○		30	±75	5	2.5	2.5	26.7	600	1	3			○
	STK-10HD/P2S	○		10	±30	3.3	1.65	2.5	50	600	1	3			○
	STK-20HD/P1S	○		20	±20	3.3	1.65	2.5	62.5	600	1	3			○
	STK-20HD/P2S	○		20	±50	3.3	1.65	2.5	25	600	1	3			○
	STK-30HD/P2S	○		30	±75	3.3	1.65	2.5	16.7	600	1	3			○
STK-HD/Q	STK-25HD/Q	○		25	±30	5	2.5	NA	63	100	1	3			○
	STK-50HD/Q	○		50	±60	5	2.5	NA	27	100	1	3			○
	STK-50HD/Q1	○		50	±60	5	1.65	NA	17.82	100	1	3			○
STK-HD/S	STK-03HD/S	○		3	±7.5	5	2.5	2.5	267	150	2	1.5			○
	STK-05HD/S	○		5	±12.5	5	2.5	2.5	160	150	2	1.5			○
	STK-10HD/S	○		10	±25	5	2.5	2.5	80	150	2	1.5			○

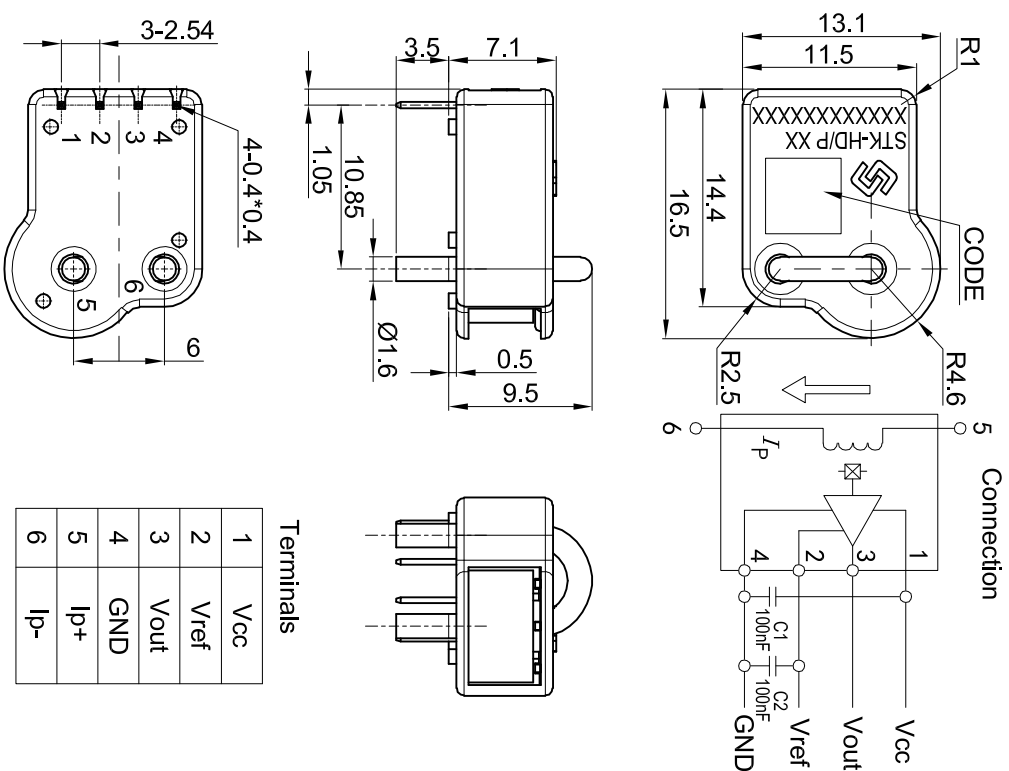
● STK-HD/S



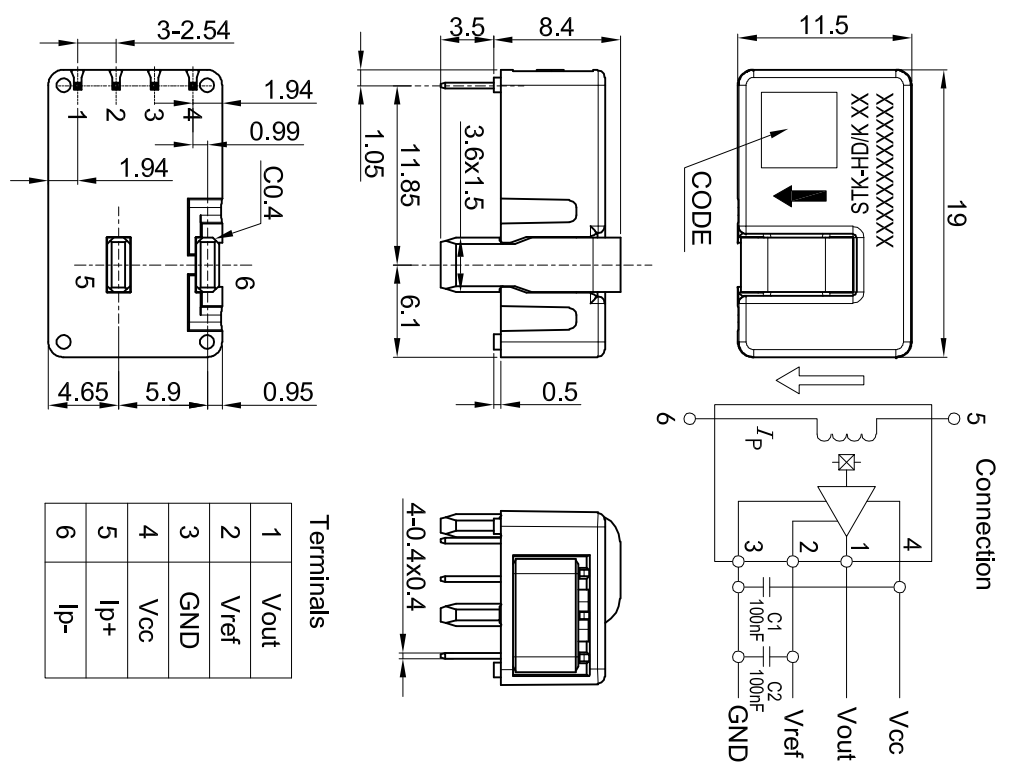
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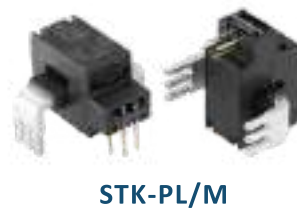
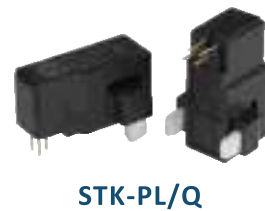
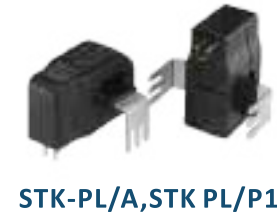
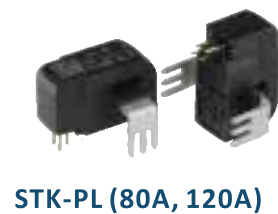
● STK-HD/P



● STK-HD/K



Product Series: STK-PL



Features	Application
· Open loop design · Fast response time of 1.5 μs · Wide frequency band width of 400 kHz · Ferrite magnetic core · TMR sensing technology · High isolation voltage	· Solar energy · Switching Mode Power Supply · Uninterruptible power supply · EV charger · Motor driver

◎Absolute parameters

Parameter	Symbol	Unit	Value
Working temperature	T _A	°C	-40 ~ 105
Supply voltage	V _{cc}	V	6
ESD rating(HBM)	U _{ESD}	kV	4
ESD rating(CDM)	U _{CDM}	kV	1.5

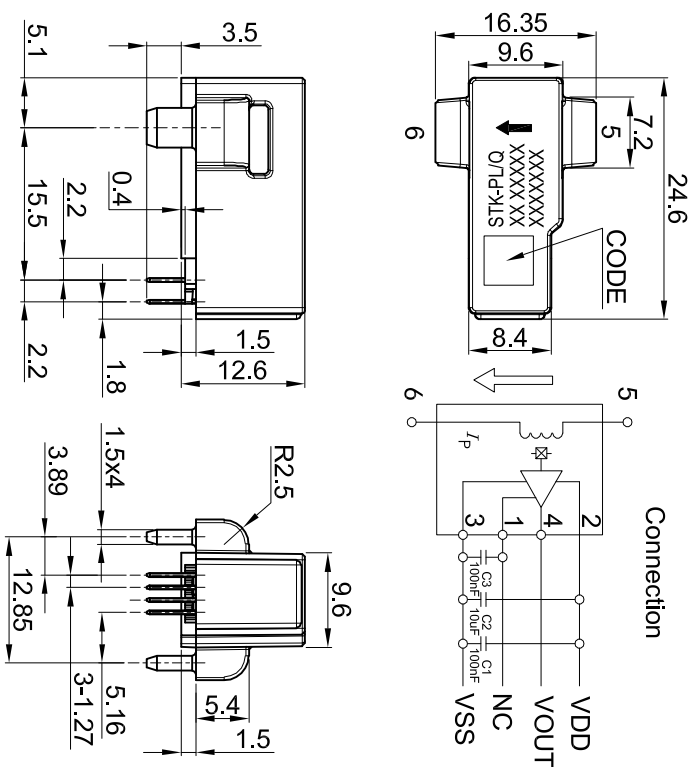
◎Isolation parameter

Paramete	Symbol	Unit	Value	Remark
RMS voltage for isolation test	U _d	kV	5	
Impulse withstand voltage 1.2/50 μ s	Ū _w	kV	8	
Clearance (pri. -sec)	D _{cl}	mm	8	See note ①
Creepage (pri. -sec)	D _{cp}	mm	8	See note ②
Case material			V0	According to UL 94
Comparative tracking index	CTI	V	≥600	

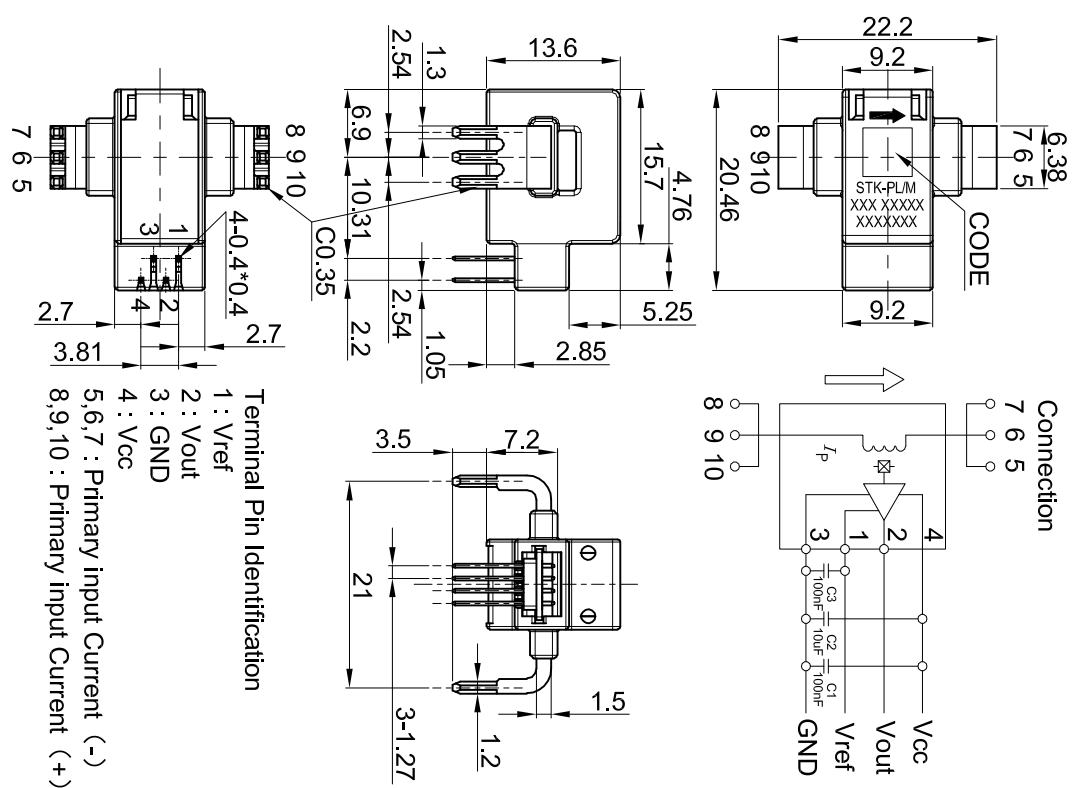
◎Electrical parameters

Product	Partnumber	Out		Normal Current	Current detection range	Supply Voltage	Offset	Reference Voltage	Sensitivity	Frequency Bandwidth	Step response time	Accuracy Error	Fluxgate	Close-loop	Open-loop
		Voltage	Current												
STK-PL/A	STK-10PL/A	○		10	±25	5	2.5	2.5	80	400	1.5	2			○
	STK-20PL/A	○		20	±50	5	2.5	2.5	40	400	1.5	2			○
	STK-32PL/A	○		32	±80	5	2.5	2.5	25	400	1.5	2			○
	STK-40PL/A	○		40	±100	5	2.5	2.5	20	400	1.5	2			○
	STK-50PL/A	○		50	±125	5	2.5	2.5	16	400	1.5	2			○
STK-PL	STK-80PL	○		80	±200	5	2.5	2.5	10	200	3.5	3			○
	STK-120PL	○		120	±300	5	2.5	2.5	6.67	200	3.5	3			○
STK-PL/M	STK-80PL/M	○		80	±200	5	2.5	2.5	10	500	1	2			○
	STK-100PL/M	○		100	±250	5	2.5	2.5	8	500	1	2			○
	STK-120PL/M	○		120	±300	5	2.5	2.5	6.67	500	1	2			○
	STK-150PL/M	○		150	±375	5	2.5	2.5	5.33	500	1	2			○
	STK-180PL/M	○		180	±450	5	2.5	2.5	4.44	500	1	2			○
STK-PL/Q	STK-PL/Q4	○		50	±54	5	2.5	NA	40	300	1.5	3			○
	STK-PL/Q5	○		50	±85	5	2.5	NA	25	300	1.5	3			○
STK-PL/P1	STK-10PL/P1	○		10	±30	5	1.65	1.65	46	400	1.5	3			○
	STK-20PL/P1	○		20	±60	5	1.65	1.65	23	400	1.5	3			○
	STK-32PL/P1	○		32	±96	5	1.65	1.65	14.4	400	1.5	3			○
	STK-50PL/P1	○		50	±150	5	1.65	1.65	9.2	400	1.5	3			○

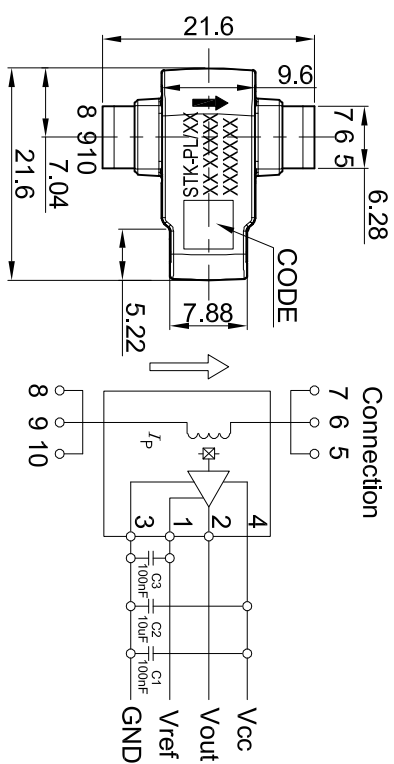
STK-PL/Q



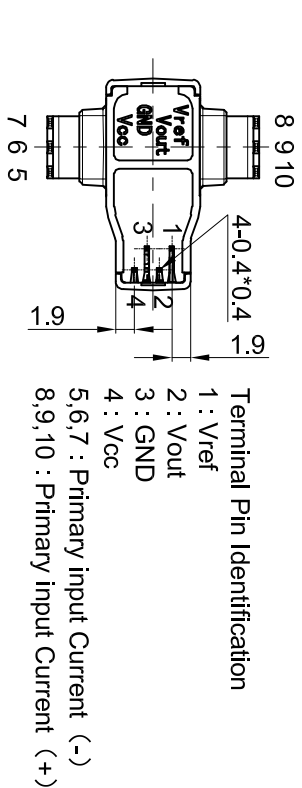
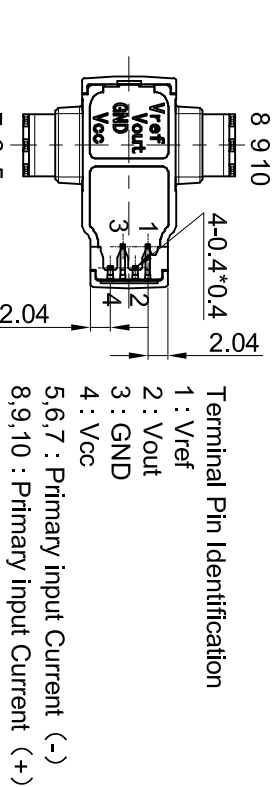
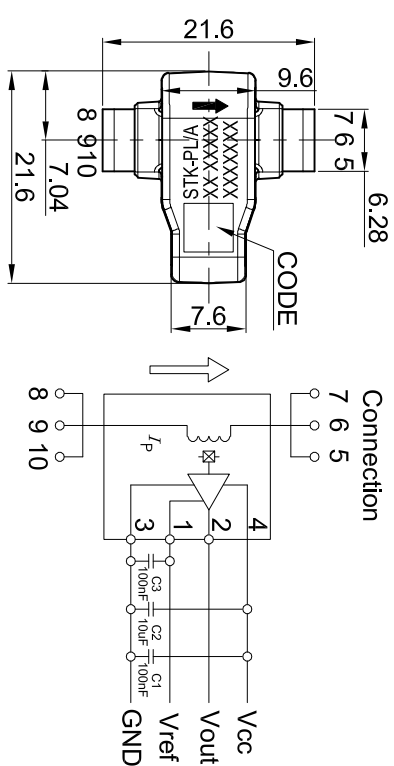
© STK-PL/M



◎ STK-PL (80A, 120A)



◎ STK-PL/A, STK-PL/P1



Electrical parameters

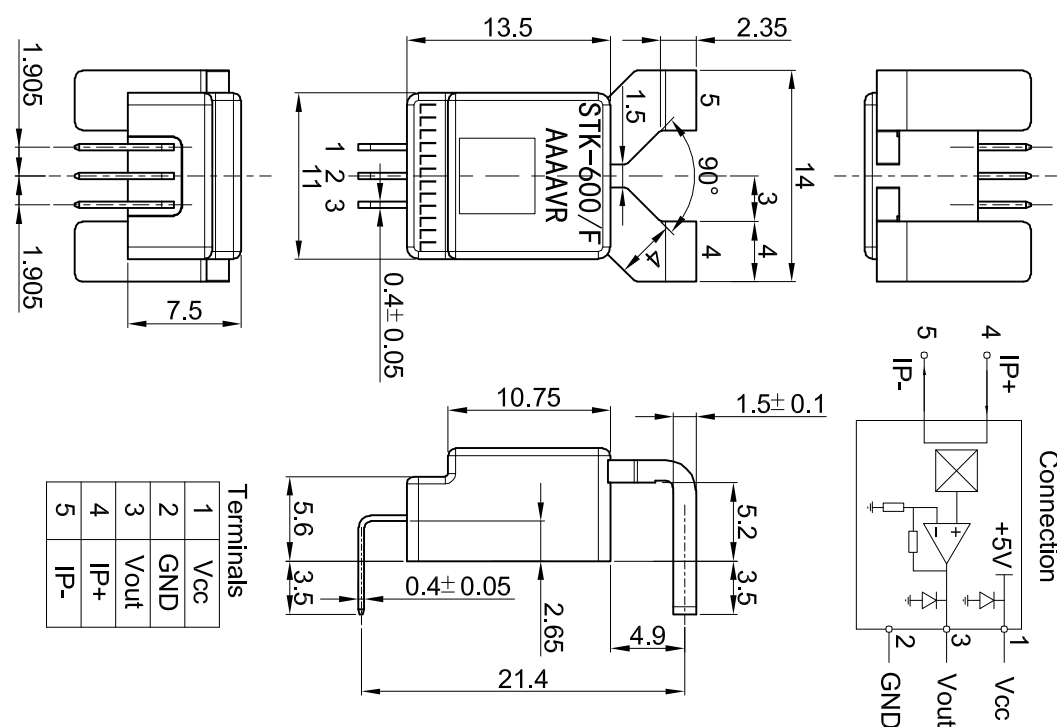
Product	Partnumber	Normal Current	Current detection range	Supply Voltage	Reference Voltage	Sensitivity	Frequency Bandwidth	Step response time	Accuracy Error	Clearance	OCD Function	Close-loop	Open-loop Fluxgate
		I _{pn} (A)	I _{pm} (A)	V _{cc} (V)	V _{ref} (V)	Gain (mV/A, mA/A)	f _{band} (MHz)	t _r (μs)	Acc. (%FS)	mm	OCD		
STK-600/F	STK-600/F-200AB5	50	±200	5	N/A	10	1	0.4	3.5	8	N/A		○
	STK-600/F-250AB5	50	±250	5	N/A	8	1	0.4	3.5	8	N/A		○
	STK-600/F-300AB5	50	±300	5	N/A	6.67	1	0.4	3.5	8	N/A		○
	STK-600/F-400AB5	50	±400	5	N/A	5	1	0.4	3.5	8	N/A		○

Product Series: STK-PL/G



STK-PL/G

Features	Application
· Open loop design · Fast response time of 0.4 μs · Wide frequency band width of 800 kHz · Ferrite magnetic core · TMR sensing technology	· Solar energy · Switching Mode Power Supply · Uninterruptible power supply · Motor driver



Absolute parameters

Parameter	Symbol	Unit	Value
Working temperature	T _A	°C	-40 ~ 105
Supply voltage	V _{cc}	V	6
ESD rating (HBM)	U _{ESD}	kV	4
ESD rating (CDM)	U _{CDM}	kV	1.5

Isolation parameter

Paramete	Symbol	Unit	Value	Remark
RMS voltage for isolation test	U _d	kV	5	AC test 50Hz/1 min
Impulse withstand voltage 1.2/50μs	Ũ _w	kV	8	
Clearance distance (pri. -sec)	D _{cl}	mm	8	See note ①
Creepage distance (pri. -sec)	D _{cp}	mm	8	See note ②
Case material			V0	According to UL 94
Comparative tracking index	CTI	V	≥600	

Electrical parameters

Product	Partnumber	Normal Current	Current detection range	Supply Voltage	Reference Voltage	Sensitivity	Frequency Bandwidth	Step response time	Accuracy Error	Clearance	OCD Function	Open-loop Fluxgate Close-loop
		I _{pn} (A)	I _{pm} (A)	V _{cc} (V)	V _{ref} (V)	Gain (mV/A, mA/A)	f _{band} (kHz)	t _r (μs)	Acc. (%FS)	mm	OCD	
STK-PL/G	STK-10PL/G	±10	±25	5	2.5	80	800	0.4	2	8.5	N/A	○
	STK-20PL/G	±20	±50	5	2.5	40	800	0.4	2	8.5	N/A	○
	STK-32PL/G	±32	±80	5	2.5	25	800	0.4	2	8.5	N/A	○
	STK-50PL/G	±50	±125	5	2.5	16	800	0.4	2	8.5	N/A	○
	STK-40PL/G	±40	±100	5	2.5	20	800	0.4	2	8.5	N/A	○

Product Series: STK-HD/G



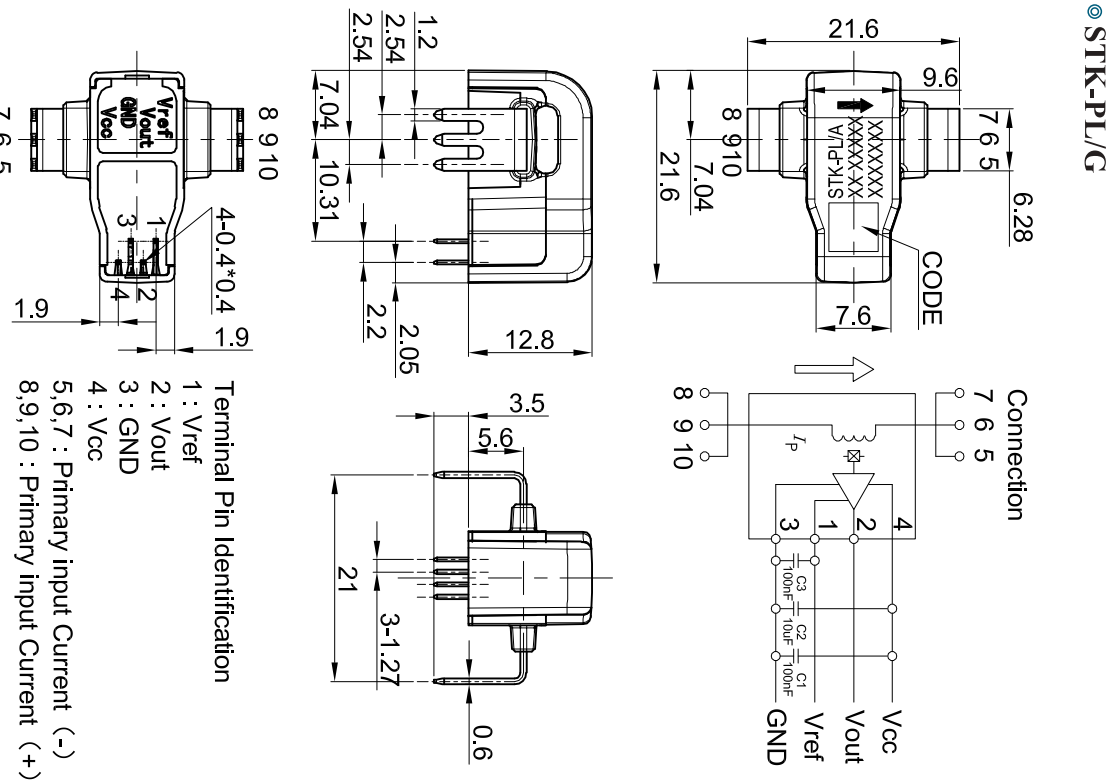
Features	Application
· Open loop design · Fast response time of 0.4 μs · Wide frequency band width of 800 kHz · Ferrite magnetic core · TMR sensing technology	· Solar energy · Uninterruptible power supply · Switching Mode Power Supply · Motor driver · EV charger

Absolute parameters

Parameter	Symbol	Unit	Value
Working temperature	T _A	°C	-40 ~ 105
Supply voltage	V _{cc}	V	6
ESD rating (HBM)	U _{ESD}	kV	4

Isolation parameter

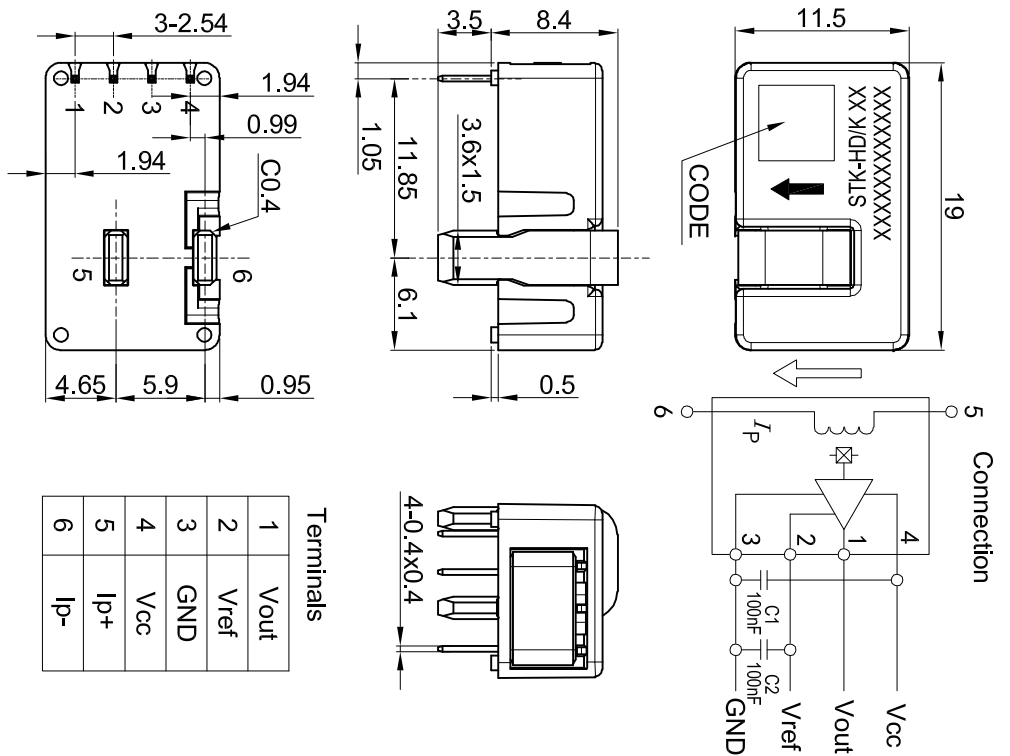
Paramete	Symbol	Unit	Value	Remark
RMS voltage for isolation test	U _d	kV	4	AC test 50Hz/1 min
Impulse withstand voltage 1.2/50μs	Ũ _w	kV	6	
Clearance (pri. -sec)	D _{cl}	mm	9.6	See note ①
Creepage (pri. -sec)	D _{cp}	mm	9.6	See note ①
Case material			V0	According to UL 94
Comparative tracking index	CTI	V	≥600	



Electrical parameters

Product	Partnumber	Normal Current	Current detection range	Supply Voltage	Reference Voltage	Sensitivity	Frequency Bandwidth	Step response time	Accuracy Error	Clearance	OCD Function	Open-loop Fluxgate
		I _{pn} (A)	I _{pm} (A)	V _{cc} (V)	V _{ref} (V)	Gain (mV/A, mA/A)	f _{band} (kHz)	t _r (μs)	Acc. (%FS)	mm	OCD	Close-loop
STK-HD/S/G	STK-03HD/S/G	3	±7.5	5	2.5	266.7	800	0.4	1.5	9.45	N/A	○
	STK-05HD/S/G	5	±12.5	5	2.5	160	800	0.4	1.5	9.45	N/A	○
	STK-10HD/S/G	10	±25	5	2.5	80	800	0.4	1.5	9.45	N/A	○
STK-HD/K/G	STK-20HD/K/G	20	±50	5	2.5	40	800	0.4	1.5	9.85	N/A	○
	STK-32HD/K/G	32	±80	5	2.5	25	800	0.4	1.5	9.85	N/A	○
	STK-40HD/K/G	40	±100	5	2.5	20	800	0.4	1.5	9.85	N/A	○
STK-HD/P/G	STK-50HD/K/G	50	±125	5	2.5	16	800	0.4	1.5	9.85	N/A	○
	STK-15HD/P2/G	15	±45	5	2.5	53	800	0.4	3.0	9	N/A	○
	STK-10HD/P2/G	10	±25	5	2.5	80	800	0.4	3.0	9	N/A	○
	STK-20HD/P2/G	20	±50	5	2.5	40	800	0.4	3.0	9	N/A	○
	STK-25HD/P2/G	25	±62.5	5	2.5	32	800	0.4	3.0	9	N/A	○
	STK-30HD/P2/G	30	±75	5	2.5	26.7	800	0.4	3.0	9	N/A	○
	STK-20HD/P1S/G	20	±20	5	2.5	62.5	800	0.4	3.0	9	N/A	○
	STK-10HD/P2S/G	10	±30	3.3	2.5	50	800	0.4	3.0	9	N/A	○
	STK-20HD/P2S/G	20	±50	3.3	2.5	25	800	0.4	3.0	9	N/A	○
	STK-30HD/P2S/G	30	±75	3.3	2.5	16.7	800	0.4	3.0	9	N/A	○

STK-HD/K/G



STK-HD/S/G

