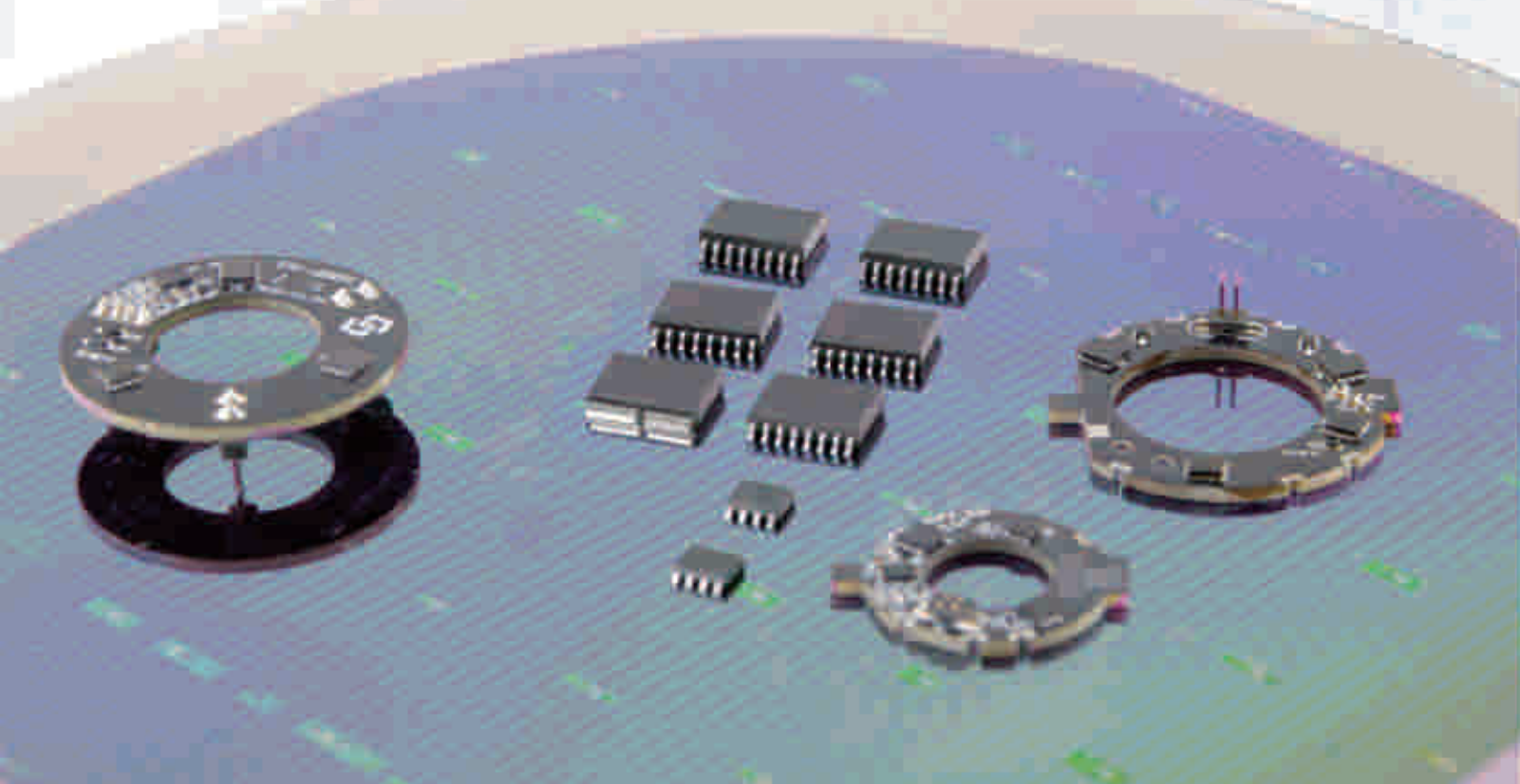


Current sensor — Coreless solution



STK-616AM



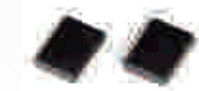
STK-616TM



STK-616KM



STK-616BM



STK-616DM



STK-616EM



STK-616ZM



STK-616YM



STK-LBS/S



STK-LBS/S



STK-LBS/6G



CURRENT SENSOR

— Coreless solution

电流传感器
— 无磁芯方案



Ver 1.2 jun.2024
Email: sinomags@sinomags.com
www.sinomags.com



Features

- Frequency band width of up to 150 ~ 2000 kHz
- Response time of down to 0.05 ~ 1.5 μs
- Open loop design
- Coreless design enables the small dimensions
- Differential magnetic field detection design supports the common-mode field rejection.
- OCD (over current detection) function available
- Support supply voltage of 3.3 V or 5.0 V

Application

- Solar energy
- Motor driver
- Uninterruptible power supply
- Switching Mode Power supply
- EV charger
- EV OBC
- EV DC/DC

Electrical parameters

Type	Partnumeber	Normal Current	Supply Voltage	Sensitivity	Frequency Bandwidth -3dB	Step Response time	Clearance	OCD Function	Trigger Delay	Trigger Holding	X_TRange (%FS)	PRODUCT PACKAGE		
		I _{pn} (A)	V _{cc} (A)	Gain (mV/A ² /mA/A)	f _{band} (kHz)	t _r (us)	d _{CI} (mm)	OCD	t _{mask} (mm)	t _{hold} (mm)	Acc (%FS)			
STK-616DML	STK-616D-12MLB3	±12.5	3.3	37	600	0.9	7.5	YES	0-3	0-4.5	3.5	SOIC16W Like 10.3 × 10.3 mm		
	STK-616D-20MLB3	±20	3.3	25	600	0.9	7.5	YES	0-3	0-4.5	3.5			
	STK-616D-25MLB3	±25	3.3	18.5	600	0.9	7.5	YES	0-3	0-4.5	3.5			
	STK-616D-6MLB5	±6	5	151	600	0.9	7.5	YES	0-3	0-4.5	3.5			
	STK-616D-12MLB5	±12.5	5	56	600	0.9	7.5	YES	0-3	0-4.5	3.5			
	STK-616D-25MLB5	±25	5	28	600	0.9	7.5	YES	0-3	0-4.5	3.5			
STK-616HML	STK-616H-10MLB5	±10	5	80	600	0.9	8	YES	0-3	0-4.5	3.5	SOIC16W Like 10.3 × 10.3 mm		
	STK-616H-15MLB5	±15	5	53.33	600	0.9	8	YES	0-3	0-4.5	3.5			
	STK-616H-20MLB5	±20	5	40	600	0.9	8	YES	0-3	0-4.5	3.5			
	STK-616H-30MLB5	±30	5	26.67	600	0.9	8	YES	0-3	0-4.5	3.5			
STK-616KMF	STK-616K-30MFB5	±30	5	66.6	1500	0.2	7.5	YES	0-3	0-4.5	3	SOIC16W Like 10.3 × 10.3 mm		
	STK-616K-40MFB3	±40	3.3	33	1500	0.2	7.5	YES	0-3	0-4.5	3			
	STK-616K-65MFB3	±65	3.3	20.3	1500	0.2	7.5	YES	0-3	0-4.5	3			
	STK-616K-40MFB5	±40	5	50	1500	0.2	7.5	YES	0-3	0-4.5	3			
	STK-616T-20MLB5	±20	5	100	600	0.9	8	YES	0-3	0-4.5	3.5			
	STK-616T-30MLB5	±30	5	66	600	0.9	8	YES	0-3	0-4.5	3.5			
STK-616TML	STK-616T-40MLB5	±40	5	50	600	0.9	8	YES	0-3	0-4.5	3.5	SOIC16W Like 10.3 × 10.3 mm		
	STK-616T-50MLB5	±50	5	40	600	0.9	8	YES	0-3	0-4.5	3.5			
	STK-616T-65MLB5	±65	5	30.8	600	0.9	8	YES	0-3	0-4.5	3.5			
	STK-616T-75MLB5	±75	5	26.7	600	0.9	8	YES	0-3	0-4.5	3.5			
	STK-616T-100MLB5	±100	5	20	600	0.9	8	YES	0-3	0-4.5	3.5			
	STK-616T-133MLB5	±133	5	15	600	0.9	8	YES	0-3	0-4.5	3.5			
	STK-616T-10MLB3	±10	3.3	132	600	0.9	8	YES	0-3	0-4.5	3.5			
	STK-616T-20MLB3	±20	3.3	66	600	0.9	8	YES	0-3	0-4.5	3.5			
	STK-616T-30MLB3	±30	3.3	44	600	0.9	8	YES	0-3	0-4.5	3.5			
	STK-616T-33MLB3	±33	3.3	39.6	600	0.9	8	YES	0-3	0-4.5	3.5			
	STK-616T-40MLB3	±40	3.3	33	600	0.9	8	YES	0-3	0-4.5	3.5			
	STK-616T-65MLB3	±65	3.3	20.3	600	0.9	8	YES	0-3	0-4.5	3.5			
	STK-616TMF5	STK-616T-10MFB5	±10	5	200	1500	0.6	8	YES	0-3	0-4.5		3.5	SOIC16W Like 10.3 × 10.3 mm
		STK-616T-20MFB5	±20	5	100	1500	0.6	8	YES	0-3	0-4.5		3.5	
STK-616T-40MFB5		±40	5	50	1500	0.6	8	YES	0-3	0-4.5	3.5			
STK-616T-50MFB5		±50	5	40	1500	0.6	8	YES	0-3	0-4.5	3.5			
STK-616T-65MFB5		±65	5	30.8	1500	0.6	8	YES	0-3	0-4.5	3.5			
STK-616T-100MFB5		±100	5	20	1500	0.6	8	YES	0-3	0-4.5	3.5			
STK-616T-133MFB5		±133	5	15	1500	0.6	8	YES	0-3	0-4.5	3.5			
STK-616T-10MFB3		±10	3.3	132	1500	0.6	8	YES	0-3	0-4.5	3.5			
STK-616T-20MFB3		±20	3.3	66	1500	0.6	8	YES	0-3	0-4.5	3.5			
STK-616T-40MFB3		±40	3.3	33	1500	0.6	8	YES	0-3	0-4.5	3.5			
STK-616T-50MFB3		±50	3.3	26.4	1500	0.6	8	YES	0-3	0-4.5	3.5			
STK-616T-65MFB3		±65	3.3	20.3	1500	0.6	8	YES	0-3	0-4.5	3.5			
STK-616TMM		STK-616T-40MWB5	±40	5	50	600	0.2	8	YES	0-3	0-4.5	3.5	SOIC16W Like 10.3 × 10.3 mm	
		STK-616T-65MWB5	±65	5	30.8	600	0.2	8	YES	0-3	0-4.5	3.5		
	STK-616T-20MWB3	±20	3.3	66	600	0.2	8	YES	0-3	0-4.5	3.5			
	STK-616T-40MWB3	±40	3.3	33	600	0.2	8	YES	0-3	0-4.5	3.5			
	STK-616T-65MWB3	±65	3.3	20.3	600	0.2	8	YES	0-3	0-4.5	3.5			
	STK-616T-20MWB5	±20	5	100	600	0.2	8	YES	0-3	0-4.5	3.5			
STK-616TMW	STK-616T-40MWB5	±40	5	50	600	0.2	8	YES	0-3	0-4.5	3.5	SOIC16W Like 10.3 × 10.3 mm		
	STK-616T-65MWB5	±65	5	30.8	600	0.2	8	YES	0-3	0-4.5	3.5			
	STK-616T-20MWB3	±20	3.3	66	600	0.2	8	YES	0-3	0-4.5	3.5			
	STK-616T-40MWB3	±40	3.3	33	600	0.2	8	YES	0-3	0-4.5	3.5			
	STK-616T-65MWB3	±65	3.3	20.3	600	0.2	8	YES	0-3	0-4.5	3.5			
	STK-616T-20MWB5	±20	5	100	600	0.2	8	YES	0-3	0-4.5	3.5			
	STK-616T-40MWB5	±40	5	50	600	0.2	8	YES	0-3	0-4.5	3.5			
	STK-616T-65MWB5	±65	5	30.8	600	0.2	8	YES	0-3	0-4.5	3.5			
	STK-616T-20MWB3	±20	3.3	66	600	0.2	8	YES	0-3	0-4.5	3.5			
	STK-616T-40MWB3	±40	3.3	33	600	0.2	8	YES	0-3	0-4.5	3.5			
	STK-616T-65MWB3	±65	3.3	20.3	600	0.2	8	YES	0-3	0-4.5	3.5			
	STK-616T-20MWB5	±20	5	100	600	0.2	8	YES	0-3	0-4.5	3.5			
	STK-616T-40MWB5	±40	5	50	600	0.2	8	YES	0-3	0-4.5	3.5			
	STK-616T-65MWB5	±65	5	30.8	600	0.2	8	YES	0-3	0-4.5	3.5			

Electrical parameters

Type	Partnumeber	Normal Current	Supply Voltage	Sensitivity	Frequency Bandwidth -3dB	Step Response time	Clearance	OCD Function	Trigger Delay	Trigger Holding	X_TRange (%FS)	PRODUCT PACKAGE		
		I _{pn} (A)	V _{cc} (A)	Gain (mV/A ² /mA/A)	f _{band} (kHz)	t _r (us)	d _{CI} (mm)	OCD	t _{mask} (mm)	t _{hold} (mm)	Acc (%FS)			
STK-616TMWD	STK-616T-20MWDB5	±20	5	40	600	0.2	8	NO	N/A	N/A	3.5	SOIC16W Like 10.3 × 10.3 mm		
	STK-616T-40MWDB5	±40	5	20	600	0.2	8	NO	N/A	N/A	3.5			
	STK-616T-65MWDB5	±65	5	13.3	600	0.2	8	NO	N/A	N/A	3.5			
	STK-616T-33MWDB3	±33	3.3	39.6	600	0.2	8	NO	N/A	N/A	3.5			
	STK-616T-20MWDB3	±20	3.3	66	600	0.2	8	NO	N/A	N/A	3.5			
	STK-616T-40MWDB3	±40	3.3	33	600	0.2	8	NO	N/A	N/A	3.5			
STK-616ZMF	STK-616Z-10MFB5	±10	5	400	2000	0.05	4.2	NO	N/A	N/A	3.5	SOIC8 Like 4.9 × 6.0 mm		
	STK-616Z-10MFB3	±10	3.3	132	2000	0.05	4.2	NO	N/A	N/A	3.5			
	STK-616Z-20MFB5	±20	5	100	2000	0.05	4.2	NO	N/A	N/A	3.5			
	STK-616Z-20MFB3	±20	3.3	66	2000	0.05	4.2	NO	N/A	N/A	3.5			
	STK-616Z-30MFB5	±30	5	66.7	2000	0.05	4.2	NO	N/A	N/A	3.5			
	STK-616Z-30MFB3	±30	3.3	88	2000	0.05	4.2	NO	N/A	N/A	3.5			
	STK-616Z-40MFB5	±40	5	50	2000	0.05	4.2	NO	N/A	N/A	3.5			
	STK-616Z-40MFB3	±40	3.3	66	2000	0.05	4.2	NO	N/A	N/A	3.5			
	STK-616Z-50MFB5	±50	5	40	2000	0.05	4.2	NO	N/A	N/A	3.5			
	STK-616Z-50MFB3	±50	3.3	88	2000	0.05	4.2	NO	N/A	N/A	3.5			
	STK-616Z-65MFB5	±65	5	30	2000	0.05	4.2	NO	N/A	N/A	3.5			
	STK-616Z-65MFB3	±65	3.3	52.8	2000	0.05	4.2	NO	N/A	N/A	3.5			
	STK-616YML	STK-616Y-20MLB5	±20	5	100	400	1	2.1	NO	N/A	N/A		3.5	SOIC8 Like 4.9 × 6.0 mm
		STK-616Y-25MLB5	±25	5	80	400	1	2.1	NO	N/A	N/A		3.5	
STK-616Y-30MLB5		±30	5	66.7	400	1	2.1	NO	N/A	N/A	3.5			
STK-616Y-40MLB5		±40	5	50	400	1	2.1	NO	N/A	N/A	3.5			
STK-616Y-50MLB5		±50	5	40	400	1	2.1	NO	N/A	N/A	3.5			
STK-616Y-50MLB3		±50	3.3	26.4	400	1	2.1	NO	N/A	N/A	3.5			

Electrical parameters

Type	Partnumeber	Normal Current	Supply Voltage	Sensitivity	Frequency Bandwidth -3dB	Step Response time	Clearance	OCD Function	Trigger Delay	Trigger Holding	X_TRange (%FS)	PRODUCT PACKAGE
		I _{pn} (A)	V _{cc} (A)	Gain (mV/A ² /mA/A)	f _{band} (kHz)	t _r (us)	d _{CI} (mm)	OCD	t _{mask} (mm)	t _{hold} (mm)	Acc (%FS)	
STK-616AM3	STK-616A-50ML3B5	±50	5	40	600	0.9	8.5	YES	0-3	0-4.5	3.5	SOIC10 Like 10.9 × 12.7 mm
	STK-616A-50ML3B3	±50	3.3	26.4	600	0.9	8.5	YES	0-3	0-4.5	3.5	
	STK-616A-66ML3B5	±66	5	30	600	0.9	8.5	YES	0-3	0-4.5	3.5	
	STK-616A-90ML3B5	±90	5	22.2	600	0.9	8.5	YES	0-3	0-4.5	3.5	
	STK-616A-25ML5B5	±25	5	80	600	0.9	8.5	YES	0-3	0-4.5	3.5	
STK-616AM5	STK-616A-50ML5B5	±50	5	40	600	0.9	8.5	YES	0-3	0-4.5	3.5	SOIC10 Like 10.9 × 12.7 mm
	STK-616A-60ML5B5	±60	5	33.3	600	0.9	8.5	YES	0-3	0-4.5	3.5	
	STK-616A-80ML5B5	±80	5	25	600	0.9	8.5	YES	0-3	0-4.5	3.5	
	STK-616A											