

2023



# 2023 NEW PRODUCT MANUAL

2023年新产品手册

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江苏长晶科技股份有限公司  
JIANGSU CHANGJING ELECTRONICS TECHNOLOGY CO.,LTD.

# CHANGJING ELEC. TECH.

## 长晶科技

江苏长晶科技股份有限公司是一家**专业从事半导体产品研发、生产和销售**的企业。

江苏长晶科技股份有限公司是一家专业从事半导体产品研发、生产和销售的企业。公司成立于 2018 年 11 月，总部坐落于江苏南京江北新区研创园，在深圳、上海、北京、香港等地设立子公司及办事处。

公司拥有成品（分立器件、电源管理 IC）和晶圆两大类，种类多元、系列齐全。二极管、三极管、MOSFET 拥有完整的产品系列和型号，处于国内市场领导地位；IGBT 单管 / 模块和第三代半导体等新产品完成产品体系搭建，产品型号不断完善；以 LDO、DC-DC、锂电保护为代表的电源管理 IC 产品也达到国内主流水平。同时，公司产品已覆盖消费级、工业级和车规级标准，广泛应用于消费电子与工业电子领域，可以满足客户一站式采购需求。

公司秉持“创造世界一流的半导体品牌”的发展愿景，以实现我国功率半导体领域关键核心技术的自主可控为己任，以“研发引领”和“供应链协同”双轮驱动为发展战略，努力锻造技术优势，稳步推进供应链整合，持续深耕及推动分立器件和电源管理 IC 等业务板块快速、稳健、可持续发展。



# 01

## 新顺工厂

地点：中国江苏省江阴市

业务范围：晶圆研发和制造工厂

# 02

## 浦联工厂

地点：江苏省南京市浦口开发区

占地面积：170000 m<sup>2</sup>

建筑面积：123022 m<sup>2</sup>

业务范围：功率器件 / 封测



# 03

## 海德工厂

地点：中国江苏省江阴市临港镇

占地面积：12000 m<sup>2</sup> / 建筑面积：9600m<sup>2</sup>

业务范围：功率器件 / 封测





# JSCJ History

Create a world-class semiconductor brand



## 2007

成立深圳长晶半导体有限公司

Established Shenzhen Changjing Semiconductor Co., Ltd.



## 2018

江苏长晶科技有限公司重组成立

Jiangsu Changjing Electronics Technology Co., Ltd. was reorganized and established



## 2019

成立深圳长晶微电子有限公司

Shenzhen Changjing Microelectronics Co., Ltd. was established

## 2020

完成 A 轮融资

Round A financing

收购江苏海德半导体有限公司

Acquisition of Jiangsu High Diode Semiconductor Co., Ltd.



## 2021

投资新建江苏长晶浦联功率半导体有限公司

Invest in the construction of Jiangsu Changjing Pulian Power Semiconductor Co., Ltd.

完成股份制改革

Complete the shareholding reform

投资成立南京长芯检测科技有限公司

Invest and establish Nanjing Changxin Testing Technology Co., Ltd.

## 2022

收购江苏新顺微电子股份有限公司

Acquisition of Jiangsu Xinshun Microelectronics Co., Ltd.

完成 B 轮融资

Round B financing





## 产品系列

## 三极管

小信号三极管

数字晶体管

功率三极管

达林顿管

## 二极管

快恢复二极管FRD

PIN二极管

肖特基二极管SBD

静电放电二极管ESD

开关二极管

瞬态抑制二极管TVS

整流二极管/桥

稳压二极管ZENER

## MOSFET

屏蔽栅沟槽SGT MOS

超结SJ MOS

沟槽TRENCH MOS

平面Planar MOS

## IC

LDO

比较器

DC-DC

达林顿阵列

马达驱动

锂电保护IC

基准电源

运放

充电管理IC

电压检测

三端稳压集成电路

复位IC

## IGBT

IGBT单管

IGBT模块

第三代  
半导体

碳化硅SBD

氮化镓HEMT

碳化硅MOSFET

## 汽车电子

车规级三极管

车规级Crystal

车规级二极管

车规级MOSFET

## 晶圆

普通二、三极管晶圆

肖特基晶圆

TVS晶圆

MOSFET晶圆

FRD晶圆

IGBT晶圆

JSCJ



## 01

### 配套方案

- 1 PD——快充适配器
- 2 PD——无线充电器
- 3 TWS 耳机
- 4 手机
- 5 PC 主板
- 6 锂电保护板
- 7 扫地机器人
- 8 电机驱动
- 9 户外电源
- 10 5G 基站电源
- 11 电表
- 12 冰箱
- 13 洗衣机
- 14 空调
- 16 电视
- 17 热水器
- 18 微逆变器
- 19 组串式逆变器
- 20 伺服电机
- 21 汽车车灯

## 02

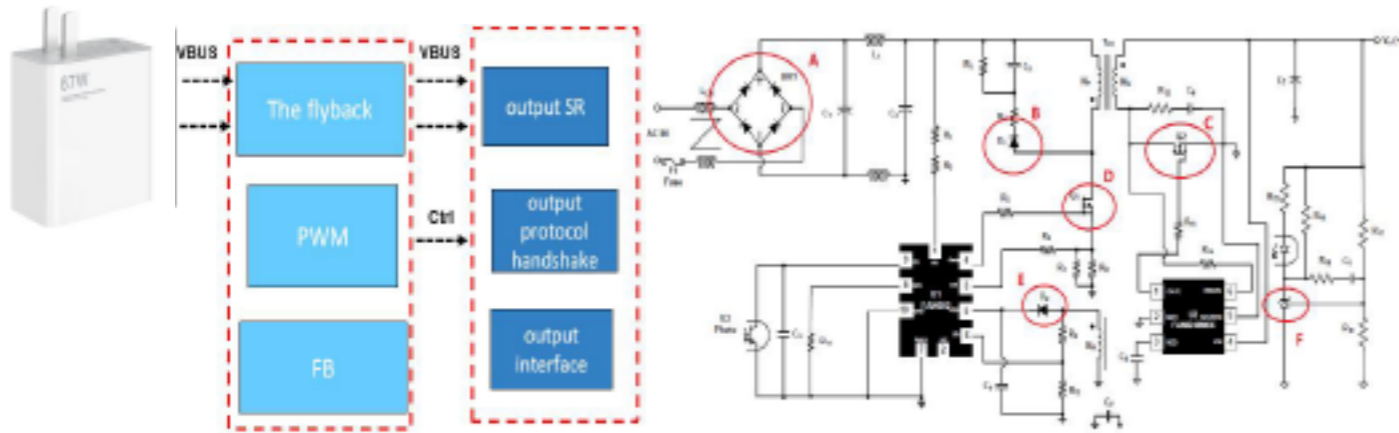
### 选型表

- 22 IC 产品系列
- 26 MOSFET 产品系列
- 30 肖特基二极管产品系列
- 31 TVS 产品系列
- 35 频率器件产品系列
- 36 IGBT 单管
- 36 FRD



PD——快充适配器

为满足当下智能手机和平板电脑等电子产品充电需求，针对PD快充适配器市场，长晶提供了整流管(改善CE特性)，稳压管，TVS，MOSFET（初级高压、次级同步、输出开关）等产品，同步整流MOS(40~150V系列)采用先进的SGT工艺，具有低内阻、低损耗、高频率、高效率的特点。满足PD体积小需求，解决温升及EMI等技术难题。



Function	Part Number	VRRM (V)	IF (A)	IFSM (A)	trr (ns)	Package	Function	Part Number	Vds (V)	Rds(on)(mΩ) @10V TYP	ID (A)	Qg (nC)	Vgs(th) (V)	Package
RCD	S1ML	1000	1	30	-	SOD-123FL	SR MOSFET	CJQ14SN06	60	9.7	14	19.9	2	SOP8
	RS1ML	1000	1	30	500	SOD-123FL		CJAC13TH06	60	2.2	130	63.7	1.8	PDFNWB5x6-8L
	S2MF	1000	2	60	-	SMAF		CJAC65SN10	100	9	65	27	2	PDFNWB5x6-8L
	RS2MF	1000	2	60	500	SMAF		CJAC65SN10L	100	11	65	23	2.1	PDFNWB5x6-8L
Rectifier Diodes	RS3MF	1000	3	90	500	SMAF		CJAC80SN10	100	6.2	80	50	1.9	PDFNWB5x6-8L
	RS3MBF	1000	3	100	500	SMBF		CJAC80SN10H	100	6.7	80	48	3.3	PDFNWB5x6-8L
	RS4MBF	1000	4	120	500	SMBF		CJAC110SN10L	100	4.3	110	78	2	PDFNWB5x6-8L
Bridge	RJBF310	1000	3	95	500	JBF		CJAC110SN10H	100	4.5	110	71	3	PDFNWB5x6-8L
	RMSB30MA	1000	3	110	250	UMSB								
	RMSB40M	1000	4	100	500	UMSB								

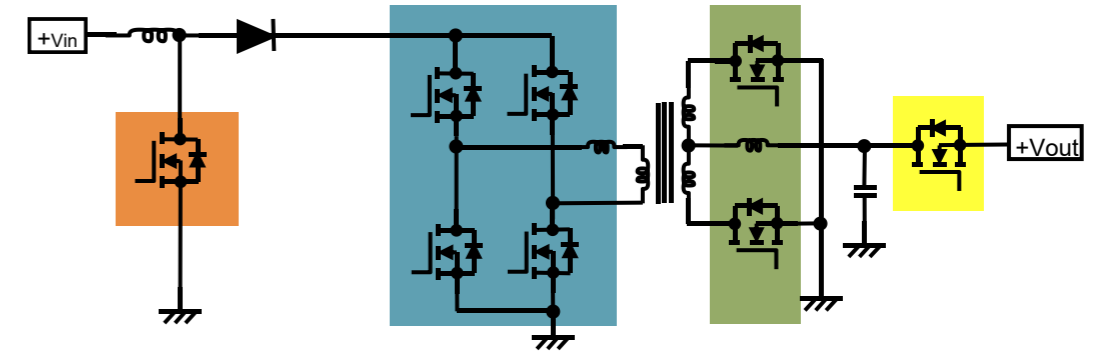
Function	Part Number	Vds (V)	RDS(on) (mΩ) @10V TYP	ID (A)	Package
MOSFET	CJAB35N03S	30	5.2	35	PDFN3.3x3.3-8L
	CJAB55N03S	30	3.8	55	PDFN3.3x3.3-8L
	CJAB75N03U	30	2.1	75	PDFN3.3x3.3-8L
Function	Part Number	Vds (V)	RDS(on) (mΩ) @10V TYP	ID (A)	Package
SJ MOS	CJPF360JN65A	650	320	11.5	TO-220F

Function	Part Number	VRRM (V)	CJ (PF)	VC (V)	IPP (A)	Package
TVS	SMF170A	170	-	275	0.7	SOD-123FL
	ESDG5V0AP	5	160	17	25	SOT-23

Function	Part Number	Vin (V)	Vout (V)	Iout (mA)	Vdrop (mV)	Iq (uA)	PSRR (dB@1KHz)	Feature	Package
LDO	CJ6330B33M	2.5~18	3.3	300	160	2	65	小封装/低噪声 低功耗	SOT-23-5L
	CJ6330B50M	2.5~18	5	300	160	2	65	小封装/低噪声 高PSRR	SOT-23-5L

PD——无线充电器

针对PD无线充市场，其USB输入控制，线圈切换，全桥逆变电路中，我们可提供多种MOS（低内阻，小封装）匹配方案，多款晶振（小封装SMD2016）搭配定频电路，为不同功率的无线充电器提供丰富的外围器件搭配选择。



Function	Part Number	VDS (V)	VGS (V)	ID (A)	RDS(ON) (mΩ)		Ciss (pF)	Qg (nC)	Package
					TYP@10V	TYP@4.5V			
MOS	2N7002K	60	±20	0.34	900	1100	40	-	SOT-23
MOS	CJAB35N03S	30	±20	35	5.2	7.5	1100	24	PDFNWB3.3x3.3-8L
MOS	CJAB35SN03	30	±20	35	6	8	630	18	PDFNWB3.3x3.3-8L
MOS	CJAB55N03S	30	±20	55	3.8	5.9	2800	50	PDFNWB3.3x3.3-8L
MOS	CJAE35SN06	60	±20	35	7.5	10.5	1270	28	DFNWB3x3-8L
MOS	CJQ14SN06	60	±20	14	9.7	12.8	1257	19.9	SOP8
MOS	CJMP3009G	-30	±20	-9	19	27	1400	25	DFNWB2x2-6-J
MOS	CJBD3020	30	±20	20	9.5	14.5	823	14	PDFNWB3.3x3.3-8L-B
MOS	CJFB30H20	30	±20	20	8.5	12	823	13	DFNWB5x6-8L

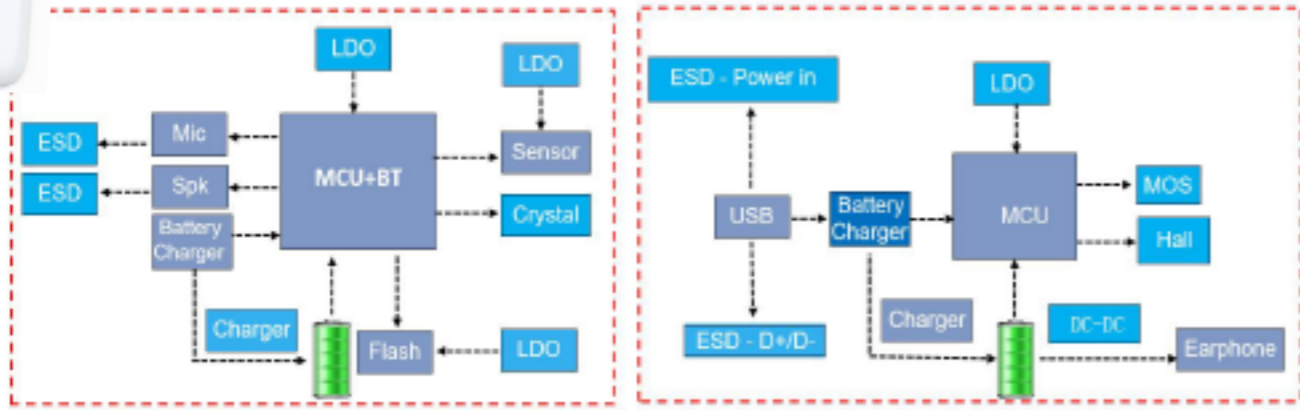
Function	Part Number	Vin (V)	Vout (V)	Iout (mA)	Vdrop (mV)	Iq (uA)	PSRR (dB@1KHz)	Feature	Package
LDO	CJ6330B33M	2.5~18	3.3	300	160	2	65	小封装/低噪声 低功耗	SOT-23-5L
	CJ6330B50M	2.5~18	5	300	160	2	65	小封装/低噪声 高PSRR	SOT-23-5L

Function	Part Number	VRWM (V)	IF (A)	VF (A)	IR (uA)	Package
SBD	DSS34	40	3	0.55	500	SOD-123FL
SBD	DSS36	60	3	0.7	500	SOD-123FL



### TWS耳机

TWS耳机市场发展迅猛，在人手一副耳机的时代，针对TWS耳机充电仓，我司可提供小封装（0201、0402）TVS管，小封装（SMD2016）晶振，小信号MOS及锂电保护MOS（CSP封装），丰富的产品型号，为充电仓提供多样化的搭配方案。



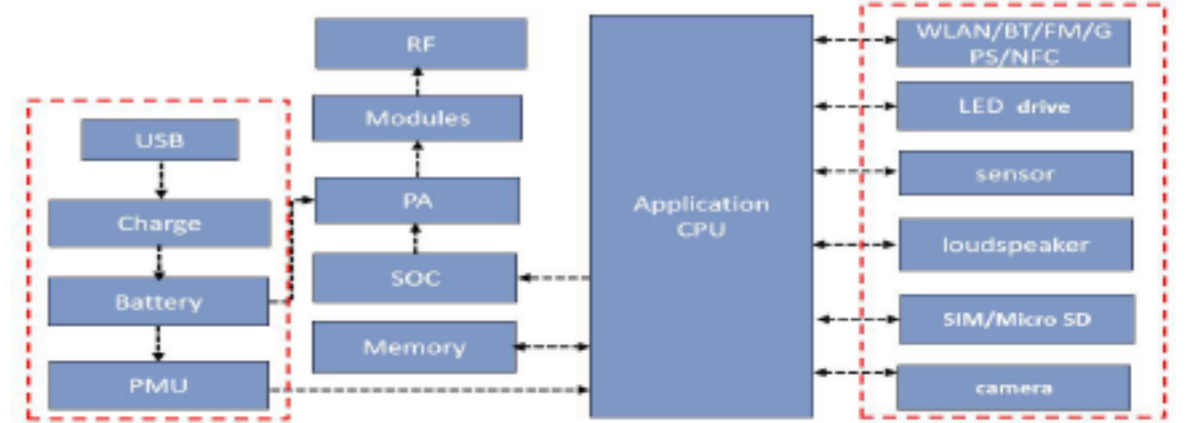
Function	Part Number	TYPE	VSS (V)	VGS (V)	ID/IS (A)	RDS(on) (mΩ)			Package
						TYP@4.5V	TYP@3.8V	TYP@2.5V	
MOS	CJBA3134K	N	20	±12	0.75	250	-	300	DFN1006-3L
MOS	CJ4616SP	N+N	15	±12	8	14	15	19	CSPB1515-4
MOS	CJ4502SP	N+N	20	±12	3.5	22.6	23.3	27.7	CSPB1111-4
MOS	CJ4506SP	N+N	20	±12	10	11.2	-	14.7	CSPB1717-4
MOS	CJ4612SP	N+N	22	±12	6	30	32	42	CSPB1313-4

Function	Part Number	Vin (V)	Vout Max (V)	Iout (mA)	Iq (uA)	Package	Feature	Function	Frequency (MHz)	Load Capacitance (pF)	Package
Charger	CJ40562	4.25-28	4.35	300	-	DFN2x2-8	最低充电电流5mA	Crystal	32	6/8/9	2.0*1.6*0.5mm
Boost	CJ9311	0.9-5.5	5	1100	300	SOT-23-6L	超低待机功耗1uA	Crystal	40	9/12	2.0*1.6*0.5mm
Boost	CJ9321	2.7-6.0	5.5	2500	190	SOT-23-6L	超低待机功耗0.1uA	Crystal	26	7/8/9/12	2.0*1.6*0.5mm
LDO	CJ6206	2.0-7.0	5	300	5	DFNWB1x1-4L, SOT23-3L/-5L	封装小待机功耗低	Crystal	24	9/10/12	2.0*1.6*0.5mm
LDO	CJ6101	1.8-6.0	5	300	0.8	DFNWB1x1-4L, SOT23-3L/-5L	封装小待机功耗低	Function	Part Number	VCEO (V)	Package
								Transistor	MMBT3904	40	SOT-23

Function	Part Number	Ppp (W)	VRWM (V)	VBRMin (V)	VBRMax (V)	IR (uA)	CJ (PF)	VC (V)	IPP (A)	Package
TVS	ESDBM3V3AE1	80	3.3	3.6	4.8	1	22	6.4	9	DFNWB0.6x0.3-2L
	ESDBS3V3AE1	120	3.3	3.8	-	0.01	34	8.5	16	DFNWB0.6x0.3-2L
	ESDSU5V0AE1	80	5	6.5	9	0.5	0.24	20	4	DFNWB0.6x0.3-2L
	ESDHB5V0AE1	80	5.5	6	8.8	0.1	20	15	7	DFNWB0.6x0.3-2L
	ESDBM7V0A1	297.5	7	7.5	10.5	1	50	12	17	DFN1006-2L
	ESDQ12VFA1	1650	12	13	16	1	500	30	55	WBFBP-02L

### 手机

手机已经成为我们生活中必不可少的一部分，随着手机技术的更新换代，我们的产品也紧跟步伐不断创新，针对手机市场，我们提供小封装（0201、0402）静电TVS管，小信号MOS（CSP封装），超低功耗LDO可提供多种组合方案，满足产品设计的多样化。



Function	Part Number	VRWM (V)	IPP (A)	VC (V)	CJ (PF)	Ppp (W)	Package
TVS	ESDI4V8FD1	4.85	165	17	350	3135	DFN1610-2L
	ESDSU5V0AE1	5	4	20	0.24	80	DFN0603-2L
	ESDBVD5V0AE1	5	4	13	3	52	DFN0603-2L
	ESDBU18VA1	18	4	12	0.35	48	DFN1006-2L
	ESDE24VP1	24	190	40	740	7600	DFN2020-3L

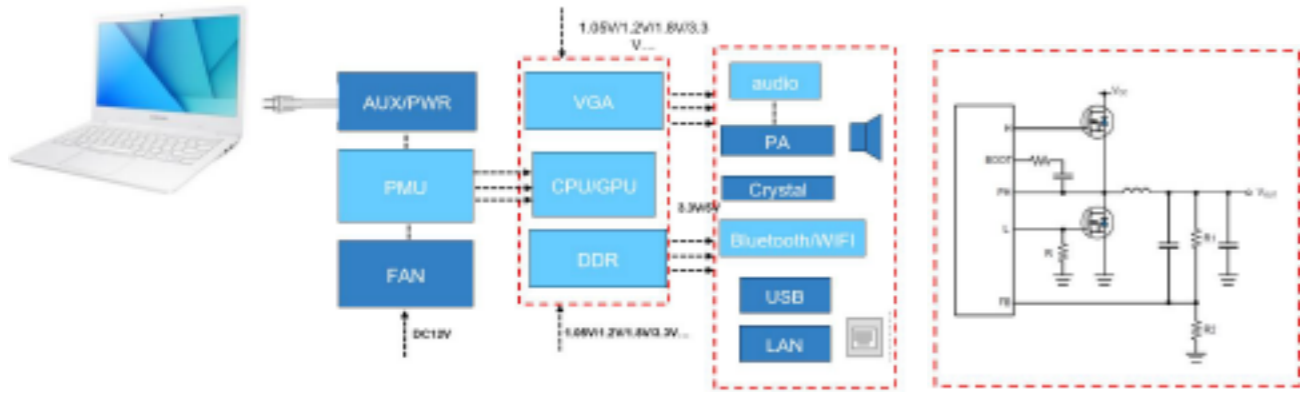
Function	Part Number	Vin (V)	Vout (V)	Iout (mA)	Vdrop (mV)	Iq (uA)	PSRR (dB@1KHz)	Package
LDO	CJ6206 Series	2.0~7.0	1.2~5.0	300	150	5	65	DFNWB1x1-4L SOT-89-3L SOT-23-3L/-5L
	CJ6211 Series	1.8~6.0	1.2~5.0	500	50	50	80	DFNWB1x1-4L SOT-23-3L/-5L

Function	Part Number	Vds/VR (V)	RDS(on) (mΩ) @4.5V TYP	ID/IC (A)	Package	Function	Part Number	Vds (V)	RDS(on) (mΩ) @4V TYP	ID (A)	Package
Transistor+ MOS	CJMNT33	20/-32	250	0.8/-1.5	DFNWB2x2-6L-I	MOSFET	CJMN3010	30	12.8	10	DFNWB2x2-6L
Function	Part Number	TYPE	VCEO (V)	IC (A)	Package	Function	Part Number	VRRM (V)	Io (A)	TRR (ns)	Package
Transistor	CJZ253PL	PNP	-32	-3	DFNWB3x2-8L	Schottky Diodes	B1040A1	40	1	<10	DFN1006-2L
	CJZ255PL	PNP	-20	-5	DFNWB3x2-8L-H						



### PC主板

PC分为台式PC和笔记本，PC主板的性能决定了PC的高度，而PC电源供电系统直接影响PC主板的工作。我们针对PC主板供电系统中的上下桥，开发出低结电容（Ciss），低内阻（ $2m\Omega\sim 7m\Omega$ ）MOS，优秀的开关频率特性，可满足多种上下桥组合，散热性，稳定性大大提高，满足PC主板高负载的工作。



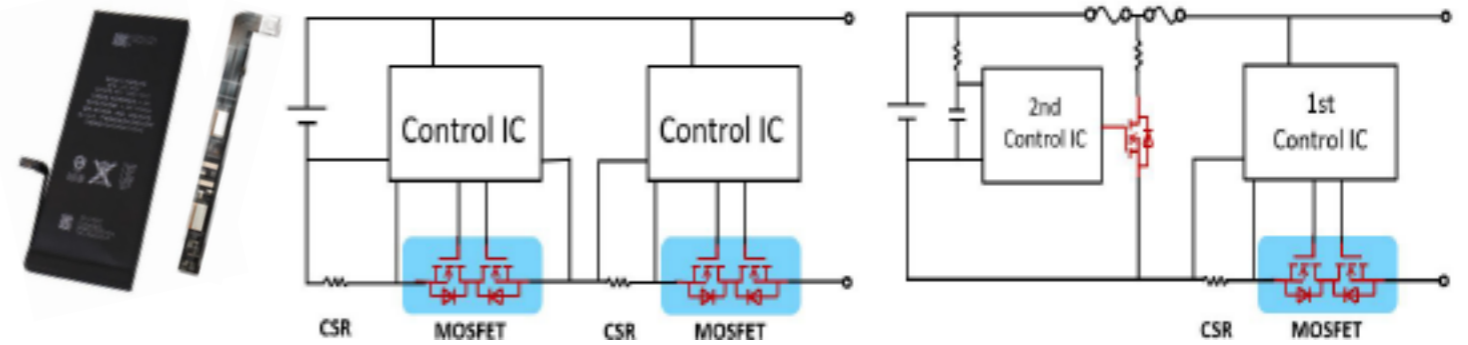
Function	Part Number	Vds (V)	RDS(on) (mΩ) @10V TYP	RDS(on) (mΩ) @4.5V TYP	ID (A)	Qg (nC)	V(th) (V)	Package
MOSFET	CJAC18SN03	30	10.5	16.5	18	6	1.0~2.5	PDFNWB5x6-8L
	CJAC35N03S	30	5.2	7.5	35	24	1.3~2.5	PDFNWB5x6-8L
	CJAC40SN03	30	6	8	40	13.7	1.2~2.5	PDFNWB5x6-8L
	CJAC1R3SN03C	30	1.0	1.5	200	62	1.2~2.5	PDFNWB5x6-8L

Function	Part Number	VRWM (V)	IPP (A)	VC (V)	CJ (pF)	Ppp (W)	Package
TVS	ESDBU3V3AE1	3.3	4	6	0.4	24	DFN0603-2L
	ESDBL5V0AH1	5	6	7.2	13	60	DFN1006-2L
	ESDTU5V0A1	5	4	10.5	0.35	45	DFN1006-2L
	ESDTU5V0AG4B	5	3	12	0.15	40	DFNWB2.5x1.0-10L-B

Function	Part Number	Vin (V)	Vout (V)	Iout (mA)	Vdrop (mV)	Iq (uA)	PSRR (dB@1KHz)	Package
LDO	CJ6206 Series	2.0~7.0	1.2~5.0	300	150	5	65	SOT-89-3L
								SOT-23/-3L/-5L
	CJ6205 Series	2.0~6.2	1.2~5.0	500	150	50	75	SOT-23/-3L/-5L
								SOT-23/23-3L/5L
	CJ6211 Series	1.8~6.0	1.0~5.0	500	50	50	80	DFNWB1x1-4L
1117 Series	20	1.2~5.0	1000	1300	10000	60	SOT-223	
							SOT-89-3L	
							TO-252-2L	

### 锂电充电保护板

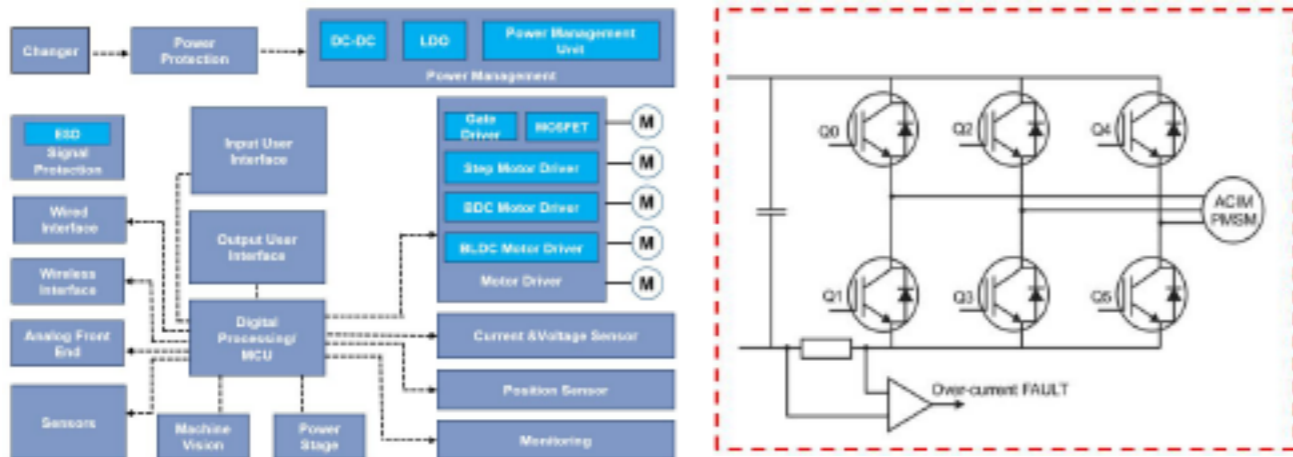
近年来锂电池市场快速发展，而充电保护板是电池组中非常核心的部件之一，为提高保护板的稳定性，我们针对锂电充电保护板模块提供多款电学性能优良，散热性能优秀的CSP封装MOS，独特CSP封装，内部附带ESD静电防护，尺寸超小超薄，配合超小封装(0201)TVS,让锂电产品做到更精密细致。



Function	Part Number	TYPE	VDS (V)	VGS (V)	ID/IS (A)	RDS(on) (mΩ)			Package
						TYP@4.5V	TYP@3.8V	TYP@3.1V	
MOS	CJAE2002	N+N	18	±12	15	4.4	4.6	4.9	DFNWB3x3-8L-J
	CJCD2003	N+N	18	±12	12	6.2	6.8	7.2	DFNWB2x3-6L
	CJCD2004	N+N	20	±12	10	7.3	7.8	8.2	DFNWB2x3-6L
	CJCD2005	N+N	20	±12	8	9	9.7	10.6	DFNWB2x3-6L
	CJCD2007	N+N	20	±12	8	12.5	13.5	14.5	DFNWB2x3-6L
	CJL2016	N+N	20	±10	6	15.7	16.4	-	SOT-23-6L
	CJL8810	N+N	20	±12	7	14.5	15.6	-	SOT-23-6L
	CJS9004	N+N	20	±12	10	7.5	8.4	8.9	TSSOP8
	CJS8810	N+N	20	±12	7	14.2	15.4	-	TSSOP8
	CJ6207SP	N+N	12	±8	8.5	4	4.2	4.9	CSPB2213-6
	CJ8208SP	N+N	12	±8	14	2	2.1	2.4	CSPC3015-10
	CJ8209SP	N+N	12	±8	17	1.2	1.3	1.5	CSPC2624-10
	CJ12209SP	N+N	12	±8	19.8	1.2	1.3	1.4	CSPC3028-14
	CJ4502SP	N+N	20	±12	3.5	22.6	23.3	25	CSPB1111-4
	CJ4506SP	N+N	20	±12	10	11.2	-	12.7	CSPB1717-4
	CJ6617SP	N+N	20	±12	12	4.9	5.2	5.7	CSPB2217-6

## 扫地机器人

近几年来扫地机器人备受欢迎，市场发展迅速，我们针对扫地机提供静电保护TVS，低功耗LDO，低内阻MOS多种搭配组合，可满足不同功率的驱动电路。



Function	Part Number	VDS (V)	VGS (V)	ID (A)	RDS(ON) (mΩ)		Ciss (pF)	Qg (nC)	Package
					TYP@10V	TYP@4.5V			
MOS	CJBD3020	30	±20	20	9.5	14.5	823	14	DFNWB3.3x3.3-8L-B
MOS (N+P)	CJAB2003	30	±20	30	10	17	1000	22	DFNWB3.3x3.3-8L-B
		-30	±20	-20	26	40	943	28	
MOS	CJU12P06	-60	±20	-12	75	90	900	18	TO-252-2L
MOS	CJAC13TH06	60	±20	130	2.2	3	5298	63.7	PDFNWB5x6-8L

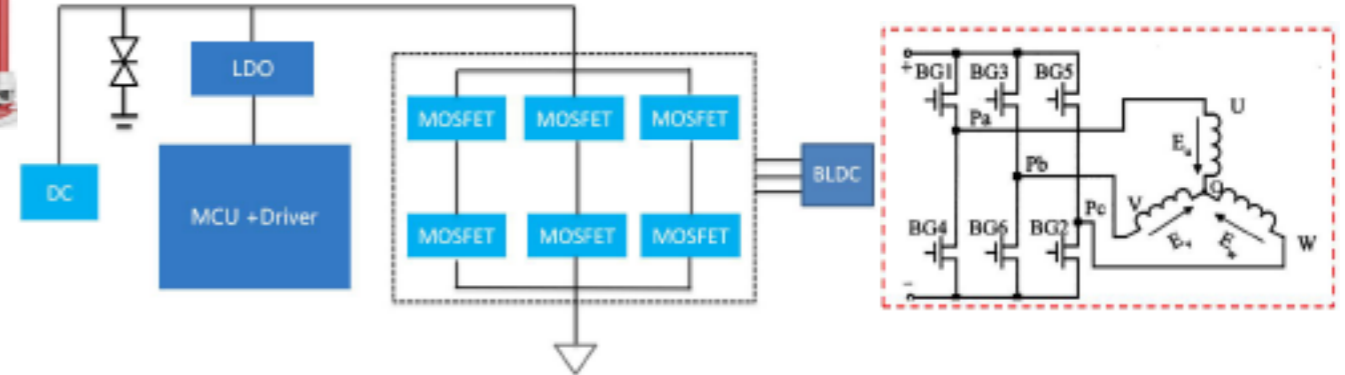
Function	Part Number	Ppp (W)	VRWM (V)	VBRMin (V)	VBRMax (V)	IR (μA)	CJ (PF)	VC (V)	IPP (A)	Package
TVS	ESDBU3V3A1	24	3.3	7	-	0.1	0.4	6	4	DFNWB1.0X0.6-02L
	ESDBU3V3AE1	24	3.3	3.8	-	0.1	0.4	6	4	DFNWB0.6x0.3-2L

Function	Part Number	Vin (V)	Vout (V)	Iout (mA)	Vdrop (mV)	Iq (μA)	PSRR (dB@1KHz)	Package
LDO	CJ75XXS	2.5~36	3.0-5.0	300	200	2	70	SOT-89-3L
	CJ6376	2.5~36	3.0-5.0	300	200	2	70	SOT23/-3L/-5L
	1117 Series	20	1.2-5.0	1000	1300	10000	60	SOT-89-3L/223/TO-252-2L
PMIC	CJ78XX/CJ78LXX	35	5.0~12.0	150-1500	-	5	-	TO-252-2L/ SOT-89-3L

Function	Part Number	VRWM (V)	If (A)	VF (A)	Package	Type	Frequency (HZ)	Load Capacitance (PF)	Package
SBD	SS14	40	1	0.55	SMAG	Crystal	12M	12	3225
SBD	SS34	40	3	0.55	SMAG				
SBD	SS36	60	3	0.7	SMAG				
SBD	SK310BF	100	3	0.85	SMBF				
FRD	ES1D	200	1	0.95	SMAG				

## 电机驱动

随着电动工具发展逐渐由直流有刷电机升级为直流无刷电机，对MOS的体积，内阻，Qg等参数要求越来越高，针对无刷电机，我司致力于研发高品质因素的功率MOSFET（小封装，低内阻，低Ciss）内阻低至2mΩ，优秀的开关频率特性，搭配TVS、LDO配套组合，使得电池供电，电机负载更稳定。



Function	Part Number	Vds (V)	RDS(on) (mΩ)		V(th) (V)	Qg (nC)	Ciss (pF)	Package
			@10V TYP	@4.5V TYP				
MOS	CJAB35N03S	30	5.2	7.5	1.3-2.5	24	1100	PDFNWB3.3x3.3-8L
	CJAB55N03S	30	3.8	5.9	1.0-2.5	50	2800	PDFNWB3.3x3.3-8L
	CJAB75N03U	30	2.2	3.2	1.0-2.2	49.7	3120	PDFNWB3.3x3.3-8L
	CJAC13TH06	60	2.2	3.0	1.0-2.5	63.7	5298	PDFNWB5x6-8L
	CJAC100SN08U	80	3.0	-	2.0-4.0	60	3780	PDFNWB5x6-8L-B
	CJAC110SN10L	100	4.3	6.0	1.5-2.5	78	3366	PDFNWB5x6-8L

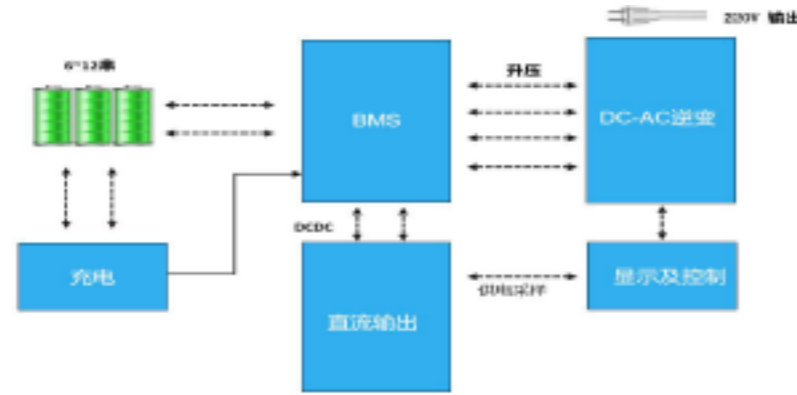
Function	Part Number	Ppp (W)	VR (V)	Vc (V)	IPP (A)	Package
TVS	SMAJ18CA	400	18	29.2	13.7	SMAG
	SMAJ20CA	400	20	32.4	12.3	SMAG
	SMAJ24CA	400	24	38.9	10.3	SMAG
	SMAJ36CA	400	36	58.1	6.9	SMAG

Function	Part Number	Vin (V)	Vout (V)	Iout (mA)	Vdrop (mV)	Iq (μA)	PSRR (dB@1KHz)	Package
LDO	CJ75XXS	2.5~36	3.0-5.0	300	200	2	70	SOT-89-3L
	CJ6376	2.5~36	3.0-5.0	300	200	2	70	SOT23-3L/-5L
	CJ6377	2.7~36	1.5~5.0	200	400	2	80	SOT23-3L/5L/89-3L
	CJ6386	2.5~45	3.3-5.0	250	700	2	70	SOT-23-3/5L,SOT-223



### 户外电源

户外电源在国内热度逐渐提升，可用于抗灾、停电应急、户外续航等场景。目前国内储能设备市场仍是一块“荒地”，未来必将迎来爆发式增长。针对户外电源所用的BMS板、均衡电路、逆变电路，长晶开发完善了相关分立器件配套物料。



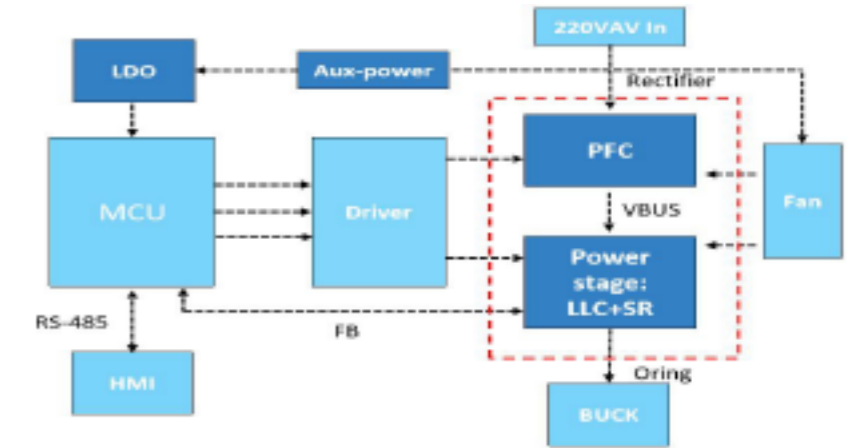
Function-	Part Number	Vds (V)	RDS(on) (mΩ)		ID (A)	Qg (nC)	V(th) (V)	Package
			@10V TYP	@4.5V TYP				
DC-DC MOSFET	CJAC13TH06	60	2.2	3	130	67.3	1.0~2.5	PDFNWB5x6-8L
	CJAC80SN10	100	6.2	8.8	80	46	1.0~2.5	PDFNWB5x6-8L
	CJAC110SN10L	100	4.3	6	110	78	1.5~2.5	PDFNWB5x6-8L
BMS MOSFET	CJAC100SN08U	80	3	-	100	60	2.0~4.0	PDFNWB5x6-8L-B
	CJAC110SN10H	100	4.5	-	110	71	2.0~4.0	PDFNWB5x6-8L
Small Signal MOSFET	CJ2301	-20	-	90	-2.3	5.5	-0.4~ -1	SOT-23
	CJ3415	-20	-	37	-4	17.2	-0.3~ -0.1	SOT-23
	CJ2310	60	82	91	3	6	0.5~2.0	SOT-23

Function	Part Number	Vin (V)	Vout (V)	Iout (mA)	Iq (mA)	Accuracy (%)	Package
PMIC	CJ78M05	0~35	5	500	6	3	TO-252-2L
	CJ78M12	0~35	12	500	6	3	TO-252-2L

Function	Part Number	VR (A)	IF (A)	IFSM (A)	VF (V)	trr (ns)	Package
SBD	SS34	40	3	70	0.55	-	SMAG
	BAT54S	30	0.2	0.6	1	-	SOT-23
	SBD30100CT	100	30	200	0.77	-	TO-220-3L
FRD	US1M	1000	1	30	1.7	75	SMAG
	MUR20H60	600	20	240	2.1/2.5	19	TO-220-2L
	MURW30H60	600	30	250	2.5/3.0	21	TO-247

### 5G基站电源

随着5G网络的到来，发展浪潮势不可挡，而基站电源则是其关键的动力来源，我们提供高效和超低的EMI整流桥，超低内阻功率MOS，优良的EAS性能和开关频率特性，配合大功率TVS，使得基站电源效率和稳定性大大提高。



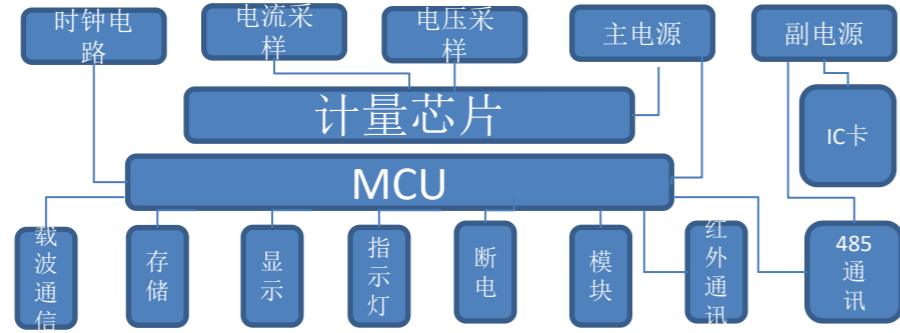
Function	Part Number	Vds (V)	RDS(on) (mΩ)		ID (A)	Qg (nC)	V(th) (V)	Package
			@10V TYP	@4.5V TYP				
SR MOSFET	CJAC13TH06	60	2.2	3	130	63.7	1.0~2.5	PDFNWB5x6-8L
	CJAC100SN08U	80	3	-	100	60	2.0~4.0	PDFNWB5x6-8L-B
	CJAC80SN10	100	6.2	8.8	80	46	1.3~2.5	PDFNWB5x6-8L
	CJAC110SN10L	100	4.3	6	110	78	1.5~2.5	PDFNWB5x6-8L
	CJP150SN10	100	3.2	-	150	88	1.5~2.5	TO-220-3L
	CJP180SN10	100	2.5	-	180	110	2.0~4.0	TO-220-3L
	CJAC70SN15	150	10	-	70	45	2.0~4.0	PDFNWB5x6-8L

Function	Part Number	VRWM (V)	IPP (A)	VC (V)	IR (uA)	Ppp (W)	Package
TVS	SMAJ5.0CA	5	43.5	9.2	800	400	SMAG
	SMBJ6.5CA	6.5	53.6	11.2	500	600	SMBG
	SMBJ85CA	85	4.4	137	5	600	SMBG
	5.0SMDJ85CA	85	36.5	137	5	5000	SMCG

Function	Part Number	VRWM (V)	IF (A)	IFSM (A)	VFM (V)	Package
Bridge	GBJ1510	1000	15	240	1	6GBJ
	GBJ2510	1000	25	350	1	6GBJ
	GBJ3510	1000	35	400	1	6GBJ

## 电能表

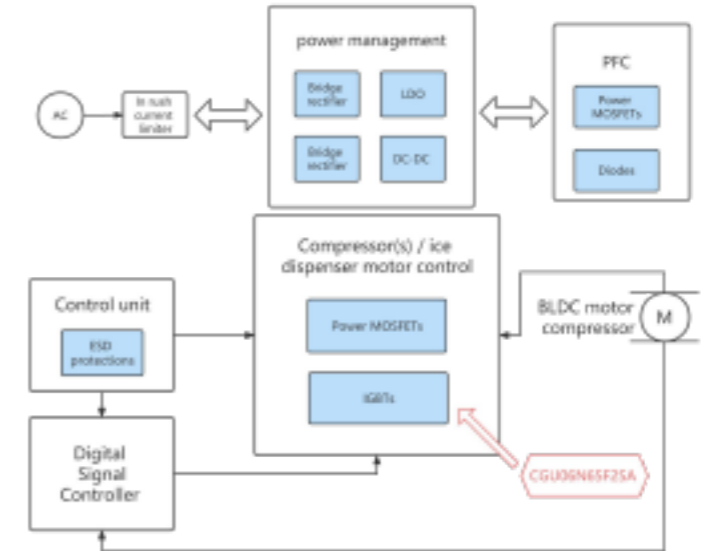
电能表作为重要的住宅民生必需品，已从传统电表发展到现在的智能电表；智能电表具有计量精准、低功耗、远程抄表等功能，满足在碳中和趋势大背景下，节约能源，清洁能源的发展应用需求。



Function-	Part Number	Vds (V)	RDS(on) (mΩ)		ID (A)	Qg (nC)	V(th) (V)	Package
			@10V TYP	@4.5V TYP				
Small Signal MOSFET	CJ3404	30	23	31	5.8	-	1~3	SOT-23
	CJ3415	-20	-	37	-4	-	-0.3~-0.1	SOT-23
	CJ2310	60	82	91	3	-	0.5~2.0	SOT-23
Function	Part Number	TYPE	VCEO (V)	IC (A)	HFE	Pc (W)	Package	
Transistor	MMBT3904	NPN	40	0.2	100~300	0.2	SOT-23	
	MMBT3906	PNP	-40	-0.2	100~300	0.2	SOT-23	
	MMBT5551	NPN	160	0.6	100~300	0.3	SOT-23	
	MMBT2222A	NPN	40	0.6	100~300	0.3	SOT-23	
Function	Part Number	Vin (V)	Vout (V)	Iq (mA)	Accuracy (%)	Package		
PMIC	CJ78L05	0~30	5	100	3	SOT-89		
	CJ7550S	0~36	5	300	8	SOT-89		
Function	Part Number	VR (A)	IF (A)	IFSM (A)	VF (V)	trr (ns)	Package	
SBD	SS14	40	1	30	0.55	-	SMAJ	
	SK24	40	2	50	0.55	-	SMBG	
	SS110	100	1	30	0.85	-	SMAJ	
Function	Part Number	Ppp (W)	VRWM (V)	VR (V)	IPP (A)	Package		
TVS	SMBJ6.0CA	600	6.0	6.67	7.37	SMBG		
	SMBJ12CA	600	12	13.3	14.7	SMBG		
	SMBJ15CA	600	15	16.7	18.5	SMBG		
	SMBJ18CA	600	18	20.0	22.1	SMBG		

## 冰箱

冰箱是千家万户中不可或缺的家电，除了低功耗、大容量、高保鲜的优点外，伴随智能家居的发展，冰箱也带上“智能化”的时代属性。我们根据不同功能的智能冰箱，提供二极管、三极管、TVS管、小信号MOS、超低功耗LDO、晶振、大功率驱动器件等多品类产品组合方案。

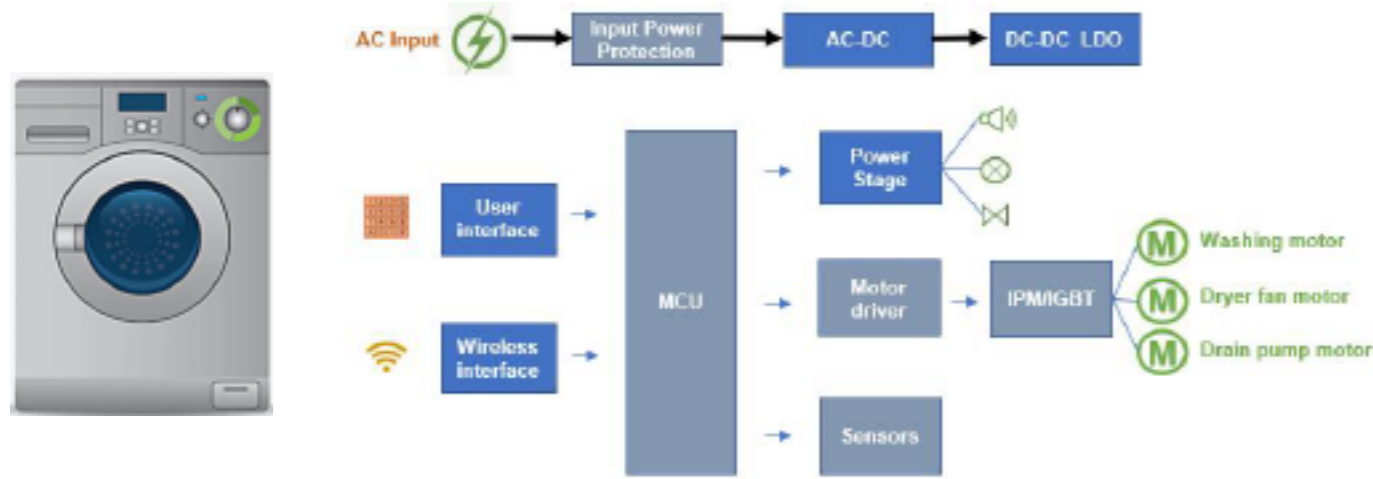


Function	Part Number	Vces (V)	IC(A) (T=100°C)	tsc (uS)	VCE(sat) (V)	Package		
IGBT	CGU06N65F2SA	650	6	5	1.68	TO-252-2L		
Function	Part Number	Vin (V)	Vout (V)	Iout (mA)	Vdrop (mV)	Iq (uA)	PSRR (dB@1KHz)	Package
LDO	CJ6205	2.5~6	3.0-5.0	500	150	50	75	SOT-23-5L
	CJ6101	1.8-6	1.0-5.0	300	110	0.8uA	50	SOT23/-3L/-5L
	1117 Series	20	1.2-5.0	1000	1300	10000	60	SOT-89/SOT-223/TO-252
Function	Part Number	Io(max) (mA)	Vin(max) (V)	Vout (V)	Iq (mA)	Ppp (W)	PSRR (dB@1KHz)	Package
PMIC	CJ7805	1500	35	5	8	3	-	TO-252/TO-220
	CJ7812	1500	35	12	8	3	-	TO-220
Function	Part Number	TYPE	VCEO (V)	IC (A)	HFE	Pc (W)	Package	
Transistor	MMBT3904	NPN	40	0.2	100~300	0.2	SOT-23	
	SS8050	NPN	25	1.5	120~400	0.3	SOT-23	
	2SD1899	NPN	60	3	100~400	1	TO-252-2L	
	TIP127	PNP	-100	-5	1000~12000	2	TO-220	
	MMBT5401	PNP	-150	-0.6	100~300	0.3	SOT-23	
	SS8550	PNP	-25	-1.5	120~400	0.3	SOT-23	
2SA1952	PNP	-60	-5	120~270	1	TO-252-2L		
Function	Part Number	Vds (V)	RDS(on) (mΩ)		V(th) (V)	Qg (nC)	Ciss (pF)	Package
MOSFET	CJ3401	-30	@10V TYP	@4.5V TYP	-0.7~-1.3	-	954	SOT-23
	2N7002K	60	1100	900	1~2.5	-	40	SOT-23
Function	Part Number	Frequency (KHZ)	Load capacitance (PF)	Frequency Tolerance (at 25°C) (PPM)	Package			
Crystal	CJK07-327681220B20(N)	32.768	12.5	20	3215			



### 洗衣机

洗衣机成为我们日常生活中不可或缺的一部分，随着人工智能的发展，我们追求更加科学、高效、节能地清洗衣物。长晶提供的电子元器件，满足高效的电源管理，稳健、可靠的用户界面，低噪声、高功率密度的电机控制。



Function	Part Number	Vin (V)	Vout (V)	Iout (mA)	Vdrop (mV)	Iq (µA)	PSRR (dB@1KHz)	Package
LDO	CJ6205	2.5~6	3.0-5.0	500	150	50	75	SOT-23-5L
	CJ6376	2.5~36	3.0-5.0	300	200	2	70	SOT23/-3L/-5L
	1117 Series	20	1.2-5.0	1000	1300	10000	60	SOT-89-3L/223/TO-252-2L
PMIC	CJ78XX/CJ78LX X	35	5/12/15	150-1500	-	5	-	TO-252-2L/ SOT-89-3

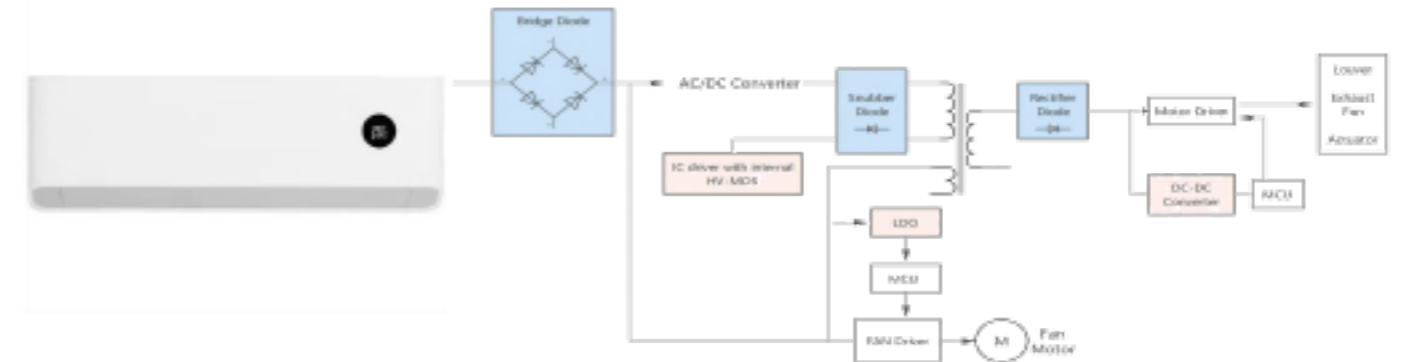
Function	Part Number	Ppp (W)	VRWM (V)	VR (V)	IPP (A)	Package
TVS	P6SMB6.8CA	600	5.8	6.46	7.14	SMBG
	P6SMB15CA	600	12.8	14.25	15.75	SMBG
	SMBJ15CA	600	15	16.7	18.5	SMBG
	SMBJ18CA	600	18	20.0	22.1	SMBG

Function	Part Number	VR (V)	IF (A)	IFSM (A)	VF (V)	trr (ns)	Package
SBD	SBD20200CT	200	20	150	0.76	-	TO-220-3L
	DSS120	200	1	30	0.95	-	S0D-123FL
FRD	ES1J	600	1	30	1.7	35	SMAG
Bridge	GBU606	600	6	175	1	-	GBU

Function	Part Number	VCBO (V)	VCEO (V)	IO (A)	VCE(SET) (V)	Type	Package
Transistor	DTC123JCA	50	50	0.1	0.3	NPN	SOT-23
	DTA114ECA	-50	-50	0.1	0.3	PNP	SOT-23
	BC847	50	45	0.1	0.5	NPN	SOT-23
	UMD12N	50	50	0.1	0.3	NPN+PNP	SOT-363

### 空调（室内机）

空调是人们现代生活中不可缺少的一部分，如今智能物联空调也不断面世。长晶对应方案中配有高效的电源管理模块，稳定、低耗的PFC控制器，低噪、高功率的电机控制。



Function	Part Number	Vin (V)	Vout (V)	Iout (mA)	Vdrop (mV)	Iq (µA)	PSRR (dB@1KHz)	Package
LDO	CJ6205	2.5~6	3.0-5.0	500	150	50	75	SOT-23-5L
	CJ6101	1.8-6	1.0-5.0	300	110	0.8uA	50	SOT23/-3L/-5L
	1117 Series	20	1.2-5.0	1000	1300	10000	60	SOT-89-3L/223/TO-252-2L

Function	Part Number	Io(max) (mA)	Vin(max) (V)	Vout (V)	Iq (mA)	Ppp (W)	PSRR (dB@1KHz)	Package
PMIC	CJ7805	1500	35	5	8	3	-	TO-252/TO-220
	CJ7812	1500	35	12	8	3	-	TO-220

Function	Part Number	VR (V)	IF (A)	IFSM (A)	VF (V)	trr (ns)	Package
Schottky Diode	DSS14	40	1	30	0.55	-	SOD-123FL
Switching Diode	1N4148W	100	0.15	2	1.25	4	SOD-123
	DAN202	80	0.1	2	1.2	4	SOT-23
	DAP202	80	0.1	2	1.2	4	SOT-23
Zener Diode	BZX84B13	8	-	-	0.9	-	SOT-23

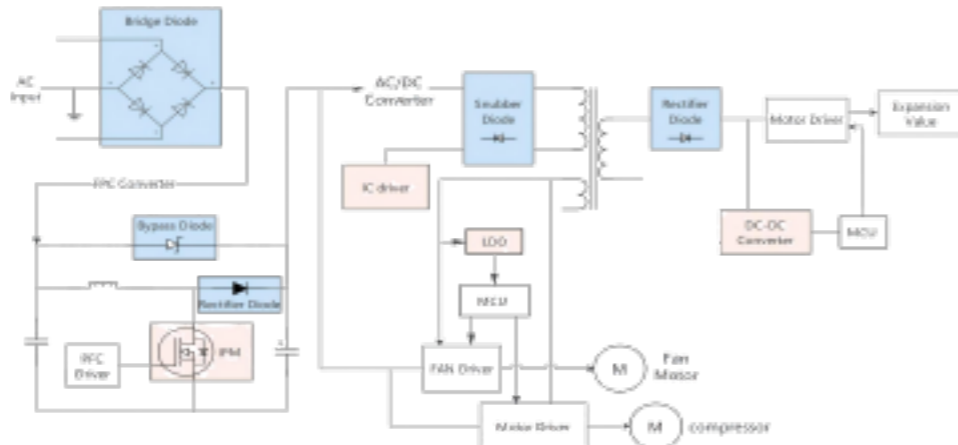
Function	Part Number	VCC (V)	Gi	IO (A)	R1 (Ω)	R2 (Ω)	Type	Package
Digital Transistor	DTC143EE	50	20	0.1	4.7K	4.7K	NPN	SOT-523
	DTC143ECA	50	20	0.1	4.7K	4.7K	NPN	SOT-23
	DTA143TE	-50	100	0.1	4.7K	Infinity	PNP	SOT-523
	DTA143EE	-50	30	0.1	4.7K	4.7K	PNP	SOT-523

Function	Part Number	VOUT (V)	IOUT (A)	VI(on) (V)	VCE(sat) (V)	Type	Package
Darlington Array	ULN2003	50	0.5	2.7	1	NPN	SOP-16

Function	Part Number	Vds (V)	RDS(on) (mΩ)		Vgs(th) (V)	Qg (nC)	Ciss (pF)	Package
			@10V TYP	@4.5V TYP				
MOSFET	CJ2301A	-20	-	90	-0.4~ -1.0	5.5	405	SOT-23
	CJL3407	-30	50	68	-1~-3	-	700	SOT-23-6L
	CJ4459A	-30	35	55	-1.4~-2.4	11	625	SOT-23

Function	Part Number	Frequency (MHZ)	Load capacitance (PF)	Frequency Tolerance (at 25°C) (PPM)	Package
Crystal	CJ03-040002020B20	4	20	20	49SMD
	CJ13-160000910B20	16	9	10	3225
	CJ03-041942020B20	4.194304	20	20	49SMD

空调 (室外机)



Function	Part Number	Vin (V)	Vout (V)	Iout (mA)	Vdrop (mV)	Iq (μA)	PSRR (dB@1KHz)	Package
LDO	CJ6205	2.5~6	3.0-5.0	500	150	50	75	SOT-23-5L
	CJ6101	1.8-6	1.0-5.0	300	110	0.8uA	50	SOT23/-3L/-5L
	1117 Series	20	1.2-5.0	1000	1300	10000	60	SOT-89-3L/ 223/TO-252-2L
PMIC	CJ78XX/CJ78LXX	35	5/12	150-1500	-	5	-	TO-252-2L/ SOT-89-3
Darlington Array	ULN2003	30	50	500	-	-	-	SOP16

Function	Part Number	VR (V)	IF (A)	IFSM (A)	VF (V)	trr (ns)	Package
SIC SBD	CSD06H065	650	6	holding	1.55	-	TO-220-2LD
Rectifier Bridge	GBJ2510	1000	25	350	1.0	-	6GBJ
	GBJ3510	1000	35	400	1.0	-	6GBJ
	GBU2510	1000	25	350	1.0	-	GBU
FRD	MURF1660CT	600	16	110	1.17	35	TO-220F

Function	Part Number	VCBO (V)	VCEO (V)	IO (A)	VCE(SET) (V)	Type	Package
Transistor	2SA1576A	-60	-50	-0.15	-0.5	PNP	SOT-323
	2SC4081	60	50	0.15	0.4	NPN	SOT-323
	KTC3198	60	50	0.15	0.25	NPN	TO-92
	2SD2391	60	60	2	0.35	NPN	SOT-89-3L

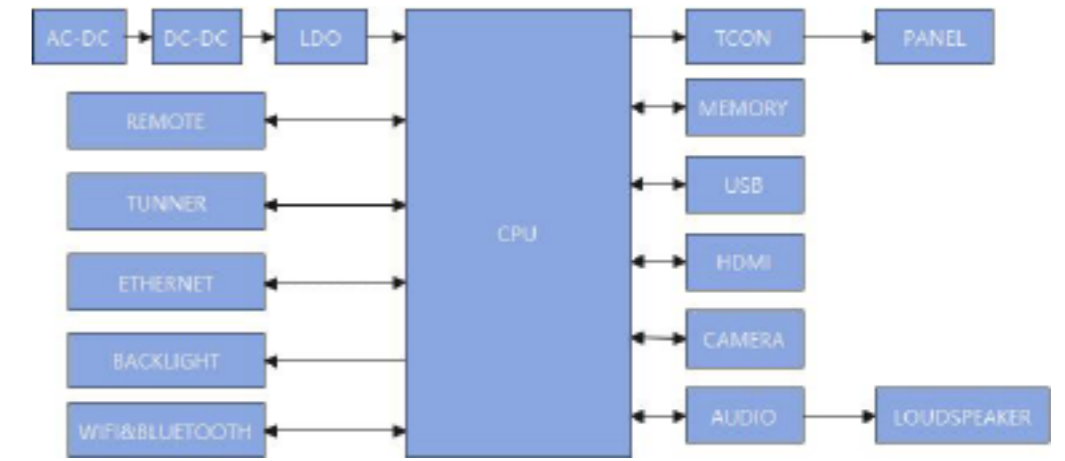
Function	Part Number	VCC (V)	Gi	IO (A)	R1 (Ω)	R2 (Ω)	Type	Package
Digital Transistor	DTC143EE	50	20	0.1	4.7K	4.7K	NPN	SOT-523
	DTC143ECA	50	20	0.1	4.7K	4.7K	NPN	SOT-23
	DTA143TE	-50	100	0.1	4.7K	Infinity	PNP	SOT-523
	DTA143EE	-50	30	0.1	4.7K	4.7K	PNP	SOT-523

Function	Part Number	VOUT (V)	IOUT (A)	VI(on) (V)	VCE(sat) (V)	Type	Package
Darlington Array	ULN2003	50	0.5	2.7	1	NPN	SOP-16

Function	Part Number	Frequency (MHZ)	Load capacitance (PF)	Frequency Tolerance (at 25°C) (PPM)	Package
Crystal	CJ03-040002020B20	4	20	20	49SMD
	CJ13-160000910B20	16	9	10	3225
	CJ03-041942020B20	4.194304	20	20	49SMD

电视

电视做为传统百姓家中必不可少的电器设备，随着互联网技术发展，成为集电视、娱乐、学习、办公、中控于一体的交互设备。我们的产品也紧跟步伐不断创新，我们提供二极管、三极管、TVS管、小信号MOS、超低功耗LDO等多品类产品组合方案，满足产品设计的多样化。



Function	Part Number	TYPE	VCEO (V)	IC (A)	HFE	Pc (W)	Package
Transistor	MMBT3904	NPN	40	0.2	100~300	0.2	SOT-23
	MMBT3906	PNP	-40	-0.2	100~300	0.2	SOT-23
	MMBT5551	NPN	160	0.6	100~300	0.3	SOT-23
	MMBT2222A	NPN	40	0.6	100~300	0.3	SOT-23

Function	Part Number	VRWM (V)	IPP (A)	VC (V)	CJ (PF)	Ppp (W)	Package
TVS	ESDHL5V0Y1	5	8	15	12	120	WBFBP-02C-A
	ESDTU5V0A1	5	4	12	0.4	45	DFN1006-2L
	ESDBU3V3A1	3.3	4	6	0.4	24	DFN1006-2L

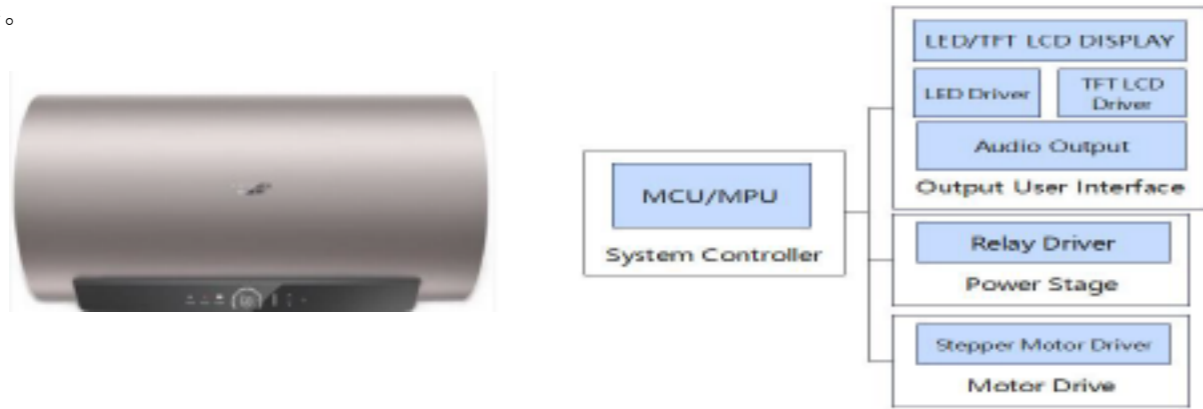
Function	Part Number	Vds (V)	RDS(on) (mΩ)		V(th) (V)	Qg (nC)	Ciss (pF)	Package
			@10V TYP	@4.5V TYP				
MOSFET	CJ3400	30	25	27	0.7~1.4	9.5	820	SOT-23
	CJ3401	-30	50	60	-0.7~-1.3	-	954	SOT-23
	2N7002K	60	1100	900	1~2.5	-	40	SOT-23

Function	Part Number	Vin (V)	Vout (V)	Iout (mA)	Vdrop (mV)	Iq (uA)	PSRR (dB@1KHz)	Package
LDO	CJ6211 Series	1.8~6.0	1.0~5.0	500	50	50	80	SOT-23/23-3L/5L
								DFNWB1x1-4L
	1117 Series	20	1.2~5.0	1000	1300	10000	60	SOT-223
								SOT-89-3L
								TO-252-2L



### 电热水器

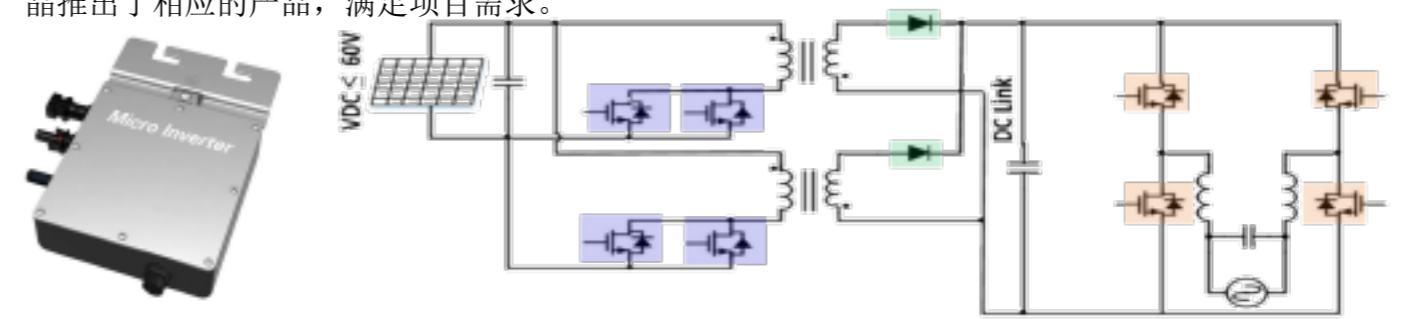
现代热水器分为电热水器和燃气热水器，用户需求如下：**1.**准确可靠的一氧化碳感应和漏电监测。**2.**高效、强大且具有增强保护功能的电机控制。**3.**安全、稳健且具有低功耗的无线连接。



Function	Part Number	Vin (V)	Vout (V)	Iout (mA)	Vdrop (mV)	Iq (μA)	PSRR (dB@1KHz)	Package
Darlington Array	ULN2003A	30	50	500	-	-	-	SOP16
LDO	CJ6101	1.8-6	1.0-5.0	300	110	0.8uA	50	SOT23/-3L/-5L
LDO	1117 Series	20	1.2-5.0	1000	1300	10000	60	SOT-89/SOT-223/TO-252
Function	Part Number	Io(max) (mA)	Vin(max) (V)	Vout (V)	Iq (mA)	Ppp (W)	Package	
PMIC	CJ78L15	1500	35	15	3.8	0.63	SOT-89-3L	
	CJ7812	1500	35	12	8	3	TO-220	
Function	Part Number	TYPE	VCEO (V)	IC (A)	HFE	Pc (W)	Package	
Transistor	2SC2411	NPN	32	0.5	82~390	0.2	SOT-23	
	MMBT5551	NPN	160	0.6	100~300	0.3	SOT-23	
	2SB1261	PNP	-60	-3	100~400	1	TO-252-2L	
	MJD122	NPN	100	8	1000~12000	1.5	TO-252-2L	
	MMBT5401	PNP	-150	-0.6	100~300	0.3	SOT-23	
	SS8550	PNP	-25	-1.5	120~400	0.3	SOT-23	
2SA1797	PNP	-50	-2	82~390	0.5	SOT-89-3L		
Function	Part Number	Vds (V)	RDS(on) (mΩ)		V(th) (V)	Qg (nC)	Ciss (pF)	Package
MOSFET	CJU30P10A	-100	@10V TYP	@4.5V TYP	-1.0~-2.5	-	3765	TO-252
	CJU20N06A	60	26	35	1~2.5	18	850	TO-252
Function	Part Number	VR (V)	IF (A)	IFSM (A)	VF (V)	trr (ns)	Package	
SBD	SBD10100CT	100	10	120	0.63	-	TO-220	
	SBDD10200CT	200	10	120	0.72	-	TO-252	
Function	Part Number	Frequency (MHZ)	Load capacitance (PF)	Frequency Tolerance (at 25°C) (PPM)	Package			
Crystal	CJ03-040002020B20	4	20	20	49SMD			
	CJ13-120001210B20	12	12	10	3225			
	CJ13-135601010B20	13.56	10	10	3225			

### 微型逆变器

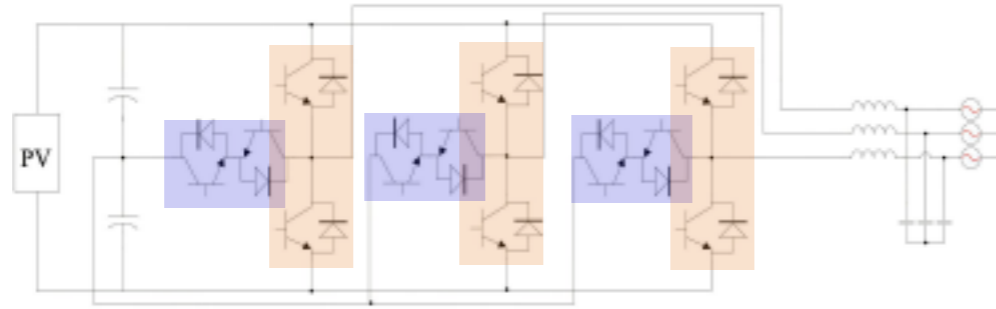
太阳能发电作为一种取之不尽，用之不竭的可再生能源，是推进能源革命和构建清洁低碳、安全高效能源体系的重大举措，是保障国家能源安全的必然选择，针对微型逆变器，长晶推出了相应的产品，满足项目需求。



Function	Part Number	Vces (V)	IC(A) (T=100°C)	VCE(sat) (V)	Package			
IGBT	CGWT40N120F2LAD	1200	40	1.5	TO-247			
Function	Part Number	Vds (V)	RDS(on) (mΩ)		Vgs(th) (V)	Qg (nC)	Ciss (pF)	Package
MOSFET	CJAC70SN15	150	@10V TYP	@4.5V TYP	2.0~4.0	45	3850	PDFNWB5*6
	CJAC092SN15A	150	8	9.2	2.0~4.0	-	-	PDFNWB5*6
	CJ2324	100	195	2	1.2~2.8	-	-	SOT-23
	CJ3400	30	25	27	0.7~1.4	-	-	SOT-23
Function	Part Number	VR (V)	IF (A)	IFSM (A)	VF (V)	trr (ns)	Package	
FRD	MURS120	200	1	30	0.875	25	SMAG	
	MUR15H60L	600	15	248	1.35	24	TO-220-2L	
	MURW60H120	1200	60	500	2.0	37	TO-247-2L	
Function	Part Number	VCBO (V)	VCEO (V)	IO (A)	VCE(SET) (V)	Type	Package	
Transistor	2SA1576A	-60	-50	-0.15	-0.5	PNP	SOT-323	
	2SC4081	60	50	0.15	0.4	NPN	SOT-323	
	KTC3198	60	50	0.15	0.25	NPN	TO-92	
	2SD2391	60	60	2	0.35	NPN	SOT-89-3L	
Function	Part Number	Vin (V)	Vout (V)	Iout (mA)	Vdrop (mV)	Iq (μA)	PSRR (dB@1KHz)	Package
LDO	CJ6385	3.0~30	3.0-5.0	200	700	2	55	SOT-89-3L
	CJ6376	2.5-36	3.3-5.0	300	200	2	70	SOT23/-3L/-5L
	1117 Series	20	1.2-5.0	1000	1300	10000	60	SOT-89-3L /223/TO-252-2L
Function	Part Number	Io(max) (mA)	Vin(max) (V)	Vout (V)	Iq (mA)	Ppp (W)	PSRR (dB@1KHz)	Package
PMIC	CJ7805	1500	35	5	8	3	-	TO-252/TO-220
	CJ7812	1500	35	12	8	3	-	TO-220
Function	Part Number	VR (V)	IF (A)	IFSM (A)	VF (V)	trr (ns)	Package	
Schottky diode	DSS24	40	2	40	0.55	-	SOD-123FL	
Switching Diode	1N4148W	100	0.15	2	1.25	4	SOD-123	
	1SS226	80	0.1	2	1.2	4	SOT-23	
	BAV21W	200	0.2	2	1.25	4	SOD-123	
Zener Diode	BZT52C3V9	3.9	-	-	0.9	-	SOD-123	

### 组串式逆变器

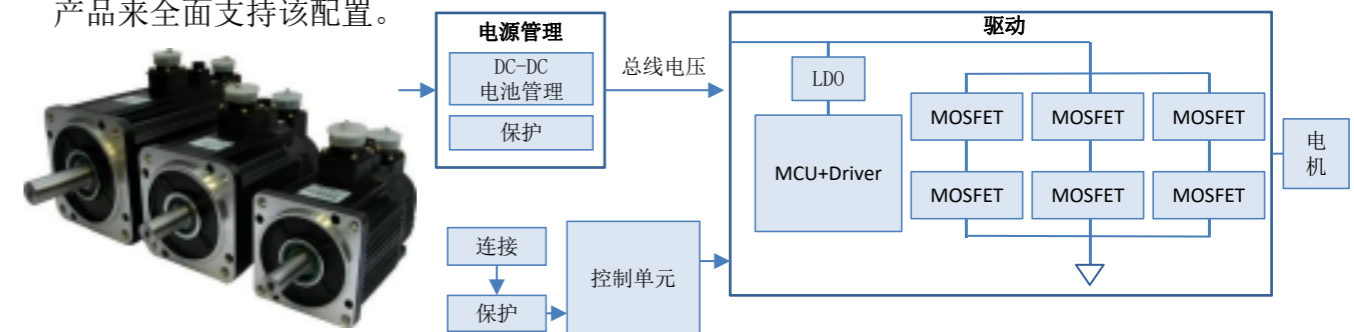
在光伏逆变器大家族中，组串式逆变器由于其安装灵活、使用场景多样化，并且单台组串逆变器的最大功率范围，逐年提升。针对组串式逆变器，长晶推出了多款IGBT型号，满足不同项目需求。



Function	Part Number	V <sub>CE(S)</sub> (V)	I <sub>C(A)</sub> (T=100°C)	V <sub>CE(sat)</sub> (V)	Package			
IGBT	CGWT40N120F2KAD	1200	40	1.6	TO-247			
	CGR75N120F2KAD	1200	75	1.67	TO-247Plus			
	CGWT80N65F2KAD	650	80	1.62	TO-247			
Function	Part Number	V <sub>ds</sub> (V)	R <sub>DS(on)</sub> (mΩ)		V <sub>gs(th)</sub> (V)	Q <sub>g</sub> (nC)	C <sub>iss</sub> (pF)	Package
MOSFET	CJAC110SN10L	100	@10V TYP	@4.5V TYP	1.5~2.5	78	3366	PDFNWB5*6
			4.3	6.0				
MOSFET	CJAC70SN15	150	@10V TYP	@4.5V TYP	2.0~4.0	45	3850	PDFNWB5*6
			10	12				
Function	Part Number	V <sub>R</sub> (V)	I <sub>F</sub> (A)	I <sub>FSM</sub> (A)	V <sub>F</sub> (V)	t <sub>rr</sub> (ns)	Package	
SiC SBD	CSDW20H120	1200	40	184	1.48	-	TO-247-2L	
FRD	MURS120	200	1	30	0.875	25	SMAG	
	MURW30H60	600	30	-	1.55	21	TO-247-2L	
	MURW60H120	1200	60	-	2.0	37	TO-247-2L	
Function	Part Number	V <sub>CB0</sub> (V)	V <sub>CE0</sub> (V)	I <sub>O</sub> (A)	V <sub>CE(SET)</sub> (V)	Type	Package	
Transistor	MJD31C	100	100	3	1.2	NPN	TO-252-2L	
	MMBT5551	180	160	0.6	0.15	NPN	SOT-23	
	MMBT2907A	-60	-60	-0.6	-0.4	PNP	SOT-23	
	D882H	70	70	3	0.5	NPN	SOT-89-3L	
Function	Part Number	V <sub>in</sub> (V)	V <sub>out</sub> (V)	I <sub>out</sub> (mA)	V <sub>drop</sub> (mV)	I <sub>q</sub> (μA)	PSRR (dB@1KHz)	Package
LDO	CJ6385	3.0~30	3.0-5.0	200	700	2	55	SOT-89-3L
	CJ6376	2.5-36	3.3-5.0	300	200	2	70	SOT23/-3L/-5L
	1117 Series	20	1.2-5.0	1000	1300	10000	60	SOT-89-3L /223/TO-252-2L
Function	Part Number	I <sub>o(max)</sub> (mA)	V <sub>in(max)</sub> (V)	V <sub>out</sub> (V)	I <sub>q</sub> (mA)	P <sub>pp</sub> (W)	PSRR (dB@1KHz)	Package
PMIC	CJ7805	1500	35	5	8	3	-	TO-252/TO-220
	CJ7812	1500	35	12	8	3	-	TO-220
Function	Part Number	V <sub>R</sub> (V)	I <sub>F</sub> (A)	I <sub>FSM</sub> (A)	V <sub>F</sub> (V)	t <sub>rr</sub> (ns)	Package	
Schottky Diode	SBD20H100CT	100	20	200	0.75	-	TO-220-3L	
Switching Diode	1N4148W	100	0.15	2	1.25	4	SOD-123	
	1SS226	80	0.1	2	1.2	4	SOT-23	
	BAV21W	200	0.2	2	1.25	4	SOD-123	
Zener Diode	BZT52C3V9	3.9	-	-	0.9	-	SOD-123	

### 伺服电机

伺服电机广泛应用于数字控制系统中，如机床、印刷设备、包装设备、纺织设备、激光加工设备、机器人、自动化生产线等对工艺精度、加工效率和工作可靠性等要求相对较高的设备。长晶针对伺服驱动控制模块，提供低功耗功率器件、电源管理及ESD保护器件等产品来全面支持该配置。



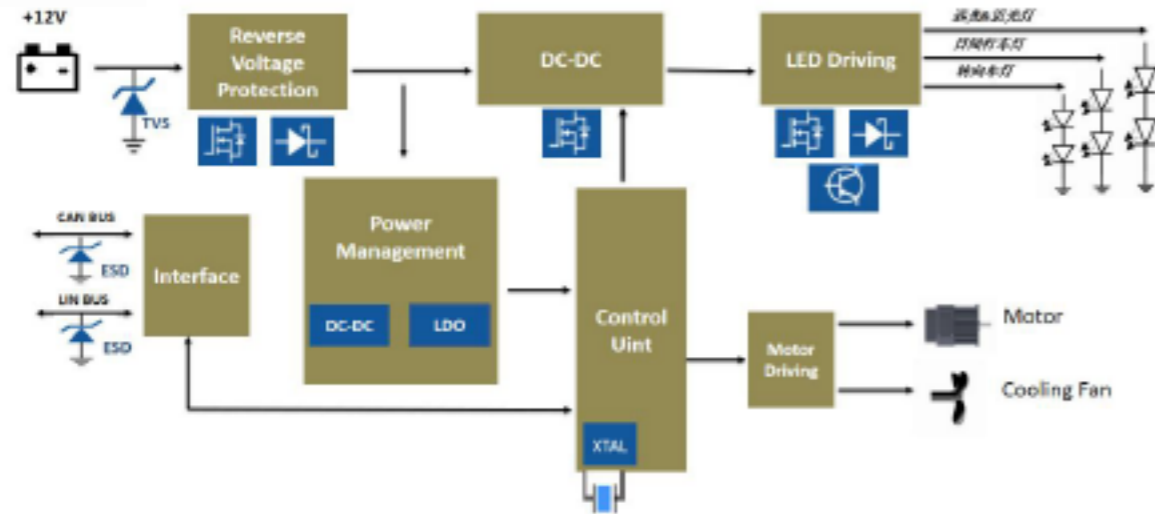
Function	Part Number	V <sub>ds</sub> (V)	R <sub>DS(on)</sub> (mΩ)		V <sub>gs(th)</sub> (V)	Q <sub>g</sub> (nC)	C <sub>iss</sub> (pF)	Package		
			@10V TYP	@4.5V TYP						
MOSFET	CJU80SN10	100	6.2	8.8	1.3~2.5	50	2100	TO-252-2L		
	CJAC110SN10L	100	4.3	-	1.5~2.5	78	3366	PDFNWB5*6		
	CJAC110SN10H	100	4.5	-	2.0~4.0	71	3067	PDFNWB5*6		
	CJAC80SN10	100	6.2	8.8	1.0~2.5	46	2200	PDFNWB5*6		
	CJAC65SN10L	100	11	15.5	1.0~2.5	23	1285	PDFNWB5*6		
	CJU60SN08	80	6.3	-	2~4	47.8	3300	TO-252-2L		
	CJAC100SN08U	80	3	-	2~4	60	3780	PDFNWB5*6		
	CJAC130SN06L	60	2.6	3.5	1.0~2.5	66.4	3560	PDFNWB5*6		
	CJAC130SN04L	40	2	2.9	1.0~2.0	47.7	2620	PDFNWB5*6		
Function	Part Number	V <sub>in</sub> (V)	V <sub>out</sub> (V)	I <sub>out</sub> (mA)	V <sub>drop</sub> (mV)	I <sub>q</sub> (μA)	PSRR (dB@1KHz)	Package		
LDO	CJ6330	2.5~18	1.2~5.0	300	160	2	65	SOT-23-3L/-5L, SOT-89-3L		
	CJ6335	2.5~18	1.2~5.0	100	100	2.5	30	SOT-23-3L		
	CJ6376	4.75~36	1.8~5.7	150	600	5	50	SOT-23-3L/-5L, SOT-89-3L		
	CJ6385	3.0~40	2.8~9.0	200	400	2	75	SOT-89-3L/223		
	1117 Series	20	1.2-5.0	1000	1300	10000	60	SOT-89-3L/223, TO-252-2L		
Function	Part Number	I <sub>o(max)</sub> (mA)	V <sub>in(max)</sub> (V)	V <sub>out</sub> (V)	I <sub>q</sub> (mA)	Accuracy (%)	Package			
PMIC	CJ78XX	1500	35	5~12	8	3	TO-252/TO-220/TO-263			
Function	Part Number	P <sub>pp</sub> (W)	V <sub>RWM</sub> (V)	V <sub>BRMin</sub> (V)	V <sub>BRMax</sub> (V)	I <sub>R</sub> (μA)	C <sub>J</sub> (PF)	V <sub>C</sub> (V)	I <sub>PP</sub> (A)	Package
ESD	ESDU5V0AG4B	50	5	6	-	1	0.8	15	1	DFNWB2.5x1-10L
	ESDTU5V0AG4B	40	5	6	-	0.5	0.38	12	3	DFNWB2.5x1.0-10L-B
	ESDBU5V0AE1C	50	5	5.6	-	1	0.35	10	5	DFNWB0.6x0.3-2L
	ESDTU5V0A1	45	5	6	-	0.1	0.35	10.5	4	DFN1006-2L
	ESD5V0H4	240	5	5.8	10	5	2	20	12	SOT-23-6L
	ESDBC3V3AE1	52	3.3	4.8	-	0.1	0.25	13	4	DFNWB0.6x0.3-2L
	ESDBU3V3AE1	24	3.3	7	-	0.1	0.4	6	4	DFNWB0.6x0.3-2L
	ESDBU3V3A1	24	3.3	7	-	0.1	0.4	6	4	DFN1006-2L
	ESDU3V3AG4	80	3.3	4	-	1	0.45	12	4	DFNWB2.5x1-10L
	ESDBKV3V3D3	1120	3.3	4.2	5.8	5	4.3	40	28	SOD-323
	ESDSU5V0A1	80	5	6.5	9	0.5	0.24	20	4	DFN1006-2L
	ESDTU5V0A1	45	5	6	-	0.1	0.35	10.5	4	DFN1006-2L
	ESDBL5V0A1	40	5	5.8	8.3	0.1	12	10	4	DFN1006-2L
	ESDBKV5V0D3	750	5	6	8	1	2	27	30	SOD-323
	CESD5V0D3	170	5	6.2	7.3	10	95	13	13	SOD-323
	CESDLC5V0K5	33	5	6.2	7.2	1	10	13	2.5	SOT-363
	CESD5V0K5	60	5	6	7.2	5	30	12	5	SOT-363
	CESD5V0M5	60	5	6	7.2	5	30	12	5	SOT-563
CESDLC5V0M5	33	5	6.2	7.2	1	10	13	2.5	SOT-563	



汽车车灯



汽车车灯经过100多年的演化，从最初的化学灯时代进化到电灯时代，其中电灯又从白炽灯一步步演变为现在的卤素灯、氙气灯和LED灯，以及可以自定义效果的OLED显示技术。针对汽车车灯，长晶凭借自身创新工艺、封装等技术优势配备了相对应产品以满足需求。



Function	Part Number	VRWM (V)	IPP (A)	VC (V)	CJ (PF)	Ppp (W)	Package
TVS	AD-ESDBM24VD3	24	9	53	35	475	SOD-323
	AD-ESDBW5V0D3	5	28	17	60	476	SOD-323

Function	Part Number	TYPE	VCEO (V)	IC (A)	HFE	Pc (W)	Package
Transistor	AD-BCX56-16	NPN	80	1	100-250	0.5	SOT-89-3L
	AD-MMBT3904	NPN	40	0.2	100-300	0.2	SOT-23
	AD-BC856-B	PNP	-65	-0.1	220-475	0.2	SOT-23

Function	Part Number	Vds (V)	RDS(on) (mΩ)		V(th) (V)	Qg (nC)	Ciss (pF)	Package
			@10V TYP	@4.5V TYP				
MOS	AD-2N7002K	60	900	1100	1.0-2.5	30	40	SOT-23
	AD-CJAC130SN06L	60	2.6	3.5	1.0-2.5	66.4	3560	PDFNWB5x6-8L
	AD-CJ2310	60	82	91	0.5-2.0	6	247	SOT-23
	AD-CJAC100SN08U	80	3	4	2.0-4.0	60	3780	PDFNWB5x6-8L-B

Function	Part Number	Frequency (MHZ)	Load capacitance (PF)	Frequency Tolerance (at 25°C) (PPM)	Package
Crystal	AD-CJ13-080001210D05	8	12	10	3225
	AD-CJ13-400000810D05	40	8	10	3225

LDO

1、低压、低噪声，高PSRR——CJ6211系列

PartNumber	VIN (V)	VOUT (V)	IOUT (mA)	VDROP (mV)	IQ (μA)	PSRR	Accuracy (±%)	Package
CJ6211	1.8~6	1~5	500	50	50	80	1/2	SOT-23 SOT-23-3L/5L DFNWB1x1-4L
CJ6221	1.8~6	0.8~5	500	50	30	80	1/2	SOT-23-3L/5L DFNWB1x1-4L

2、低压、低噪声，低功耗——CJ6206系列、6101系列

Part Number	VIN (V)	VOUT (V)	IOUT (mA)	VDROP (mV)	IQ (μA)	PSRR (dB@1KHz)	Accuracy (±%)	Package
CJ6206	2~7	1.2~5	300	150	5	65	1/2	SOT-23 SOT-23-3L/5L DFNWB1x1-4L
CJA6206	2~6	1.2~5	300	280	5	50	2	SOT-23 SOT-89-3L
CJ6101	1.8~8	1.2~5	300	110	0.8	50	1/2	SOT-23-3L/5L DFNWB1x1-4L
CJA6101	2.5~6.5	1.2~3.6	300	100	1	-	1/2	SOT-23-3L/5L DFNWB1x1-4L

3、中压、低功耗——CJ6320系列、CJ6330系列、6331系列

Part Number	VIN (V)	VOUT (V)	IOUT (mA)	VDROP (mV)	IQ (μA)	PSRR (dB@1KHz)	Accuracy (±%)	Package
CJ6320	3~15	2.5~5	500	200	2	-	2	SOT-23-3L SOT-89-3L
CJ6330	2.5~18	1.2~5	300	160	2	65	1/2	SOT-23-3L/5L SOT-89-3L
CJ6331	2.5~18	1.2~5	300	170	1	45	2	SOT-23-3L/5L SOT-89-3L

4、高压、低功耗——CJ63系列、CJ75系列、CJ86系列、CJ88系列

Part Number	VIN (V)	VOUT (V)	IOUT (mA)	VDROP (mV)	IQ (μA)	PSRR (dB@1KHz)	Accuracy (±%)	Package
CJ75LXXS	2.5~36	3.3~5	300	200	2	70	2	SOT-89-3L SOT-23/TO-92
CJ75XXS	2.5~36	3.3~12	300	200	2	70	1/2	SOT-89-3L
CJ6376	2.5~36	3.3~5	300	200	2	70	2	SOT-23-3L/5L
CJA6376	4.75~36	1.8~5	150	600	5	50	2	SOT-89-3L
CJ6377	2.7~36	1.5~5	200	400	2	80	2	SOT-23-3L/5L SOT-89-3L
CJ6386	2.5~45	3.3~12	250	700	2	70	1/2	SOT-23-3L SOT-23-5L SOT-223
CJ86XX	2.5~45	3.3~12	250	700	2	70	2	SOT-89-3L
CJ86LXX	2.5~45	2.1~12	250	700	2	70	2	SOT-89-3L
CJ6388	2.5~60	2.1~12	250	500	3	80	1/2	SOT-23-3L SOT-23-5L
CJ88XX	2.5~60	2.1~12	250	500	3	80	1/2	SOT-89-3L

5、低压、输出可调——CJ6300系列

Part Number	VIN (V)	VOUT (V)	IOUT (mA)	VDROP (mV)	IQ (μA)	PSRR	Accuracy (±%)	Package
CJ6300	1.8~7.0	0.6~5.4	500	110	45	70	1/2	SOT-23-5L WBHFBP-06L

6、低压、大电流输出——CJ6107、CJ6109系列

Part Number	V <sub>IN</sub> (V)	V <sub>OUT</sub> (V)	I <sub>OUT</sub> (mA)	V <sub>DROP</sub> (mV)	I <sub>Q</sub> (μA)	PSRR (dB@1KHz)	Accuracy (±%)	Package
CJ6107	2.0~6.0	1.1~5	1000	600	25	70	1/2	SOT-23-5L/ SOT-89-3L/ SOT-223
CJ6109	1.6~6.0	0.9~4	1000	240	70	75	2	SOT-23-5L/ SOT-89-3L/ SOT-223

7、传统稳压IC

Part Number	V <sub>IN</sub> (V)	V <sub>OUT</sub> (V)	I <sub>OUT</sub> (mA)	I <sub>Q</sub> (mA)	Accuracy (±%)	Package
CJ78XX	35	5/6/8/9/12/15	1500	5	3	TO-220-3L/TO-263-2L/TO-252-2L
CJ78LXX	30~35	5/6/8/9/12/15/18	100	3.8	3	SOT-89-3L/TO-92
CJ79XX	-25~-30	-5/-6/-8/-9/-12/-15	1500	2	3	TO-252-2L/TO-220-3L
CJ79LXX	-30~-35	-5/-6/-8/-9/-12/-15	100	3.9	3	SOT-89-3L/TO-92/SOT-23-3L
CJ78MXX	35	5/6/8/9/12/15	500	4.2	3	TO-220-3L/TO-251/252/SOT-89-3L
CJA1117B-XX	20	1.8/2.5/3.3/5/ADJ	1000	5	1.5	SOT-89-3L
CJT1117B-XX	20	1.8/2.5/3.0/3.3/5/ADJ	1000	10	1.5	SOT-223
CJU1117B-XX	20	1.8/2.5/3.0/3.3/5/ADJ	1000	10	1.5	TO-252-2L
SCJT1117B-XX	20	3.3/5	1000	5	1.5	SOT-223
SCJT1117B-XX-A	20	1.8/3.3/5/ADJ	1000	10	1.5	SOT-223
SCJA1117B-XX-A	20	3.3/5/ADJ	1000	5	1.5	SOT-89-3L
LM317	40	1.2~37 (ADJ)	1500	-	1.5	TO-220-3L/TO-263-2L/TO-252-2L

8、基准源稳压IC

Part Number	V <sub>KA</sub> (V)	V <sub>REF</sub> (V)	I <sub>REF</sub> (μA)	I <sub>KA</sub> (mA)	Accuracy (±%)	Package
CJ431	37	2.5	1.5	-100~+150	0.5	SOT-89-3L/ TO-92/SOT-23 /SOP8
CJ432	18	1.24	6	100	1.0/1.5	TO-92/SOT-23
CJ431K	37	2.495	1.5	-100~+150	0.5/1.0	TO-92/SOT-23
CJ431B	40	2.495	0.5	-100~+150	0.5/1.0	SOT-23
CJ431Q	40	2.495	0.5	-100~+150	0.5/1.0	SOP8
CD431	37	2.5	1.5	-100~+150	0.5	SOT-23

Charger

Part Number	V <sub>CCmin</sub> (V)	V <sub>CCmax</sub> (V)	I <sub>BAT</sub> (mA)	V <sub>float</sub> (V)	OVP (V)	NTC (Y/N)	Package
CJ4054A420M	4.5	6.5	800	4.2	N	N	SOT-23-5L
CJ40541A420M	4.25	6.5	120	4.2	N	N	SOT-23-5L
CJ40561A420FB8	4.5	28	300	4.2	10.5	N	DFN2×2-8L
CJ40562A420ES	4.5	6.5	1000	4.2	N	Y	SOP8-PP
CJ40563A420FC10	4.5	24	1000	4.2	6.5	Y	DFN3x3-10
CJ40563A420FB10	4.5	24	1000	4.2	6.5	Y	DFN2x3-10

Operational Amplifier

Part Number	Channels	V <sub>IN min</sub> (V)	V <sub>IN max</sub> (V)	GBW (MHZ)	Slew Rate (V/us)	CMRR (dB)	Output Voltage Swing(mV)	Matching Part Number	Package
LM321	1	-0.3	44919	1	0.4	90	5	LM321	SOT-23-5L
LMV321	1	2.1	5.5	1	0.52	70	8	LMV321	SOT-23-5L
CJ358	2	3	32	0.7	0.3	85	5	LM358	SOP8
LMV358	2	2.1	7.5	1	0.52	68	8	LMV358	SOP8
LM324	4	4	30	0.7	0.5	85	5	LM324	SOP14
LMV324	4	2.1	5.5	1.1	0.5	68	8	LMV324	SOP14
LM4558	2	-	15	1	-	90	12000	RC4558	SOP8
OP07C	1	-	13	0.5	-	-	12000	OP07C	SOP8

Voltage Detector

Part Number	V <sub>IN min</sub> (V)	V <sub>IN max</sub> (V)	V <sub>reset</sub> (V)	Triggering time (mS)	Output Forms C/N	Accuracy (%)	Package
CJ809CXXM	0.95	7	2.63/2.93/3.08	210	CMOS	2	SOT-23/-3L
CJ809NXXM	0.95	7	2.63/2.93	210	Nch	2	SOT-23-3L
CJ808CXXM	0.95	7	3/3.3/3.6	0	CMOS	2	SOT-23-3L
CJ8345NM	0.7	10	4.5	0	Nch	2	SOT-23-3L
CJ8311CM	0.7	10	1.1	0	CMOS	2	SOT-23-3L

Lithium Battery Protection

Part Number	Overcharge Detection Voltage	Overcharge Release Voltage	Overdischarge Detection Voltage	Overdischarge Release Voltage	Discharge Overcurrent Detection Voltage	Charge Overcurrent Detection Voltage	Short Circuit Detection Voltage	0V charge	Standby/ Auto Wake-up
	Vdet1 (V)	Vrel1 (V)	Vdet2 (V)	Vrel2 (V)	Vdet3 (V)	Vdet4 (V)	Vshort (V)		
CJ5123B5G	4.25	4.05	2.5	2.9	0.15	-0.15	0.8	Allowed	Auto Wake-up
CJ5123D5A	4.28	4.08	2.5	2.9	0.08	-0.08	0.8	Allowed	Auto Wake-up
CJ5123D5G	4.28	4.08	2.5	2.9	0.15	-0.15	0.8	Allowed	Auto Wake-up
CJ5123H5G	4.375	4.175	2.5	2.9	0.15	-0.15	0.8	Allowed	Auto Wake-up
CJ5123J5E	4.425	4.225	2.5	2.9	0.13	-0.13	0.8	Allowed	Auto Wake-up
CJ5123J5H	4.425	4.225	2.5	2.9	0.16	-0.16	0.8	Allowed	Auto Wake-up
CJ5123J5I	4.425	4.225	2.5	2.9	0.15	-0.12	0.8	Allowed	Auto Wake-up
CJ5123L5F	4.475	4.275	2.5	2.9	0.15	-0.12	0.8	Allowed	Auto Wake-up
CJ5123D0A	4.28V	4.08	3	3.4	0.08	-0.08	0.8	Allowed	Auto Wake-up
CJ5123J8A	4.425	4.225	2.8	3.2	0.08	-0.08	0.8	Allowed	Auto Wake-up
CJ5123SG3J	4.28	4.08	3	3	0.08	-0.1	0.58	Allowed	Standby
CJDW01A	4.3	4.1	2.4	2.9	0.15	-	1.36	Allowed	Auto Wake-up



## Hall

Part Number	Polarity	V <sub>IN</sub> (V)	ID <sub>D</sub> (mA)	BOP (GS)	BRP (GS)	BHYS (GS)	Package
CJH0104	Omnipolar	2~5.0	0.005	±20	±15	5	TO-92S、SOT-23-3L、DFNWB1×1-4L
CJH1311	Unipolar	2~5.0	0.005	30	20	10	SOT-553、TO-92S、SOT-23-3L、DFNWB1×1-4L
CJH2205	Bipolar	2.5~28	2	30	-30	60	TO-92S、SOT-23-3L
CJH0103	Unipolar	2.5~28	2	40	-30	10	TO-92S、SOT-23-3L

## 1、BOOST

Part Number	V <sub>IN</sub> (V)	V <sub>OUT</sub> (V)	I <sub>OUT</sub> (A)	V <sub>FB</sub> (V)	Efficiency (%)	Switch Frequency (Hz)	Package
CJ9107	0.9~6.0	2.1~5.5	1	-	0.95	300K	SOT-23 SOT-89-3L SOT-23-5L
CJ9112	0.82~5.5	1.8~5.5	0.4	1.215	0.96	500K	SOT-23-6L
CJ9113	0.82~5.5	1.8~5.5	0.4	1.215	0.96	500K	SOT-23-6L
CJ9117	0.9~6.0	1.9~5.5	1	-	0.88	100K	SOT-23-3L/-5L SOT-89-3L/-5L
CJ9311	0.9~5.5	2.5~5.5	1.1	1.23	0.96	1.2M	SOT-23-6L
CJ9313	0.5~4.5	2.5~5.25	1.2	1.23	0.96	1.2M	SOT-23-6L
CJ9321	2.7~5.5	3.0~5.5	2.5	0.6	0.92	1.25M	SOT-23-6L
CJ9340	2.0~24	V <sub>IN</sub> -28	4	0.6	0.88	1.2M	SOT-23-6L

## 2、BUCK

Part Number	V <sub>IN</sub> (V)	V <sub>OUT</sub> (V)	I <sub>OUT</sub> (A)	V <sub>FB</sub> (V)	Efficiency (%)	Switch Frequency (Hz)	Package
CJ9217T5	2.0~6.0	0.6~5.0	1.5	0.6	0.96	1.5M	SOT-23-5L
CJ9219T5	2.6~6.0	0.6~5.0	2	0.6	0.96	3M	SOT-23-5L
CJ9218T5	2.7~5.5	1.25~5	1	0.6	0.96	1.5M	SOT-23-5L
CJ9221T5	2.7~5.5	1.2~3.6	2	0.6	0.96	1.5M	SOT-23-5L
CJ9460T6	4.5~18	0.6~7.0	2	0.6	0.96	500K	SOT-23-6L

## MOSFET

## 1、LV/MV MOS

Part Number	Configuration	Type	V <sub>DS</sub> (V)	V <sub>GS</sub> (V)	I <sub>D</sub> (A)	R <sub>DS(ON)</sub> /R <sub>DS(ON)</sub> (mΩ)				C <sub>iss</sub> (pF)	Q <sub>g</sub> (nC)	Package
						V <sub>GS</sub> =10V		V <sub>GS</sub> =4.5V				
						TYP	MAX	TYP	MAX			
CJBA3134K	Single	N	20	±12	0.75	-	-	250	500	79	-	DFN1006-3L
CJBB3134K	Single	N	20	±12	0.75	-	-	250	500	79	-	DFN1006-3L-A
CJAA3134K	Single	N	20	±12	0.75	-	-	-	380	79	-	WFBFBP-03E
CJ3134K	Single	N	20	±12	0.75	-	-	270	380	79	-	SOT-23
CJ3139K	Single	P	-20	±12	-0.66	-	-	430	520	113	-	SOT-23
CJ2301	Single	P	-20	±8	-2.3	-	-	90	112	405	5.5	SOT-23
CJ3415	Single	P	-20	±8	-4	-	-	37	50	1450	17.2	SOT-23
CJ2302	Single	N	20	±8	2.1	-	-	35	60	300	4	SOT-23
CJ2312	Single	N	20	±8	5	-	-	18	318	865	-	SOT-23
CJ8810	Single	N	20	±12	7	15.6	22	16	27	1150	13	SOT-23
CJMN2012	Single	N	20	±12	12	-	-	10	15	1800	-	DFNWB2×2-6L-J
CJAB50N02	Single	N	20	±20	50	-	-	2.8	-	-	-	PDFNWB3.3×3.3-8L
CJAB35SN03	Single	N	30	±20	35	6	7.5	8	10.5	630	18	PDFNWB3.3×3.3-8L
CJAB35N03S	Single	N	30	±20	35	5.2	7	6.7	12	1100	24	PDFNWB3.3×3.3-8L
CJAB55N03S	Single	N	30	±20	55	3.8	5.5	5.9	9.5	2800	50	PDFNWB3.3×3.3-8L
CJAB75N03U	Single	N	30	±20	75	2.2	3	3.2	6	3120	387	PDFNWB3.3×3.3-8L
CJAC35N03	Single	N	30	±20	35	5.3	7	8	12	1300	40	PDFNWB5×6-8L
CJAC40SN03	Single	N	30	±20	40	6	7.5	8	10.5	630	13.7	PDFNWB5×6-8L
CJAC50SN03	Single	N	30	±20	50	3.8	-	5	-	1220	24	PDFNWB5×6-8L
CJAC70N03	Single	N	30	±20	70	4.3	5.5	6	9.5	1980	45	PDFNWB5×6-8L
CJAC80N03	Single	N	30	±20	80	3	4	4.3	7.3	2440	62	PDFNWB5×6-8L
CJAC110N03A	Single	N	30	±20	110	1.8	2.4	2.7	4.3	5372	100	PDFNWB5×6-8L
CJAC150N03A	Single	N	30	±20	150	1.4	2	2	2.7	10300	82	PDFNWB5×6-8L
CJU100N03S	Single	N	30	±20	100	4.7	6.5	7.2	9	1705	20	TO-252-2L
CJAB25N04S	Single	N	40	±20	25	7.5	9.4	10.5	15	1200	20.3	PDFNWB3.3×3.3-8L
CJAC130SN04L	Single	N	40	±20	130	2	2.4	2.9	3.7	2620	47.7	PDFNWB5×6-8L

Part Number	Configuration	Type	VDS (V)	VGS (V)	ID (A)	RSS(ON)/RDS(ON) (mΩ)				Ciss (pF)	Qg (nC)	Package
						VGS=10V		VGS=4.5V				
						TYP	MAX	TYP	MAX			
CJAC140SN04	Single	N	40	±20	140	1.65	2.2	-	-	4100	65	PDFNWB5x6-8L-C
CJAC200SN04	Single	N	40	±20	200	0.88	1.1	-	-	7450	120	PDFNWB5x6-8L-C
CJP140N04	Single	N	40	±20	140	2.8	3.3	-	-	5990	678	TO-220-3L
CJP160N04	Single	N	40	±20	160	2	-	-	-	-	-	TO-220-3L
CJP180N04A	Single	N	40	±20	180	1.3	-	-	-	-	-	TO-220-3L
CJP180N04	Single	N	40	±20	180	1.8	2.2	-	-	6690	121	TO-220-3L
CJP200N04	Single	N	40	±20	200	1.4	1.8	-	-	10680	183	TO-220-3L
CJU110SN04	Single	N	40	±20	110	3.2	3.6	-	-	-	-	TO-252-2L
CJU130SN04	Single	N	40	±20	130	2	-	-	-	3215	56	TO-252-2L
CJAE35SN06	Single	N	60	±20	35	7.5	10	10.5	14	1270	28	PDFNWB3.3x3-8L
CJAC50N06	Single	N	60	±20	50	5.9	-	-	-	3600	87	PDFNWB5x6-8L
CJAC13TH06	Single	N	60	±20	130	2.2	3	3	4.5	5298	63.7	PDFNWB5x6-8L
CJQ12SN06	Single	N	60	±20	12	11	14	14	21	-	-	SOP-8
CJQ14SN06	Single	N	60	±20	14	9.7	14	12.8	18	1000	20	SOP-8
CJQ18SN06	Single	N	60	±20	18	5.5	6.5	7	10	2057	33	SOP-8
CJU40SN06	Single	N	60	±20	40	11	14	14	21	-	-	TO-252-2L
CJAC100SN08U	Single	N	80	±20	100	3	3.9	-	-	3780	60	PDFNWB5x6-8L-B
CJU60SN08	Single	N	80	±20	60	6.3	7.8	-	-	3300	47.8	TO-252-2L
CJB85SN08C	Single	N	80	±20	85	6	8	-	-	3113	49	TO-263-2L
CJB120SN08	Single	N	80	±20	120	3	3.9	4.1	6.2	5000	106	TO-263-2L
CJP120SN08	Single	N	80	±20	120	3.2	3.9	4.5	6.2	5000	106	TO-220-3L-C
CJAC40SN10L	Single	N	100	±20	40	14	-	-	-	-	-	PDFNWB5x6-8L
CJAC65SN10L	Single	N	100	±20	65	11	13.5	15.5	21	1485	23	PDFNWB5x6-8L
CJAC75SN10L	Single	N	100	±20	75	9	-	12	-	2100	50	PDFNWB5x6-8L
CJAC80SN10	Single	N	100	±20	80	6.5	8.5	8.8	10.5	2100	50	PDFNWB5x6-8L
CJAC80SN10H	Single	N	100	±20	80	6.7	8.5	-	-	1977	48	PDFNWB5x6-8L
CJAC80SN10	Single	N	100	±20	80	6.5	8.5	8.8	10.5	2100	50	PDFNWB5x6-8L
CJAC80SN10H	Single	N	100	±20	80	6.7	8.5	-	-	1977	48	PDFNWB5x6-8L
CJAC110SN10A	Single	N	100	±20	110	3.4	4.2	4.5	6	3736	93	PDFNWB5x6-8L
CJAC110SN10L	Single	N	100	±20	110	4.3	5.2	6	7.8	3366	78	PQFNWB5x6-8L
CJAC110SN10H	Single	N	100	±20	110	4.5	5.2	-	-	3067	71	PDFNWB5x6-8L

Part Number	Configuration	Type	VDS (V)	VGS (V)	ID (A)	RSS(ON)/RDS(ON) (mΩ)				Ciss (pF)	Qg (nC)	Package
						VGS=10V		VGS=4.5V				
						TYP	MAX	TYP	MAX			
CJB110SN10	Single	N	100	±20	110	8.5	10	9.5	14	3050	46.5	TO-263-2L
CJB120SN10	Single	N	100	±20	120	5	5.8	-	-	4190	68	TO-263-2L
CJB130SN10	Single	N	100	±20	130	4.3	5.5	-	-	6660	91	TO-263-2L
CJP120SN10	Single	N	100	±20	120	4.6	5.5	-	-	-	-	TO-220-3L
CJP180SN10	Single	N	100	±20	180	2.5	-	-	-	6480	110	TO-220-3L
CJP110SN10	Single	N	100	±20	110	8.5	10	-	-	2604	49.9	TO-220-3L-C
CJP120SN10	Single	N	100	±20	120	4.6	5.5	-	-	4190	68	TO-220-3L-C

## 2、HV MOS

Part Number	Configuration	Type	VDS (V)	VGS (V)	ID (A)	RDS(ON) (mΩ)				Ciss (pF)	Qg (nC)	Package
						VGS=10V		VGS=4.5V				
						TYP	MAX	TYP	MAX			
CJD02N65	Single	N	650	±20	2	3.8	-	-	-	435	5	TO-251S
CJD04N65	Single	N	650	±20	4	2.3	-	-	-	515	5	TO-251S
CJU02N65	Single	N	650	±20	2	3.8	-	-	-	435	5	TO-252-2L
CJU02N65	Single	N	650	±20	2	3.8	-	-	-	435	5	TO-252-2L
CJU04N65	Single	N	650	±30	4	2.3	-	-	-	-	5	TO-252-2L
CJPF02N65	Single	N	650	±20	2	3.8	-	-	-	435	5	TO-220F
CJPF04N65	Single	N	650	±30	4	2.5	-	-	-	515	5	TO-220F
CJPF05N65	Single	N	650	±30	5	2.2	-	-	-	1130	15	TO-220F
CJPF07N65	Single	N	650	±30	7	1.1	-	-	-	928	23	TO-220F
CJPF08N65	Single	N	650	±30	8	1.2	-	-	-	895	28	TO-220F
CJPF10N65	Single	N	650	±30	10	0.75	-	-	-	1570	44	TO-220F
CJPF12N65	Single	N	650	±30	12	0.7	-	-	-	1800	42	TO-220F
CJP02N65	Single	N	650	±20	2	3.8	-	-	-	435	5	TO-220-3L
CJP04N65	Single	N	650	±30	4	2.5	-	-	-	760	5	TO-220-3L
CJP07N65	Single	N	650	±30	7.4	1.1	-	-	-	928	29	TO-220-3L
CJP08N65	Single	N	650	±30	8	1.1	-	-	-	895	28	TO-220-3L
CJP10N65	Single	N	650	±30	10	0.7	-	-	-	1570	42	TO-220-3L
CJP12N65	Single	N	650	±30	12	0.7	-	-	-	1800	42	TO-220-3L
CJPF03N80	Single	N	800	±30	3	3.2	-	-	-	485	19	TO-220F
CJPF04N80	Single	N	800	±30	4	2.1	-	-	-	560	21	TO-220F
CJPF08N80	Single	N	800	±20	8	1.18	-	-	-	1580	35	TO-220F
CJP02N80	Single	N	800	±30	2.4	-	-	-	-	-	-	TO-220-3L



3、Lithium Battery Protection MOS

Part Number	Configuration	Type	V <sub>DS</sub> (V)	V <sub>ES</sub> (V)	I <sub>D</sub> (A)	R <sub>DS(ON)</sub> (mΩ)			C <sub>iss</sub> (pF)	Q <sub>g</sub> (nC)	Package
						TYP@10V	TYP@4.5V	TYP@2.5V			
CJ6207SP	Common Drain	N	12	±8	8.5	-	4.5	6.2	1290	32	CSPB2213-6
CJ6605SP	Common Drain	N	12	±12	13	-	4.8	6.5	-	-	CSPB2718-6
CJ8218SP	Common Drain	N	12	±8	13.5	-	2.1	2.2	1373	36	CSPC2019-10
CJ8208SP	Common Drain	N	12	±8	14	-	2	2.8	1560	32.5	CSPC3015-10
CJ8209SP	Common Drain	N	12	±8	17	-	1.2	1.8	4975	52	CSPC2624-10
CJ12209SP	Common Drain	N	12	±8	19.8	-	1.2	1.6	6315	75	CSPC3028-14
CJ4616SP	Common Drain	N	15	±12	8	-	14	19	485	8.8	CSPB1515-4
CJ4502SP	Common Drain	N	20	±12	3.5	-	22.6	27.7	644	8.6	CSPB1111-4
CJ4506SP	Common Drain	N	20	±12	10	-	11.2	14.7	1746	28	CSPB1717-4
CJ6617SP	Common Drain	N	20	±12	12	-	4.9	6.6	2609	34.7	CSPB2217-6
CJL2013	Common Drain	N	20	±10	6	-	12.2	14.9	935	16	SOT-23-6L
CJL2016	Common Drain	N	20	±10	6	-	15.7	20	800	11	SOT-23-6L
CJL2019	Common Drain	N	20	±10	5	-	19.5	24	800	11	SOT-23-6L
CJL8810	Common Drain	N	20	±12	7	13.5	14.5	18.5	1150	15	SOT-23-6L
CJL8820	Common Drain	N	20	±12	7	15	17	22	650	8	SOT-23-6L
CJS2013	Common Drain	N	20	±10	6	-	10.5	13.5	935	16	TSSOP-8
CJS2016	Common Drain	N	20	±10	6	-	15.7	20	800	11	TSSOP-8
CJS2019	Common Drain	N	20	±10	5	-	19.5	24	800	11	TSSOP-8
CJS8205B	Common Drain	N	20	±10	5	-	24	32	-	-	TSSOP-8
CJS8804	Common Drain	N	20	±12	8	9.8	10.5	13.3	1800	17.9	TSSOP-8
CJS8810	Common Drain	N	20	±12	7	14	14.2	18.2	1150	15	TSSOP-8
CJS8820	Common Drain	N	20	±12	7	14	16	22	650	8	TSSOP-8
CJS9004A	Common Drain	N	20	±12	10	-	7.5	9.7	1040	13	TSSOP-8
CJCE2016	Common Drain	N	20	±12	7	-	15.5	17	680	10	DFNWB2×2-6L
CJCD2003	Common Drain	N	18	±12	10	-	6.2	8.2	1950	17	DFNWB2×3-6L
CJCD2004	Common Drain	N	20	±12	10	-	7.3	9	1950	17	DFNWB2×3-6L
CJCD2005	Common Drain	N	20	±12	8	-	9	12.5	1800	17	DFNWB2×3-6L
CJCD2007	Common Drain	N	20	±12	8	-	12.5	17	1150	15	DFNWB2×3-6L
CJCD2008	Common Drain	N	20	±12	7	-	15.5	19.8	670	9	DFNWB2×3-6L
CJND2004S	Common Drain	N	20	±12	10	-	8	10	1950	17	DFNWB2×5-6L
CJAE2002	Common Drain	N	18	±12	15	-	4.4	5.4	1970	26.5	DFNWB3×3-8L-J
CJBE5005	Common Drain	N	18	±12	10	-	9.3	12.5	1700	17	DFNWB3×3-8L-K

Schottky Diode

Part Number	VRRM (V)	IFAV (A)	IR at VRRM 25°C (μA)	VF at IFAV 25°C (V)	IFAV (A)	Package
SBD4045TCTB	45	40	80	0.41	20	TO-220-3L
SBD4060TCTB	60	60	80	0.43	30	TO-220-3L
SBD10100TCTB	100	10	5	0.68	5	TO-220-3L
SBD10100SCTB	100	10	7	0.58	5	TO-220-3L
SBD20100TCTB	100	20	9	0.67	10	TO-220-3L
SBD30100TCTB	100	30	11	0.72	15	TO-220-3L
SBD30100SCTB	100	30	12	0.67	15	TO-220-3L
SBD40100TCTB	100	40	20	0.66	20	TO-220-3L
SBD20120TCTB	120	20	7	0.77	10	TO-220-3L
SBD30120TCTB	120	30	8	0.85	15	TO-220-3L
SBD30120SCTB	120	30	14	0.79	15	TO-220-3L
SBD40120TCTB	120	40	19	0.76	20	TO-220-3L
SBD20150TCTB	150	20	5	0.75	10	TO-220-3L
SBD20H150CTB	150	20	0.1	0.82	10	TO-220-3L
SBD30150SCTB	150	30	10	0.83	15	TO-220-3L
SBD40150TCTB	150	40	5	0.73	10	TO-220-3L
SBD20H200CTB	200	20	0.1	0.84	10	TO-220-3L
SBDF4045TCTB	45	40	80	0.41	20	TO-220F
SBDF4060TCTB	60	40	80	0.43	20	TO-220F
SBDF10100TCTB	100	10	5	0.68	5	TO-220F
SBDF10100SCTB	100	10	7	0.58	5	TO-220F
SBDF20100TCTB	100	20	9	0.67	10	TO-220F
SBDF30100TCTB	100	30	11	0.72	15	TO-220F
SBDF30100SCTB	100	30	12	0.67	15	TO-220F
SBDF40100TCTB	100	40	20	0.66	20	TO-220F
SBDF20120TCTB	120	20	7	0.77	10	TO-220F
SBDF30120TCTB	120	30	8	0.85	15	TO-220F
SBDF30120SCTB	120	30	14	0.79	15	TO-220F
SBDF20150TCTB	150	20	5	1.06	10	TO-220F
SBDF30150SCTB	150	30	10	1.05	15	TO-220F

TVS

Feature	Part Number	Ppp (W)	VRWM (V)	VBRMin (V)	VBRMax (V)	IR (uA)	CJ (PF)	VC (V)	IPP (A)	Package	
0201	ESDBS1V8AH1	250	1.8	3	4	1	45	8	25	DFNWB1.0×0.6-2L-G	
	ESDBU2V5AE1	24	2.5	7	-	0.1	0.4	6	4	DFNWB0.6×0.3-2L	
	ESDBS3V3AE1	120	3.3	3.8	-	0.01	34	8.5	16	DFNWB0.6×0.3-2L-D	
	ESDBU3V3AE1	24	3.3	7	-	0.1	0.4	6	4	DFNWB0.6×0.3-2L	
	ESDM3V3AE1	70	3.3	4.5	6.5	1	30	14	5	DFNWB0.6×0.3-2L	
	ESDBM3V3AE1	80	3.3	3.6	4.8	1	22	9	9	DFNWB0.6×0.3-2L	
	ESDBL3V3AE1	54	3.3	4	6.8	0.1	12	8.5	6	DFNWB0.6×0.3-2L	
	ESDU5V0AE1	80	5	5.8	9.4	1	0.9	20	4	DFNWB0.6×0.3-2L	
	ESD5V0AE1	117	5	5.8	9.4	1	55	13	9	DFNWB0.6×0.3-2L	
	ESDSU5V0AE1	80	5	6.5	9	0.5	0.24	20	4	DFNWB0.6×0.3-2L	
	ESDBVD5V0AE1	52	5	5.6	10	1	3	13	4	DFNWB0.6×0.3-2L	
	ESDBL5V0AE1	50	5	5.8	8	0.1	10	10	5	DFNWB0.6×0.3-2L	
	ESDHBL5V0AE1	80	5.5	6	8.8	0.1	20	15	7	DFNWB0.6×0.3-2L	
	ESDBU6V0AE1	45	6	6.7	-	0.1	0.45	12	4	DFNWB0.6×0.3-2L	
	ESDBL7V0AE1	75	7	7.5	10.5	1	10	15	5	DFNWB0.6×0.3-2L	
	ESDBL12VAE1	84	12	13.5	17.5	1	8	25	3	DFNWB0.6×0.3-2L	
	ESD15VAE1	127	15	16.7	20	1	17	31	4.1	DFNWB0.6×0.3-2L	
	ESDL24VAE1	90	24	25	33	1	13	36	2.5	DFNWB0.6×0.3-2L-B	
	0402	ESDBS1V8AH1	250	1.8	3	4	1	45	8	25	DFNWB1.0×0.6-2L-G
		ESD3V3Y1	110	3.3	5	6.5	1	70	11	10	WBFBP-02C-A(1.0×0.6×0.5)
ESDBU3V3A1		24	3.3	7	-	0.1	0.4	6	4	DFN1006-2L	
ESDBM3V3A1		80	3.3	3.6	4.8	1	20	6.5	9	DFN1006-2L	
ESDBL3V3Y1		70	3.3	4	6	0.4	15	10	7	WBFBP-02C-A(1.0×0.6×0.5)	
ESDBUC3V6AH1		45	3.6	6	-	0.1	0.18	4	13	DFNWB1.0×0.6-2L-G	
ESDBW4V5A1		540	4.5	4.6	6	1	60	18	30	DFN1006-2L	
ESDBU5V0Y1		80	5	6.5	9.4	1	0.9	20	4	WBFBP-02C-A	
ESDU5V0Y1		75	5	5.4	9.4	1	0.5	15	5	WBFBP-02C-A(1.0×0.6×0.5)	
ESDM5V0Y1		120	5	6	8	1	30	15	8	WBFBP-02C-A(1.0×0.6×0.5)	
ESDBW5V0A1		476	5	5.5	7.5	1	60	17	28	DFN1006-2L	
DTESDB5V0LED02		120	5	5.8	8.8	1	27	15	8	WBFBP-02C	
DTESD5V0LED02	170	5	6.2	7.3	1	95	13	13	WBFBP-02C		

Feature	Part Number	Ppp (W)	VRWM (V)	VBRMin (V)	VBRMax (V)	IR (uA)	CJ (PF)	VC (V)	IPP (A)	Package
0402	ESDTU5V0A1	45	5	6	-	0.1	0.35	10.5	4	DFN1006-2L
	ESDBVD5V0Y1	52	5	5.6	10	1	3	13	4	WBFBP-02C-A(1.0×0.6×0.5)
	ESDHBL5V0Y1	120	5	5.8	8	0.1	12	15	8	WBFBP-02C-A(1.0×0.6×0.5)
	ESDSU5V0A1	80	5	6.5	9	0.5	0.24	20	4	DFN1006-2L
	ESDBL5V0Y1	40	5	5.8	8.3	0.1	12	10	4	WBFBP-02C-A(1.0×0.6×0.5)
	ESDHBM5V0A1	300	5.5	6	8	1	60	12	25	DFN1006-2L
	ESDM6V3A1	300	6.3	7	8	1	180	11	20	DFN1006-2L
	ESDBL7V0Y1	85	7	8.2	10.5	1	9	17	5	WBFBP-02C-A(1.0×0.6×0.5)
	ESDBM7V0A1	75	7	7.5	10.5	1	50	12	17	DFN1006-2L
	ESDBL8V0Y1	85	8	9.2	14	1	9	17	5	WBFBP-02C-A(1.0×0.6×0.5)
	ESDBM12VA1	260	12	13.3	17	1	30	27	10	DFN1006-2L
	ESDBL12VY1	92	12	14	-	0.1	12	23	4	WBFBP-02C-A(1.0×0.6×0.5)
	ESDBL15VA1	160	15	16.8	20	1	15	35	4	DFN1006-2L
	ESDBU18VA1	48	18	19	-	0.1	0.35	12	4	DFN1006-2L
	ESDBL18VA1	400	18	19.8	25	1	10	40	5	DFN1006-2L
	ESDBU24VA1	40	24	26	32	1	0.4	8	4	DFNWB1.0×0.6-2L-C
	ESDBL24VA1	275	24	26.7	-	0.2	20	35	1	DFNWB1.0×0.6-2L
	ESD36VF1	240	36	40	48	1	30	80	3	WBFBP-02C
DFN1610-2L	ESDBT4V5FD1	1610	4.5	5	-	1	360	11.5	120	DFN1610-2L
	ESDI4V8FD1	3135	4.85	4.9	-	0.1	350	17	165	DFN1610-2L
	ESDH5V0FD1	2635	5	5.2	-	1	950	17	155	DFN1610-2L
DFN2X2-3L	ESDBH4V5P1	5750	4.5	4.6	-	1	800	26	200	DFNWB2.0×2.0-3L
	ESDH5V0P1	7000	5	5.3	6	40	2500	25	300	DFNWB2.0×2.0-3L
	ESDH7V0P1	7600	7	7.5	-	1	2000	38	200	DFNWB2.0×2.0-3L
	ESDH10VP1	5800	10	11.3	14.5	1	1300	29	200	DFNWB2.0×2.0-3L
	ESDH12VP1	5700	12	13.3	16.5	1	1200	30	190	DFNWB2.0×2.0-3L
	ESDE24VP1	6650	24	25.5	-	1	740	35	190	DFNWB2.0×2.0-3L
	ESDD24VP1	5400	24	25	-	1	740	40	135	DFNWB2.0×2.0-3L
2-Line ESD	ESDR0502N2	75	5	6	-	0.5	0.25	15	5	DFNWB1006-3L
	ESDBVD5V0F2	52	5	5.6	10	1	3	13	4	WBFBP-03E
	ESDBL5V0F2	50	5	5.8	8	0.1	10	10	5	WBFBP-03E
4-Line ESD	ESDU3V3AG4	80	3.3	4	-	1	0.45	12	4	DFNWB2.5×1.0-10L
	ESDTU5V0AG4B	40	5	6	-	0.5	0.38	12	3	DFNWB2.5×1.0-10L



Feature	Part Number	Ppp (W)	VRWM (V)	VBRMin (V)	VBRMax (V)	IR (uA)	CJ (PF)	VC (V)	IPP (A)	Package	
SOD-123	CESD5V0D1	170	5	6.2	7.3	1	95	13	13	SOD-123	
	ESDBKV3V3D3	1120	3.3	4.2	5.8	5	4.3	40	28	SOD-323	
	CESD3V3D3	210	3.3	5	5.9	10	120	13	16	SOD-323	
	ESDBT4V5D3	3300	4.5	5	-	1	150	27.5	100	SOD-323	
	ESDQ4V5D3	2420	4.5	5.6	6.4	1	920	22	110	SOD-323	
	ESDBW5V0D3	476	5	5.5	7.5	1	60	17	28	SOD-323	
	CESDBLC5V0D3	50	5	5.8	7.8	0.1	12	10	5	SOD-323	
	CESD5V0D3	170	5	6.2	7.3	10	95	13	13	SOD-323	
	ESDBKV5V0D3	750	5	6	8	1	2	27	30	SOD-323	
	ESDD5V0D3	3520	5	5.3	6	20	1250	20	150	SOD-323	
	ESDBL7V0D3	85	7	8.2	10.5	1	9	17	5	SOD-323	
	ESDQ7V0D3	1040	7	7.7	10	7	500	16	65	SOD-323	
	ESDD7V0D3	3500	7	8	10	1	550	25	125	SOD-323	
	ESDBL8V0D3	40	8	9	14	2	15	20	2	SOD-323	
	ESDBKV12VD3	352	12	13.6	16	0.5	2	32	11	SOD-323	
	ESDBM12VD3	224	12	13.3	16	0.1	18	26	8	SOD-323	
	SOD-323	CESD12VD3	220	12	13.3	16.5	1	45	24	9	SOD-323
ESDBL15VD3		204	15	17.8	21	1	15	34	6	SOD-323	
ESDM15VD3		204	15	16.7	20	1	30	34	6	SOD-323	
ESDBL18VD3		200	18	19.2	25.2	1	13	36.5	5	SOD-323	
ESDM18VD3		200	18	19.8	24	0.1	26.5	36.5	5	SOD-323	
ESDBM18VD3		360	18	20	25	1	35	40	9	SOD-323	
CESD24VD3		330	24	26.7	33	1	36	44	7.5	SOD-323	
ESDBM24VD3		480	24	26	32	1	37	53	9	SOD-323	
ESDBL36VD3		240	36	40	48	1	15	80	3	SOD-323	
SOD-523		CESD3V3D5	210	3.3	5	5.9	0.08	120	13	16	SOD-523
		ESDU5V0D5	75	5	5.4	9.4	1	0.5	15	5	SOD-523
		CESD5V0D5	170	5	6.2	7.3	10	95	13	13	SOD-523
		CESDBLC5V0D5	50	5	5.8	8.3	0.1	12	10	5	SOD-523
		CESDB5V0D5	112	5	5.8	8.8	1	27	14	8	SOD-523
		CESD7V0D5	150	7	7.5	8.7	30	70	15.1	10	SOD-523
		CESD12VD5	220	12	14.1	16.5	1	45	24	9	SOD-523
		CESD15VD5	323	15	16.7	20	1	48	34	9.5	SOD-523
	CESD24VD5	330	24	26.7	33	1	36	44	7.5	SOD-523	
	ESD36VD5	240	36	40	48	1	30	80	3	SOD-523	

Feature	Part Number	Ppp (W)	VRWM (V)	VBRMin (V)	VBRMax (V)	IR (uA)	CJ (PF)	VC (V)	IPP (A)	Package
SOD-723	CESD3V3D7	120	3.3	5	5.9	2.5	110	13	9	SOD-723
	CESDBLC5V0D7	50	5	5.8	7.8	0.1	12	10	5	SOD-723
	CESD7V0D7	150	7	7.5	8.7	1	70	15.1	10	SOD-723
	CESD12VD7	220	12	13.5	16.5	1	45	24	9	SOD-723
	Multi-Line ESD	CESD3V3AP	210	3.3	5	5.9	10	120	13	16
CESD5V0AP		170	5	6.2	7.3	10	95	13	13	SOT-23
CESD12VAP		220	12	13.3	16.5	1	45	24	9	SOT-23
ESDBW712C2		396/468	44902	14.2/9.4	16.7/11.9	1	55	33/26	15/18	SOT-23
ESDM24VCP		400	24	26	32	1	100	52	8	SOT-23
ESDBM24VC2		350	24	26.2	-	1	28	50	8	SOT-23
ESD36VAP		240	36	40	48	1	30	80	3	SOT-23
ESDU5V0H3		90	5	6	10	1	0.8	25	3.5	SOT-23-6L
ESDU5V0H4		125	5	6.5	8.8	1	0.8	25	5	SOT-23-6L
ESD5V0H4		240	5	5.8	10	5	2	20	12	SOT-23-6L
ESDU5V0N4		125	5	6.5	8.8	1	0.8	25	5	SOT-563
ESDU5V0N2		90	5	6	10	1	0.8	25	3.5	SOT-563
ESDU5V0L2		90	5	6	10	1	0.8	25	3.5	SOT-553
ESDU5V0K4		125	5	6.5	8.8	1	0.8	25	5	SOT-363
ESDU5V0E2		56	5	5.4	9.4	1	0.5	11	1	SOT-523
ESDF5V0J4		225	5	6.2	7.3	1	95	15	15	SOT-353
CESDLC5V0M5		33	5	6.2	7.2	1	10	13	2.5	SOT-563
CESDLC5V0L4		28	5	6	7.2	1	10	11	2.5	SOT-553
CESDLC5V0K5		33	5	6.2	7.2	1	10	13	2.5	SOT-363
CESDLC5V0J4		28	5	6	7.2	1	10	11	2.5	SOT-353
CESDLC3V0L4	20	3	5.3	5.9	1	9	8	2.5	SOT-553	
CESDLC3V0J4	20	3	5.3	5.9	1	9	8	2.5	SOT-353	
CESDB5V0AT3	120	5	5.8	8.8	1	27	15	8	SOT-323	
CESD5V0M5	60	5	6	7.2	5	30	12	5	SOT-563	
CESD5V0L4	60	5	6	7.2	5	30	12	5	SOT-553	
CESD5V0K5	60	5	6	7.2	5	30	12	5	SOT-363	
CESD5V0J4	60	5	6	7.2	5	30	12	5	SOT-353	
ESDBL5V0E2	60	5	5.8	8.3	0.1	10.5	12	5	SOT-523	
ESDU5V0G3	90	5	6	10	1	0.8	25	3.5	SOT-143	
CESDLC5V0G3	28	5	6.1	7.2	0.055	10	11	2.5	SOT-143	
ESDBP5V0Q4	550	5	6	8	1	120	25	25	SOP8	

Frequency Devices

1、Crystals

KHz Band Crystal Resonators			
Type	Photo	Frequency Range	Packaging Type
CJK01 Series		32.768KHz	DIP 3*8
CJK02 Series		32.768KHz	DIP 2*6
CJK04 Series		32.768KHz	8.0*3.8*2.4mm
CJK05 Series		32.768KHz	7.0*1.4*1.3mm
CJK07 Series		32.768KHz	3.2*1.5*0.75mm
CJK08 Series		32.768KHz	2.0*1.2*0.6mm
CJK09 Series		32.768KHz	1.6*1.0*0.5mm
MHz Band Crystal Resonators			
Type	Photo	Frequency Range	Packaging Type
CJ02 Series		3.2MHz~90MHz	HC-49S
CJ03 Series		3.2MHz~70MHz	HC-49S SMD
CJ10 Series		8MHz~100MHz	5.0*3.2*0.9mm
CJ11 Series		8MHz~80MHz	5.0*3.2*1.2mm
CJ13 Series		8MHz~66MHz	3.2*2.5*0.7mm
CJ15 Series		12MHz~66MHz	2.5*2.0*0.55mm
CJ16 Series		16MHz~96MHz	2.0*1.6*0.5mm
CJ17 Series		24MHz~60MHz	1.6*1.2*0.33mm

2、Crystal Oscillators

Crystal Oscillators					
Type	Photo	Packaging Type	Frequency Range	Working Voltage	OUTPUT
CJO03 Series		7.0*5.0*1.3mm	32.768KHz~156MHz	1.8~5V	CMOS
CJO04 Series		5.0*3.2*1.2mm	32.768KHz~127MHz	1.8~5V	CMOS
CJO05 Series		3.2*2.5*1.0mm	32.768KHz~100MHz	1.8~3.3V	CMOS
CJO06 Series		2.5*2.0*0.9mm	32.768KHz~60MHz	1.8~3.3V	CMOS
CJO07 Series		2.05*1.65*0.75mm	1.5MHz~50MHz	1.8~3.3V	CMOS
QMEMS Crystal Oscillators					
Type	Photo	Packaging Type	Frequency Range	Working Voltage	OUTPUT
CJQ03 Series		7.0*5.0*1.3mm	1MHz~200MHz	1.8~3.3V	CMOS
CJQ04 Series		5.0*3.2*1.2mm	1MHz~200MHz	1.8~3.3V	CMOS
CJQ05 Series		3.2*2.5*1.0mm	2.048MHz~200MHz	1.8~3.3V	CMOS
CJQ06 Series		2.5*2.0*0.9mm	2.048MHz~200MHz	1.8~3.3V	CMOS
CJQ07 Series		2.05*1.65*0.75mm	2.048MHz~200MHz	1.8~3.3V	CMOS

IGBT

Function	Part Number	V <sub>CE(S)</sub> (V)	I <sub>C(A)</sub> (T=100°C)	V <sub>CE(sat)</sub> (V)	Package
IGBT	CGU06N65F2SA	650	6	1.68	TO-252
	CGWT40N120F2LAD	1200	40	1.5	TO-247
	CGWT40N120F2KAD	1200	40	1.6	TO-247
	CGR75N120F2KAD	1200	75	1.67	TO-247Plus
	CGWT80N65F2KAD	650	80	1.62	TO-247
	CGR100N120F2KAD	1200	100	1.68	TO-247Plus

FRD

Part Number	V <sub>R</sub> (V)	I <sub>O</sub> (A)	V <sub>F</sub> (V)	T <sub>rr</sub> (ns)	I <sub>R</sub> (uA)	Package
US1M	1000	1	1.7	75	SMAG	SMAG
US2M	1000	2	1.7	75	SMAG	SMAG
US3M	1000	3	1.7	75	SMBG	SMBG
US5M	1000	5	1.7	75	SMCG	SMCG
RS1M	1000	1	1	500	5	SMAG
RS2M	1000	2	1.3	500	5	SMAG
RS3M	1000	3	1.3	500	10	SMBG
RS5M	1000	5	1.3	500	10	SMCG
ES1D	200	1	0.95	35	5	SMAG
ES2D	200	2	0.95	35	5	SMAG
ES3D	200	3	0.95	35	5	SMBG
ES5D	200	5	0.95	35	10	SMCG
ES1J	600	1	1.7	35	5	SMAG
ES2J	600	2	1.7	35	5	SMAG
ES3J	600	3	1.7	35	5	SMBG
ES5J	600	5	1.7	35	10	SMCG
FFM104-M	400	1	1.3	150	5	SOD-123FL
FFM107-M	1000	1	1.3	500	5	SOD-123FL
MURS120	200	1	0.875	25	2	SMAG
MURS160	600	1	1.25	50	5	SMAG
MURS220	200	2	0.95	25	5	SMBG
MURS260	600	2	1.45	50	50	SMBG
MURS320	200	3	0.875	25	5	SMBG
MURS360	600	3	1.25	50	5	SMBG
MURS460	600	4	1.28	50	10	SMCG

Part Number	VR (V)	IO (A)	VF (V)	Trr (ns)	IR (uA)	Package
MURW60H20LCTB	200	60	1.2	31	10	TO-247-3L
MURW60H30LCTB	300	60	1.3	33	10	TO-247-3L
MURF1040CT	400	10	1.4	35	1	TO-220F
MUR1040CT	400	10	1.4	35	1	TO-220-3L
MURF1640CT	400	16	1.4	35	1	TO-220F
MUR1640CT	400	16	1.4	35	1	TO-220-3L
MURW60H40LCTB	400	60	1.4	32	10	TO-247-3L
MUR8H60	600	8	1.6	34	10	TO-220-2L
MURF8H60	600	8	1.6	34	10	TO-220F-2L
MURD8H60	600	8	1.6	34	10	TO-252-2L
MURF1060CT	600	10	1.7	32	2	TO-220F
MUR1060CT	600	10	1.7	32	2	TO-220-3L
MUR10H60	600	10	1.6	32	10	TO-220-2L
MURF10H60	600	10	1.6	32	10	TO-220F-2L
MURD10H60	600	10	1.6	32	10	TO-252-2L
MUR15H60	600	15	2.2	23	10	TO-220-2L
MUR15H60L	600	15	1.6	34	10	TO-220-2L
MURF15H60	600	15	2.2	23	10	TO-220F-2L
MURF15H60L	600	15	1.6	34	10	TO-220F-2L
MURF1660CT	600	16	1.6	35	1	TO-220F
MUR1660CT	600	16	1.6	35	1	TO-220-3L
MUR20H60	600	20	2.5	31	10	TO-220-2L
MUR20H60L	600	20	1.6	35	10	TO-220-2L
MURF20H60	600	20	2.5	31	10	TO-220F-2L
MURF20H60L	600	20	1.6	35	10	TO-220F-2L
MUR30H60	600	30	3	32	10	TO-220-2L
MUR30H60L	600	30	1.6	38	10	TO-220-2L
MURF30H60	600	30	3	32	10	TO-220F-2L
MURF30H60L	600	30	1.6	38	10	TO-220F-2L
MURW30H60	600	30	3	32	10	TO-247-2L
MURW30H60L	600	30	1.6	38	10	TO-247-2L
MURW75H60L	600	75	1.6	48	10	TO-247-2L
MURW75H65	650	75	2.35	40	10	TO-247-2L
MURW60H120	1200	60	3.5	43	10	TO-247-2L