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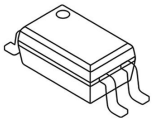
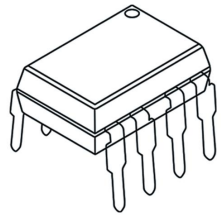
AOTE
SEMICONDUCTOR

PRODUCT MANUALS
产品手册





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台湾奥特半导体科技有限公司
Taiwan Aote Semiconductor Technology Co.,Ltd
广东奥特半导体有限公司
Guangdong Aote Semiconductor Co.,Ltd

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广东奥特半导体有限公司
Guangdong Aote Semiconductor Co.,Ltd

公司简介
Company Profile

奥特半导体
领先的光电耦合器制造商

台湾奥特半导体科技有限公司（以下简称AOTE）成立于2018年、总部及研发实验室设立于台湾省台中市。旗下分公司-广东奥特半导体有限公司的成立标志着AOTE奥特半导体公司在国内市场的扩张，深圳市作为中国半导体产业的核心地区，具有便捷的交通和良好的产业生态环境，为公司的发展提供了有力的保障。分公司主要负责销售产品，以满足不同地区市场的需求。设立分公司不仅有利于与国内客户的合作，也能更好地了解并满足中国市场的需求。

奥特公司研发团队成员大部分来自于国内外大型半导体公司，奥特拥有国际一流水准的高性能模拟.混合集成电路设计能力，和依据产品性能指标设计集成电路的丰富经验，是目前拥有光耦芯片全产业链生产能力的及研发高科技公司，公司已通过ISO9001,ISO14001质量管理体系认证，公司对产品高研发投入及设计，现有产品已可PIN对PIN对标及兼容欧美、日、台资的多系列光电耦合器，产品均符合欧盟RoHS、REACH、SGS环保指令标准，并通过中国质量CQC，德国VDE，美国UL安规认证等多项国际认证。

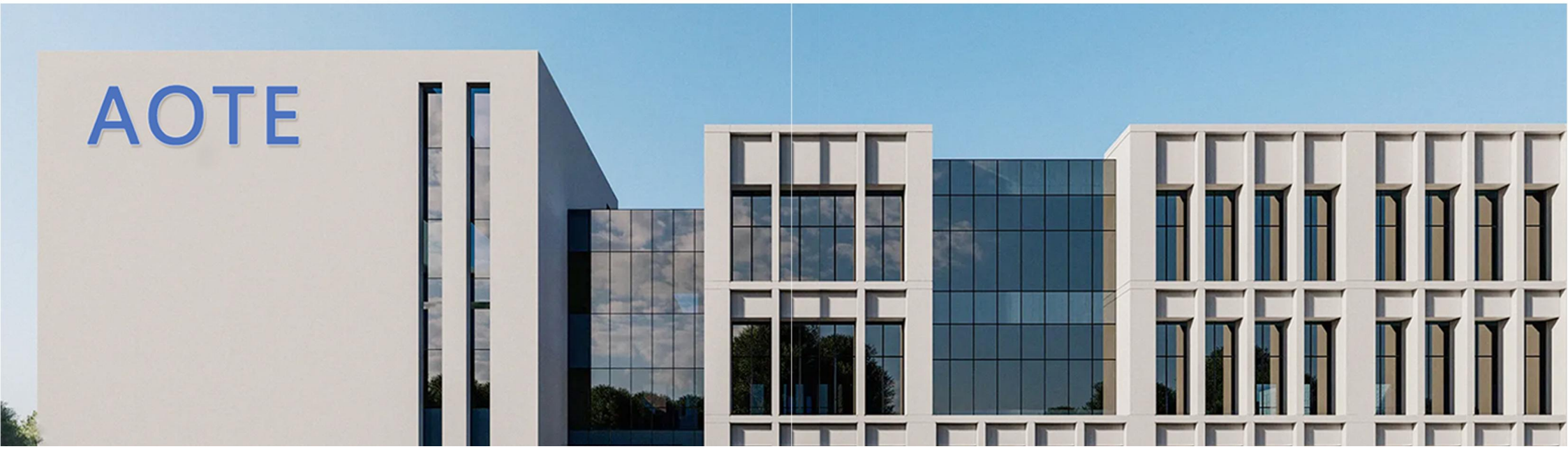
目前的光电耦合器产品包括：晶体管输出光耦、光电继电器、可控硅输出光耦、高速光耦、达林顿、IGBT驱动光耦等产品，产品广泛应用于智能家居、移动互联、智能仪表、智能汽车、医疗设备、工业控制、消费类及工业级产品领域等，为各行业提供完善服务。

正品保证 质量保证 无忧退换 可开发票 长期现货 原厂供应

Taiwan Province AOTE Semiconductor Technology Co., Ltd. (hereinafter referred to as AOTE) was established in 2018, with its headquarters and R&D laboratory in Taichung City,Taiwan Province Province.The establishment of its subsidiary Guangdong AOTE Semiconductor Co., Ltd. marks the expansion of Aote Aote Semiconductor Company in the domestic market. As the core area of China's semiconductor industry,Shenzhen has convenient transportation and good industrial ecological environment,which provides a strong guarantee for the company's development.The branch company is mainly responsible for selling products to meet the needs of different regional markets.Setting up branches is not only beneficial to cooperation with domestic customers, but also can better understand and meet the needs of China market.

Most of the R&D team members of Aote Company come from large semiconductor companies at home and abroad.Aote has worldclass highperformance analog and hybrid integrated circuit design capabilities and rich experience in designing integrated circuits according to product performance indicators.It is a hightech R&D company with the production capacity of optocoupler chips in the whole industry chain.The company has passed the ISO 9001 and ISO 14001 quality management system certification, and the company has high R&D investment and design for products. The existing products can be PIN-to-PIN, and are compatible with many series of photoelectric couplers from Europe, America, Japan and Taiwan. The products all meet the environmental protection directive standards of EU RoHS, REACH and SGS, and have passed many international certifications, such as China Quality CQC, German VDE and US UL Safety Certification.

At present, the photoelectric coupler products include: transistor output optocoupler, photoelectric relay, SCR output optocoupler,high-speed optocoupler,Darlington,IGBT driven optocoupler and other products.The products are widely used in smart home, mobile internet, smart instruments, smart cars, medical equipment, industrial control, consumer and industrial products, etc., and provide perfect services for various industries.



品质保证
QUALITY GUARANTEE

体系管理

通过 ISO9001、ISO14001 等体系标准认证；
产品符合 CQC、VDE、UL、SGS、ROSH、REACH 等认证的规则要求。

AOTE’ s system passed ISO9001, ISO14001,and other system standard certification. Products comply with CQC, VDE, UL, SGS、ROSH、REACHcertification rules and requirements.

供应商管理

奥特拥有完整的供应商评估体系，安全、稳定的供应商队伍。

AOTE has a complete supplier evaluation system, safe andstable supplier team.

制程品质管理

奥特一直秉承着“质量第一”的管理思想，精益求精，做到“不接收、不制造、不流出“不良品。

AOTE has been adhering to the “Quality first” management philosophy, excellence, to “Do not receive, do not manufacture, do not flow out of” defective products.

客诉管理

奥特拥有专业的客服团队，能高效处理客户抱怨和投诉，承诺 48 小时内完成快速反应及处理，72 小时内给出基本原因分析及改善计划，一般问题 7 个工作日内回复完整的 8D 报告。

AOTE has a professional customer service team, can effectively deal with customer complaints and complaints, promised to complete the rapid response and handling within 48 hours, 72 hours to provide root cause analysis and improvement plan, general questions reply to the full 8D report within 7 working days.

有害物质管理

奥特具备 RoHS1.0、RoHS2.0 检测能力，
成品按封装形式 1 次 / 年进行第三方检测并提供检测报告。

AOTE has rohs 1.0, rohs 2.0 testing capabilities, finished products in the form of packaging once a year for third-party testing and provide testing reports.

体系管理

实验室具备独立进行 RA 测试和 FA 分析能力，测试项目包含
HAST、PCT、HTOL、HTRB、WHTOL、HT/HH、H3TRB、TC、Salt Test 等。

The lab has the ability to independently conduct RA tests and FA analysis, including HAST, PCT, HTOL, HTRB, WHTOL, HT/HH, H3TRB,Tc, Salt Test, etc.

产品及体系认证
PRODUCT AND SYSTEM CERTIFICATION

公司已通过 ISO9001、ISO14001 等认证
产品已陆续通过 CQC、VDE、UL、SGS、ROHS、REACH 等认证
The company has passed ISO9001 and ISO14001 certifications.
The products have passed CQC, VDE, UL, SGS, ROHS, REACH and other certifications.

诚信务实·质量求存·共赢未来

Integrity and pragmatism, quality survival, and win-win future

CONTENTS目录

应用领域
APPLICATION FIELD

工业控制

工业控制是机器设备或生产过程在不需要人工直接干预的情况下，按预期的目标实现测量、操纵等信息处理和过程控制的统称。在工业控制系统中，存在着各种各样的干扰，使用光隔离器可以实现隔离、抗干扰的效果。奥特的栅极驱动光耦 (AT3120、AT341) 能够对设备前端发出的驱动信号进行隔离保护，其和晶体管光耦 (AT817、AT357 等) 实现了低压数字电路和高压驱动电路之间的电气隔离，从而避免工控设备初次级悬殊的压差带来的安全隐患。

医疗

社会大众健康生活的检测、预防、治疗过程中和医疗设备、仪器是离不开的。奥特光耦抗干扰能力强、体积小，输入输出两端完全绝缘、抑制电噪声和瞬态干扰、消除接地回路等作用是医疗设备实现完全隔离的理想器件。奥特的高速光耦 (如 AT6N137,ATW501,ATW601 等)用于电源和电机控制电路、数据通信、数字逻辑接口电路；栅极驱动光耦 (AT3120、AT341 等) 驱动 IGBT 和功率 MOSFET 器件，实现电机控制和功率转换。

仪器仪表

仪器仪表是用以检出、测量、观察、计算各种物理量、物质成分、物性参数等的器具或设备，是为某一特定用途所准备的一套装置或机器，如示波器、功率计、测试仪、万用表等。奥特的晶体管光耦 (如：AT817、AT357 等) 用于设备供电区域做电压信号反馈；光继电器 (如 AT17x、AT21x 等) 和高速光耦 (如 AT6N137、ATW501) 用于隔离通讯端口，光继电器的无机械动作、寿命长及高速光耦的快速响应等优点成为仪器仪表选择使用光耦隔离的一大首选。

电源

开关电源是一种高频电能转换装置，是利用电子开关器件通过控制电路快速地“开通”和“关断”，对输入电压进行脉宽调制，从而实现 AC-DC、DC-DC、DC-AC 电压变换。奥特晶体管光耦 (AT817/AT1018/ AT1019 等) 在开关电源中将进线 220V 高压和输出低压两端隔离，同时提供反馈信号至前端控制电路和保护电路，控制驱动电路输出相应的 PWM 信号，以控制开关功率管的工作状态，从而保证后端设备及使用人员的安全和保护输出电压的稳定。

光伏逆变

光伏发电是一种利用太阳电池半导体材料的光伏效应，将太阳光辐射能直接转换为电能的一种新型发电系统，搭配储能系统可以对能源利用达到最大化。奥特光继电器 (ATY258/QXS258 1500V) 在光伏储能产品上做为信号检测、绝缘检测应用，具有输出端子关断耐压高、初次侧高绝缘耐压特性 (5000V 以上绝缘耐压)，给高压储能设备提供安全保障 ;QXN201 高精度线性光耦，提供更高精度的信号采样数据。

家居家电

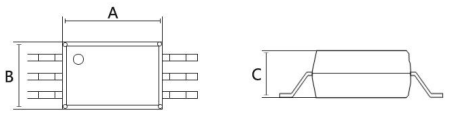
家用电器使人们从繁重、琐碎、费时的家务劳动中解放出来，为人类创造了更为舒适优美、更有利于身心健康的生活和工作环境，提供了丰富多彩的文化娱乐条件，是现代家庭生活的必需品。日用家电的高功率、高电压会有一定的安全隐患，这就需要用到隔离器件来消除电平转换时悬殊的压差带来的不安全因素。奥特晶体管光耦 (AT817、AT1018、AT1019 等) 电压采样和信号反馈；高速光耦 (ATM60x、ATW60x、AT6N137、AT0601 等) 用于检测与保护线路；可控硅光耦 (ATx223、ATx213、AT305x、AT306x 等) 能在高压，强电流的条件下工作，且工作过程可以控制，用于可控整流、交流调压、无触点电子开关、逆变及变频等电子电路中。

新能源

在全球能源不断缩减、提倡节能减排的大背景下，新能源汽车在市场中占比日益增加，存在全面取代燃油车的趋势，汽车是肩负着人员运输安全使命的交通工具。新能源汽车电池充电、BMS 管理、电控等系统中使用的奥特光继电器 (AT17x、AT22x、ATY258、ATS258 等) 响应速度快，灵敏度高，导通电阻小，漏电电流小等特点能够更大限度地利用电池存储能力和循环寿命；高速光耦 (AT6N137, AT074L, AT0631 等) 的高速响应为汽车控制系统指挥执行系统提供和采集数据； 智能栅极驱动光耦 (AT33xJ 系列) 更高的输出峰值电流、更强的抗扰能力，具有可编程故障检测、欠压锁定的特点用于强弱电隔离、通信、过程控制等系统。

产品封装图

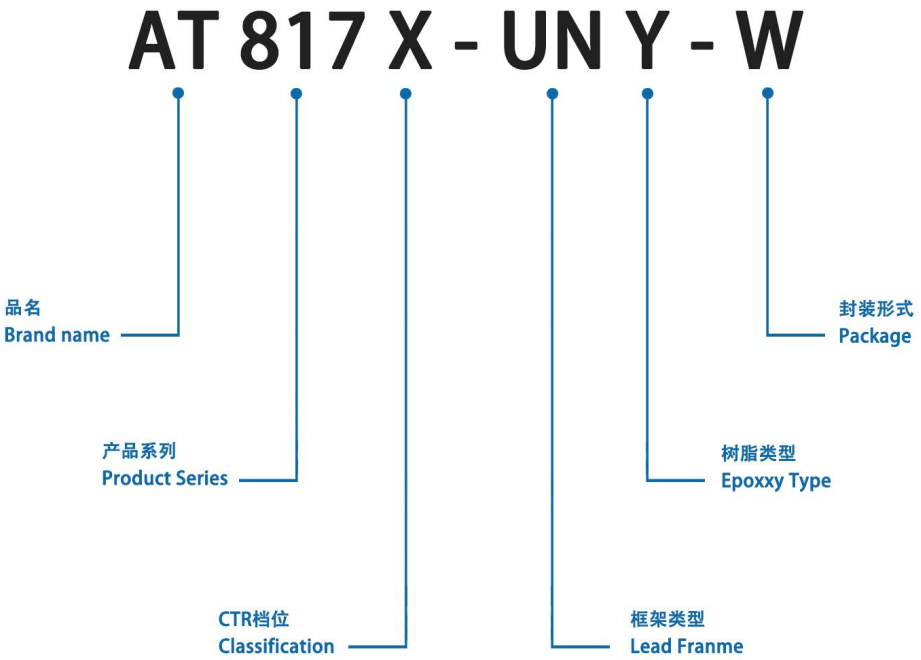
Product packaging diagram



	Package	size AxBxC
 DIP4 DIP4-M SMD-4 SLM-4	DIP4	6.5x4.6x3.5
 DIP6	DIP6	6.5x7.3x3.5
 DIP8 DIP7	DIP8	6.5x9.68x3.5
 SOP4	SOP4	4.4x3.85x2.0
 SOP5	SOP5	4.4x3.6x2.3
 SOP8	SOP8	3.91x5.84x3.18
 SMD6	SMD6	7.12x6.5x3.5
 SMD7 SMD8	SMD7	9.68x6.5x3.5
 LSOP4	LSOP4	7.5x3.8x2.0
 SSOP4	SSOP4	4.4x2.6x2.0
 SSOP16	SSOP16	4.4x10.28x2.0
 WDIP-8 WSMD-8	WDIP8	11.23x9x5.1
 WSMD-10 WSIP-10	WDIP10	13.7x11x5.25

产品型号定义

Product Model Definition



备注：

CTR档位（代码：A、B、C、D）

框架类型：（Cu：铜框架，Fe：铁框架）

封装形式：（D:DIP，D:SMD；M:DIP-M）

产品选型表
AOTE Product Selection Table

	奥特　产品选型表									
晶体管光耦	AT816 AT817	AT851 AT814	AT357 AT354	AT8801 AT101x	AT826 AT827	AT451 AT127	AT3H7 AT8016	AT2514 ATN201	ATN200 ATN201	ATN826 ATN827
达林顿光耦	AT815 AT852	AT825 AT415	AT452 AT215	AT4Nxx ATN825	AT6N138 AT6N139	ATN6N138 ATN6N139	ATN825			
光继电器	AT21x AT41x	AT22x AT17x	ATY258 ATS258	ATY258H ATS258H	AT176 AT42x	AT1722 AT2122	ATV21x ATV25x	AT2222 AT41xS	ATY259 ATS259	ATV41x ATV45x
可控硅光耦	AT52x AT55x	AT56x AT58x	AT302x AT305x	AT306x AT308x	ATM302x ATM305x	ATM306x ATM308x	ATx213 ATx223	AT202x AT205x	AT206x AT208x	
高速光耦	6N135 6N136	6N137 AT7720	ATM511 ATM611	ATW511 ATW611	ATM721 ATW720	ATN6N135 ATN6N136	H11L1 ATC64L	ATN6N137 ATN261L	ATC53x ATC63x	ATM723 ATW723
栅极驱动光耦	AT3120 AT3150	ATM341 ATM314	AT350 AT341	AT314 AT343	ATM343 ATN3140	AT0341 AT0314	AT3140 AT0343	ATN3120 ATN3150		
智能栅极驱动光耦	AT330J	AT332J	AT316J	AT331J	AT333J	AT337J	AT339J			
智能功率模块接口光耦	AT4504	AT4506	AT480	ATM480	ATM481	AT481	ATN4504	ATN4506	ATC4504	ATC4506
隔离运算放大器	AT7840	ATC87AT	ATC87BT	ATH87AT	ATH87BT	ATC790	ATH790			

晶体管光耦

产品应用：

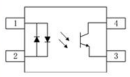
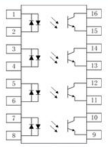
- Household Appliances
  家用电器
- Switching Power Supply
  开关电源
- Smart Electric Meter
  智能电表

产品特点：

- Has a large current transmission ratio(CTR)
  具有大电流传输比 (CTR)
- High withstand voltage and low input current
  高耐压、 低输入电流
- It can be used to isolate high voltage circuit and low voltage circuit
  可用于隔离高压电路和低压电路 ；
- Safety certification:CQC/UL/VDE/State grid certification
  安规认证 ： CQC/UL/VDE/SGS/ 国网认证等
- Product certification:SGS/ROHS&REACH
  产品认证 ： SGS/ROHS&REACH/ 无卤等

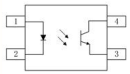
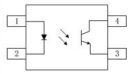
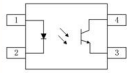
产品型号参数：

交流输入型

Part Number	Pin Configuration	Package	CTR					Vce (V)	Viso @1min (Vrms)
			Rank	Min(%)	Max(%)	@IF (mA)	@Vce (V)		
AT3H4		SSOP-4	A B --	50 100 20	150 300 300	±1	5	80	3750
AT354		SOP-4							
AT814		DIP-4 DIP-4M SMD-4							5000
AT3H44		SSOP-16	--	20	300	±1	5	80	3750

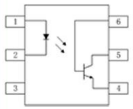
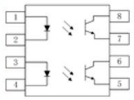
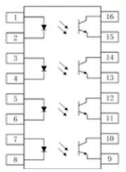
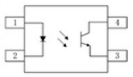
产品型号参数：

交流输入型

Part Number	Pin Configuration	Package	CTR					Vce (V)	Viso @1min (Vrms)
			Rank	Min(%)	Max(%)	@IF (mA)	@Vce (V)		
AT8801		SSOP-4 SOP-4	A B C --	80 130 200 80	160 260 400 400	1	5	80	3750
		LSOP-4 DIP-4 DIP-4M SMD-4							5000
AT816		DIP-4 DIP-4M SMD-4	C D1 D2 --	200 300 380 200	400 450 600 600	5	5	80	5000
AT3H7		SSOP-4	A B C D --	80 130 200 300 80	160 260 400 600 600				3750
AT817		DIP-4 DIP-4M SMD-4							5000
AT357		SOP-4							3750
AT101x		LSOP-4	1010 1017 1018 1019 1020	50 80 130 200 300	600 160 260 400 450	5	5	80	3750
			1012 1013 1014	63 100 160	125 200 320	10			
			1012 1013 1014	22 34 56	-- -- --	1			

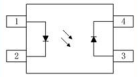
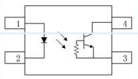
产品型号参数：

交流输入型

Part Number	Pin Configuration	Package	Rank	Min(%)	Max(%)	@IF (mA)	@Vce (V)	Vce (V)	Viso @1min (Vrms)
AT4Nxx		DIP-6 SMD-6	4N25 4N34	20 100	-- --	10	10	30	5000
AT826		DIP-8 SMD-8	C D1 D2 --	200 300 380 200	400 450 600 600	5	5	80	5000
AT827		DIP-8 SMD-8	A B C D --	80 130 200 300 80	160 260 400 600 600				5000
AT826		WDIP-8 WSMD-8	C D1 D2 --	200 300 380 200	400 450 600 600	5	5	80	5000
AT827		WDIP-8 WSMD-8	A B C D --	80 130 200 300 80	160 260 400 600 600				5000
AT3H74		SSOP-16	--	80	600	5	5	80	3750
AT451		SSOP-4	--	50	600	5	5	350	3750
AT851		DIP-4 DIP-4M SMD-4	--	50	600	5	5	350	5000

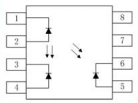
产品型号参数：

交流输入型

Part Number	Pin Configuration	Package	CTR Rank	CTR Min(%)	CTR Max(%)	CTR @IF (mA)	CTR @Vce (V)	Vce (V)	Viso @1min (Vrms)
AT8016		DIP-4 DIP-4M SMD-4	--	0.1	1	5	5	30	5000
AT818		DIP-4 DIP-4M SMD-4	--	50	600	1	5	70	5000
AT358		SOP-4	--	50	600	1	5	70	3750

产品型号参数：

高线性度模拟光耦

Part Number	Pin Configuration	Package	CTR Rank	CTR Min(%)	CTR Max(%)	CTR @IF (mA)	CTR @Vce (V)	Vce (V)	Viso @1min (Vrms)
ATN200		WDIP-8 WSMD-8	--	0.85	1.15	5nA < I_{PD} < 50μA	0V < V_{PD} < 15V	150	5000
ATN201				0.95	1.05	5nA < I_{PD} < 50μA	0V < V_{PD} < 15V	150	

达林顿光耦

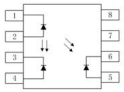
产品应用：

- Power system control
  电力系统控制
- Medical treatment
  医疗设备
- Commercial unit
  工业设备

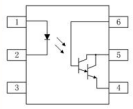
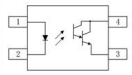
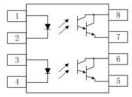
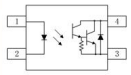
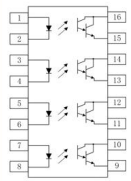
产品特点：

- High gain, enhanced signal
  高增益， 增强信号
- High isolation, avoiding the interference of electrical noise
  高隔离度， 避免电气噪声的干扰
- High-speed response, signal transmission and conversion can be completed in microsecond level
  高速响应、 可在微秒级别内完成信号传输和转换
- Safety certification:CQC/UL/VDE/State grid certification
  安规认证 ： CQC/UL/VDE/SGS/ 国网认证等
- Product certification:SGS/ROHS&REACH
  产品认证 ： SGS/ROHS&REACH/ 无卤等

产品型号参数：

Part Number	Pin Configuration	Package	CTR					Vce (V)	Viso @1min (Vrms)
			Rank	Min(%)	Max(%)	@IF (mA)	@Vce (V)		
AT6N138		DIP-8 SMD-8	--	300	--	1.6	4.5	7	5000
AT6N139			--	400	--	0.5		18	
ATN138		WDIP-8 WSMD-8	--	300	--	1.6		7	
ATN139			--	400	--	0.5		18	
ATC70A		WSOP-8	--	300	5000	1.6	5	18	

产品型号参数：

Part Number	Pin Configuration	Package	CTR					Vce (V)	Viso @1min (Vrms)
			Rank	Min(%)	Max(%)	@IF (mA)	@Vce (V)		
AT4Axx		DIP-6 SMD-6	4N33	500	--	10	10	30	5000
AT215		SSOP-4	--	600	7500	1	2	40	3570
AT415		SOP-4	--	600	7500				
AT815		DIP-4 DIP-4M SMD-4	--	600	7500				5000
AT825		DIP-8 SMD-8	--	600	7500	1	2	40	5000
ATN825		WDIP-8 WSMD-8							
AT452		SOP-4	--	1000	--	1	2	350	3750
AT852		DIP-4 DIP-4M SMD-4	--	1000	--	1	2	350	5000
AT2154		SSOP-16	--	600	7500	1	2	40	3750

光继电器

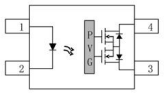
产品应用：

- Automobile drive electronic control system
  汽车驱动电控系统
- Photovoltaic inverter
  光伏逆变
- Battery detection
  电池检测

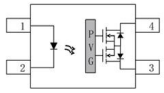
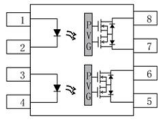
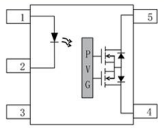
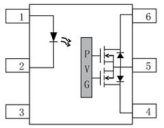
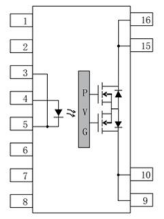
产品特点：

- It has good isolation, and the input and output terminals are completely electrically isolated
  具有良好的隔离性， 输入端和输出端完全实现电隔离
- Luminescence and photosensitive devices have ideal spectral matching, rapid response and high transmission efficiency. Easy to connect logic circuit
  发光与光敏器件光谱匹配理想， 响应迅速， 传输效率高。 易于连接逻辑电路
- Transmitting optical signals in one direction effectively blocks the electrical connection of circuits, but does not cut off the signal transmission between them
  单方向传输光信号， 有效地阻断电路的电气连接， 但不会它们切断之间的信号传输
- Safety certification:CQC/UL/VDE/State grid certification
  安规认证 ： CQC/UL/VDE/SGS/ 国网认证等
- Product certification:SGS/ROHS&REACH
  产品认证 ： SGS/ROHS&REACH/ 无卤等

产品型号参数：

Part Number	Pin Configuration	Package	Device Name	V_L Max(V)		Ron Typ(Ω)	I_{OFF} Typ(ms)	T_{ON} Typ(ms)	T_{OFF} Typ(ms)	Viso @1min (Vrms)
AT17x		SOP-4	AT1722	60	2	0.07	3	5	1	5000
			AT172	60	0.5	0.9	3	2	1	
			AT173	100	1.25	0.22	3	1	1	
			AT174	400	0.12	16	3	1	1	
			AT176	600	0.04	36	3	1	1	
			AT177	200	0.18	2.2	3	2	1	

产品型号参数：

Part Number	Pin Configuration	Package	Device Name	V_L Max(V)	I_L Max(A)	Ron Typ(Ω)	I_{OFF} Typ(ms)	T_{ON} Typ(ms)	T_{OFF} Typ(ms)	Viso @1min (Vrms)
AT21x		DIP-4 DIP-4M SMD-4	AT2122	60	2	0.08	3	5	1	5000
			AT212	60	0.5	0.8	3	2	1	
			AT213	100	1.25	0.22	3	5	1	
			AT214	400	0.12	15	3	2	1	
			AT216	600	0.04	36	3	2	1	
AT22x		DIP-8 SMD-8	AT2222	60	2	0.08	3	5	1	5000
			AT222	60	0.5	0.8	3	5	1	
			AT223	100	1.25	0.3	3	2	1	
			AT224	400	0.12	15	3	2	1	
			AT226	600	0.04	36	3	2	1	
ATY25x		DIP-5 SMD-5	ATY258	1500	0.02	110	3	1.5	0.5	5000
			ATY259	1800	0.35	2.2	3	2	1	
ATV25x		DIP-6 SMD-6	ATV253	100	1.25	0.25	3	2	1	5000
			ATV254	400	0.12	13	3	2	1	
			ATV256	600	0.04	36	3	2	1	
			ATV252	60	3.5	0.05	3	5	0.5	
			ATV258	1500	0.02	110	3	5	1	
AT25A			AT252A	60	2	0.08	3	5	1	
ATS25x		SOP16	ATS258	1500	0.02	110	3	1.5	0.5	5000
			ATS259	1800	0.35	2.2	3	2	1	

可控硅光耦

产品应用：

- household appliances
  家用电器
- High voltage AC switch
  高压交流开关
- Lighting controller
  灯光控制器

产品特点：

- The switching speed is improved by using MOSFET as switching tube
  采用 MOSFET 作为开关管， 提高了开关速度
- The MOSFET structure is adopted inside, and the volume is reduced, and the weight is only 1/3 of that of the common triac
  内部采用 MOSFET 结构，体积缩小，重量只有普通三端可控硅的 1/3
- Using unique thermal protection technology, the working temperature range is wide, thus prolonging the service life
  采用独特的热保护技术， 工作温度范围宽， 从而延长了使用寿命
- Safety certification:CQC/UL/VDE/State grid certification
  安规认证 ： CQC/UL/VDE/SGS/ 国网认证等
- Product certification:SGS/ROHS&REACH
  产品认证 ： SGS/ROHS&REACH/ 无卤等

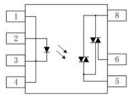
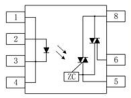
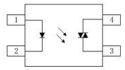
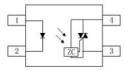
产品型号参数：

Part Number	Pin Configuration	Package	ZC or NZC	Device Name	$I_{T(RMS)}$ (mA)	I_{FT} Max(mA)	V_{DRM} Min(V)	I_{DRM} Max(μA)	V_{TM} Max(V)	Viso @1min (Vrams)
ATM301X		SOP-4	NZC	ATM3011	100	15	250	100	3	3750
				ATM3012		10				
				ATM3013		5				
ATM302x		SOP-4	NZC	ATM3020		30	600	100	2.5	3750
				ATM3021		15				
				ATM3022		10				
				ATM3023		5				
ATM305x				ATM3051	100	15	600	100	2.5	
				ATM3052		10				
				ATM3053		5				
ATM303x				ATM3031	100	15	250	100	3	
				ATM3032		10				
				ATM3033		5				

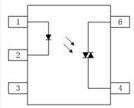
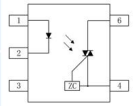
产品型号参数：

Part Number	Pin Configuration	Package	ZC or NZC	Device Name	$I_{T(RMS)}$ (mA)	I_{FT} Max(mA)	V_{DRM} Min(V)	I_{DRM} Max(μA)	V_{TM} Max(V)	Viso @1min (Vrams)
AT301x		DIP-6 SMD-6	NZC	AT3010	100	15	250	100	2.5	5000
				AT3011		10				
				AT3012		5				
AT302x				AT3020		30	400	100	2.5	
				AT3021		15				
				AT3022		10				
				AT3023		5				
AT305x				AT3051	100	15	250	100	3	
				AT3052		10				
				AT3053		5				
AT303x		DIP-6 SMD-6	ZC	AT3031	100	15	250	100	3	5000
				AT3032		10				
				AT3033		5				
AT304x				AT3041	100	15	400	100	3	
				AT3042		10				
				AT3043		5				
AT306x				AT3061	100	15	600	500	3	
				AT3062		10				
				AT3063		5				
AT308x				AT3081	100	15	800	500	3	
				AT3082		10				
				AT3083		5				
ATM304x		SOP-4	ZC	ATM3041	100	15	400	100	3	3750
				ATM3042		10				
				ATM3043		5				
ATM306x				ATM3061	100	15	600	500	3	
				ATM3062		10				
				ATM3063		5				
ATM308x				ATM3081	100	15	800	500	3	
				ATM3082		10				
				ATM3083		5				

产品型号参数：

Part Number	Pin Configuration	Package	ZC or NZC	Device Name	$I_{T(RMS)}$ (mA)	I_{FT} Max(mA)	V_{DRM} Min(V)	I_{DRM} Max(μA)	V_{TM} Max(V)	Viso @1min (Vrams)
ATx223		DIP-7 SMD-7	NZC	AT0223	300	10	600	100	2.5	5000
				AT1223	600					
				AT2223	900					
				AT3223	1200					
ATx213		DIP-7 SMD-7	ZC	AT0213	300	10	600	100	2.5	5000
				AT1213	600					
				AT2213	900					
				AT3213	1200					
AT52x		DIP-5 SMD-5	NZC	AT520	100	30	250	100	3	5000
				AT521		15				
				AT522		15				
				AT523		5				
AT55x				AT551	100	15	600	100	2.5	
				AT552		10				
				AT553		5				
AT53x		DIP-5 SMD-5	ZC	AT531	100	15	250	100	3	5000
				AT532		10				
				AT533		5				
AT54x				AT541	100	15	400	100	3	
				AT542		10				
				AT543		5				
AT56x				AT561	100	15	600	500	3	
				AT562		10				
				AT563		5				
AT58x				AT581	100	15	800	500	3	
				AT582		10				
				AT583		5				

产品型号参数：

Part Number	Pin Configuration	Package	ZC or NZC	Device Name	$I_{T(RMS)}$ (mA)	I_{FT} Max(mA)	V_{DRM} Min(V)	I_{DRM} Max(μA)	V_{TM} Max(V)	Viso @1min (Vrams)
AT201x		DIP-5 SMD-5	NZC	AT2011	100	15	250	100	2.5	5000
				AT2012		10				
				AT2013		5				
AT202x				AT2020	100	30	400	100	2.5	
				AT2021		15				
				AT2022		10				
				AT2023		5				
AT205x				AT2051	100	15	600	100	2.5	
				AT2052		10				
				AT2053		5				
AT203x		DIP-5 SMD-5	ZC	AT2031	100	15	250	100	3	5000
				AT2032		10				
				AT2033		5				
AT204x				AT2041	100	15	400	100	3	
				AT2042		10				
				AT2043		5				
AT206x				AT2061	100	15	600	500	3	
				AT2062		10				
				AT2063		5				
AT208x				AT2081	100	15	800	500	3	
				AT2082		10				
				AT2083		5				

高速光耦

产品应用：

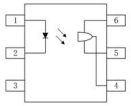
- Automobile drive electronic control system
  汽车驱动电控系统
- Instrument instrument
  仪表仪器
- Line reception
  线路接收

产品特点：

- Small size, close coupling, low driving power, fast action speed and wide working temperature range
  体积小、 耦合密切、 驱动功率小、 动作速度快、 工作温度范围宽
- It has the advantages of unidirectional information transmission, wide frequency band, small parasitic feedback, strong noise elimination ability and good electromagnetic
  具有可单向传递信息、 通频宽带、 寄生反馈小、 消噪能力强、 抗电磁干扰性能好
- TProvide fast switching speed, thereby reducing dead time and improving moving efficiency and precision, and the response speed reaches ns order of magnitude
  提供快速开关速度， 进而降低停滞时间并提高移动效率和精密度， 响应速度达到 ns 量级
- Safety certification:CQC/UL/VDE/State grid certification
  安规认证 ： CQC/UL/VDE/SGS/ 国网认证等
- Product certification:SGS/ROHS&REACH
  产品认证 ： SGS/ROHS&REACH/ 无卤等

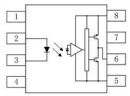
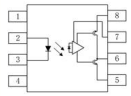
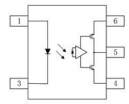
产品型号参数：

施密特触发型

Part Number	Pin Configuration	Package	DTR (Mbps)	$I_{F(on)}$ Typ (mA)	$I_{F(off)}$ Typ (mA)	Output $t_{R(us)}$	Output $t_{F(us)}$	Vcc (V)	t_{on} Max (us)	t_{off} Max (us)	Viso @1min (Vrms)
ATH11L1			1	1.6	1	0.1	0.1	15	4	4	5000
ATH11L2				10	1						
ATH11L3				5	1						

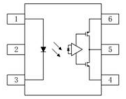
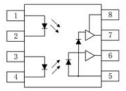
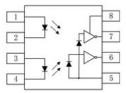
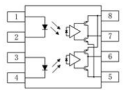
产品型号参数：

施密特触发型

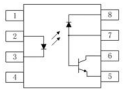
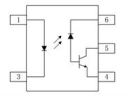
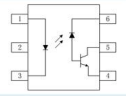
Part Number	Pin Configuration	Package	DTR (Mbps)	Output $t_{R(us)}$	Output $t_{F(us)}$	Vcc (V)	t_{PHL} Max (ns)	t_{PHL} Max (ns)	CMR Min (V/us)	Viso @1min (Vrms)
AT7720		DIP-8 SMD-8	15	30	30	5.5	55	55	10000	
AT7721			25	9	8	5.5	40	40	10000	5000
AT7723			50	8	6	5.5	22	22	10000	
AT0720		SOP-8	15	30	30	5.5	55	55	10000	
AT0721			25	9	8	5.5	40	40	10000	3750
AT0723			50	8	6	5.5	22	40	10000	
ATN7720		WDIP-8 WSMD-8	15	30	30	5.5	55	55	10000	
ATN7721			25	9	8	5.5	40	40	10000	5000
ATN7723			50	8	6	5.5	22	22	10000	
ATC7720		WSOP-8	15	30	30	5.5	55	55	10000	
ATC7721			25	9	8	5.5	40	40	10000	3750
ATC7723			50	8	6	5.5	22	22	10000	
ATN261L		WDIP-8 WSMD-8	10	10	10	5.5	95	95	20000	5000
ATC261L		WSOP-8	10	10	10	5	90	90	20000	5000
ATM720		SOP-5	15	30	30	5.5	55	55	10000	
ATM721			25	9	8	5.5	40	40	10000	3750
ATM723			50	8	6	5.5	22	22	10000	

产品型号参数：

直流输入型

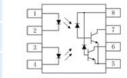
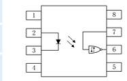
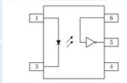
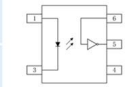
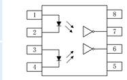
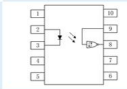
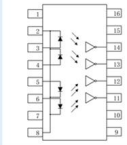
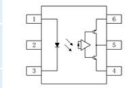
Part Number	Pin Configuration	Package	DTR (Mbps)	Output		Vcc (V)	t_{PHL} Max (ns)	t_{PHL} Max (ns)	CMR Max (ns)	Viso @1min (Vrms)
				$t_{R(us)}$	$t_{F(us)}$					
ATW720		SOP6-P SOP6-W	15	30	30	5.5	55	55	10000	3750
ATW721			25	9	8	5.5	40	40	10000	
ATW723			50	8	6	5.5	22	22	10000	
ATC74L		WSOP-8	15	3.5	3.5	5.5	55	55	10000	3750
AT074L		SOP-8	15	20	25	6	50	50	10000	3750
AT075L			15	20	25	6	50	50	10000	3750
ATC64L		WSOP-8	10	10	10	5.5	80	80	20000	5000

集电极断开型

Part Number	Pin Configuration	Package	DTR (Mbps)	Output		Vcc (V)	t_{PHL} Max (ns)	t_{PHL} Max (ns)	CMR Max (ns)	Viso @1min (Vrms)
				$t_{R(us)}$	$t_{F(us)}$					
AT6N135		DIP-8 SMD-8	1	5	50	30	2	1	10000	5000
AT6N136				15	50	30	2	1	10000	
ATN135		WDIP-8 WSMD-8	1	15	50	30	0.8	1	10000	5000
ATN136				15	50	30	0.8	0.8	10000	
AT0501		SOP-8	1	15	50	30	0.8	0.8	5000	3750
AT0511										
ATC501		WSOP-8								
ATC511										
ATM501		SOP-5	1	15	50	30	0.8	0.8	5000	3750
ATM511				15	50	30	0.8	0.8	10000	
ATW501		SOP6-P SOP6-W	1	15	50	30	0.8	0.8	5000	5000
ATW511			1	15	50	30	0.8	0.8	10000	

产品型号参数：

直流输入型

Part Number	Pin Configuration	Package	DTR (Mbps)	Output		Vcc (V)	t_{PHL} Max (ns)	t_{PHL} Max (ns)	CMR Max (ns)	Viso @1min (Vrms)
				$t_{R(us)}$	$t_{F(us)}$					
AT0530		SOP-8	1	7	50	30	1.5	1.5	1000	3750
AT0531				19	50	30	0.8	0.8	1000	
AT0534				19	50	30	0.8	0.8	15000	
AT6N137		DIP-8 SMD-8	10	--	--	5.5	0.1	0.1	5000	5000
ATN137		WDIP-8 WSMD-8		--	--	5.5	30	0.8	5000	
AT0601		SOP-8		--	--	5.5	0.075	0.075	5000	3750
AT0611				--	--	5.5	0.075	0.075	20000	
ATC601		WSOP-8		--	--	5.5	0.075	0.075	5000	5000
ATC611				--	--	5.5	0.075	0.075	20000	
ATM601		SOP-5	10	--	--	5.5	0.1	0.1	5000	3750
ATM611				--	--	5.5	0.1	0.1	20000	
ATW601		SOP6-P SOP6-W	10	--	--	5.5	0.1	0.1	5000	5000
ATW611				--	--	5.5	0.1	0.1	20000	
AT0630		SOP-8	10	--	--	5.5	0.075	0.075	5000	3750
AT0631				--	--	5.5	0.075	0.075	20000	
AT2601		WDIP-10 WSMD-10	10	--	--	5.5	0.12	0.12	20000	5000
AT6N437		WSOP-16	10	--	--	5.5	0.1	0.1	5000	5000
ATW720		LSOP-8	15	30	30	5.5	55	55	10000	7500
ATW721			25	9	8	5.5	40	40	10000	
ATW723			50	8	6	5.5	22	22	10000	

栅极驱动光耦

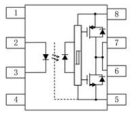
产品应用：

- Actuating Motor
  伺服电机
- Industrial Frequency Converter
  工业变频器

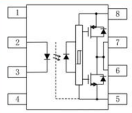
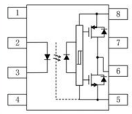
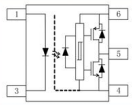
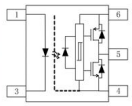
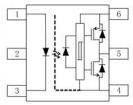
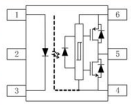
产品特点：

- The gate-driven optocoupler is used to provide enhanced electrical insulation between the control circuit and the high voltage
  栅极驱动光耦用于在控制电路和高压之间， 提供增强的电绝缘
- This kind of optocoupler is suitable for driving power IGBT and MOSFET, and the higher output voltage can meet the gate voltage driving requirements of power devices.
  此类光耦适合驱动功率 IGBT 和 MOSFET，较高的输出电压能达到功率器件的栅极电压驱动要求
- Its ability to suppress high common mode noise can prevent the misoperation of power semiconductor during high frequency switching
  其抑制高共模噪声的能力可防止在高频开关期间功率半导体的误动作
- Safety certification:CQC/UL/VDE/State grid certification
  安规认证 ： CQC/UL/VDE/SGS/ 国网认证等
- Product certification:SGS/ROHS&REACH
  产品认证 ： SGS/ROHS&REACH/ 无卤等

产品型号参数：

Part Number	Pin Configuration	Package	IO_{PEAK} Max (A)	I_{FLH} Max (mA)	Vcc (V)	t_{PHL} Max (us)	t_{PHL} Max (us)	CMR Min (V/us)	Viso @1min (Vrms)
AT3150		DIP-8 SMD-8	0.6	5	30	0.5	0.5	35000	5000
AT3120			2.5	5	30	0.4	0.4	35000	
AT0314		SOP-8	0.6	7	30	0.7	0.7	25000	3750
AT0341			3	4	30	0.2	0.2	35000	
AT0343			4	4	30	0.5	0.5	35000	

产品型号参数：

Part Number	Pin Configuration	Package	IO_{PEAK} Max (A)	I_{FLH} Max (mA)	Vcc (V)	t_{PHL} Max (us)	t_{PHL} Max (us)	CMR Min (V/us)	Viso @1min (Vrms)
ATN3120		WDIP-8 WSMD-8	2	8	35	0.5	0.5	35000	5000
ATN3150			0.6	5	30	0.5	0.5	35000	
AT350		DIP-8 SMD-8	2.5	5	30	0.4	0.4	25000	5000
ATN350		WDIP-8 WSMD-8	2.5	5	30	0.4	0.4	25000	
AT155		SOP-5	1	7.5	30	0.2	0.2	20000	3750
ATM314			0.6	7	30	0.7	0.7	25000	
ATM341			3	4	30	0.2	0.2	35000	
ATM343			4	4	30	0.2	0.2	35000	
AT314		SOP6-P SOP6-W	0.6	7	30	0.7	0.7	35000	5000
AT340			1	4	30	0.2	0.2	35000	
AT341			3	4	30	0.2	0.2	35000	
AT343			4	4	30	0.2	0.2	35000	

智能栅极驱动光耦

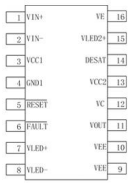
产品应用：

- Industrial inverter and UPS power supply, etc
  工业逆变器及 UPS 电源等
- IGBT and power MOS isolated drive (such as high-power power board)
  IGBT 和功率 MOS 隔离驱动 （比如大功率电源板）
- Brushless motor drive (such as industrial application: elevator motor, water pump, etc.)
  无刷电机驱动 （比如工业应用 ： 电梯马达、 水泵等）

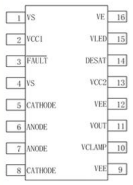
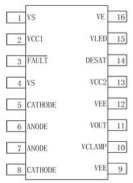
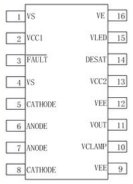
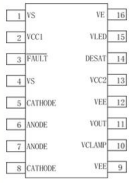
产品特点：

- Compared with the gate-driven optocoupler, the intelligent IGBT gate-driven optocoupler contains various protection functions
  相对于栅极驱动光耦， 智能 IGBT 栅极驱动光耦包含各种保护功能
- Active Miller clamp and fault output function to protect IGBT from overcurrent generated by inverter and other circuit
  有源米勒钳和故障输出功能， 以保护 IGBT 免受逆变器和其他电路产生的过电流
- IThe integrated protection function of IGBT gate drive is helpful to improve the system security, shorten the design time and reduce the circuit area
  IGBT 栅极驱动的集成保护功能有助于提高系统安全性， 缩短设计时间并减少电路占地面积
- Safety certification:CQC/UL/VDE/SGS/(ROHS&REACH)
  安规认证 ： CQC/UL/VDE/SGS/(ROHS&REACH) 等

产品型号参数：

Part Number	Pin Configuration	Package	IO_{PEAK} Max (A)	I_{FON} Min (mA)	Vcc (V)	t_{PHL} Max (ns)	t_{PLH} Max (ns)	CMR Min (V/us)	Viso @1min (Vrms)	Features
AT316J		SOP-16	2.5	7	30	500	500	1500	5000	2.5A IGBT Gate Driver with Integrated (VCE) Desaturation Detection, UVLO, Fault Feedback

产品型号参数：

Part Number	Pin Configuration	Package	IO_{PEAK} Max (A)	I_{FON} Min (mA)	Vcc (V)	t_{PHL} Max (ns)	t_{PLH} Max (ns)	CMR Min (V/us)	Viso @1min (Vrms)	Features
AT330J		SOP-16	1.5	7	30	250	250	1500	5000	1.5A IGBT Gate Driver with Integrated (VCE) Desaturation Detection, UVLO, Fault Feedback, Active Miller Clamp and Auto-Fault Reset
AT331J		SOP-16	1.5	7	30	250	250	1500	5000	1.5A IGBT Gate Driver with Integrated (VCE) Desaturation Detection, UVLO, Fault Feedback and Active Miller Clamp
AT332J		SOP-16	2.5	7	30	250	250	1500	5000	2.5A IGBT Gate Driver with Integrated (VCE) Desaturation Detection, UVLO, Fault Feedback and Active Miller Clamp
AT333J		SOP-16	2.5	7	30	250	250	1500	5000	2.5A IGBT Gate Driver with Integrated (VCE) Desaturation Detection, UVLO, Fault Feedback and Active Miller Clamp and Auto-Fault Reset

智能功率模块接口光耦

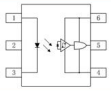
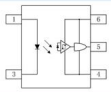
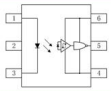
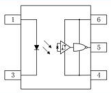
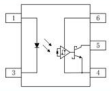
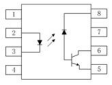
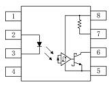
产品应用：

- Universal digital isolation
  通用数字隔离
- Industrial frequency converter
  工业变频器
- IPM interface isolation (e.g. intelligent power module)
  IPM 接口隔离 （比如：智能功率模块）
- Isolated IGBT/MOSFET gate drivers (such as high-power power boards)
  隔离 IGBT/MOSFET 门驱动器 （比如大功率电源板）
- AC and brushless DC motor drive (such as household appliances: air conditioners, washing machines, etc.)
  交流和无刷直流电机驱动 （比如家用电器：空调、 洗衣机等）

产品特点：

- Fast IGBT switch with short propagation delay
  拥有短传播延迟、 快速 IGBT 开关
- High common-mode transient suppression capability and wide operating temperature range
  高共模瞬变抑制能力和宽广工作温度范围
- It has the function of strengthening insulation and is very suitable for IPM interface drive applications
  具有强化绝缘功能， 非常适合 IPM 接口驱动应用
- The interface optocoupler of intelligent power module is generally the gate-level drive interface optocoupler of intelligent power module with high CMR
  智能功率模块接口光耦一般是具有高 CMR 的智能功率模块的门级驱动接口光耦
- Safety certification:CQC/UL/VDE/State grid certification
  安规认证 ： CQC/UL/VDE/SGS/ 国网认证等
- Product certification:SGS/ROHS&REACH
  产品认证 ： SGS/ROHS&REACH/ 无卤等

产品型号参数：

Part Number	Pin Configuration	Package	I_{Fon} Min (mA)	CTR			t_{PHL} Max (us)	t_{PLH} Max (us)	PDD Max (us)	CMR Min (V/us)	Viso @1min (Vrms)
				Min (%)	Max (%)	@I_F (mA)					
AT480		SOP6-P SOP6-W	6	--	--	--	0.35	0.35	0.25	20000	5000
ATM480		SOP-5	6	--	--	--	0.35	0.35	0.25	20000	3750
AT481		SOP6-P SOP6-W	6	--	--	--	0.35	0.35	0.25	20000	5000
ATM481		SOP-5	6	--	--	--	0.35	0.35	0.25	20000	3750
ATM456		SOP-5	10	44	> 90	10	0.4	0.55	0.45	1500	3750
AT4504		DIP-8 SMD-8	12	26	65	12	0.5	0.7	1.3	1500	5000
ATN4504		WDIP-8 WSMD-8	16	25	63	12	0.5	0.7	1.3	1500	5000
ATC4504		WSOP-8	16	19	50	16	0.5	0.7	1	1500	5000
AT4506		DIP-8 SMD-8	10	44	> 90	10	0.49	0.6	0.45	1500	5000
ATN4506		WDIP-8 WSMD-8	10	44	> 90	10	0.49	0.6	0.45	1500	5000
ATC4506		WSOP-8	10	44	> 90	10	0.49	0.6	0.45	1500	5000

隔离运算放大器

产品应用：

- Signal acquisition (motor phase, line voltage/current, etc.)
  信号采集 (马达相位、 线路电压 / 电流等)
- Products with motor (detecting motor phase and line AC)
  带马达的产品 (检测马达相位和线路交流)
- Inverter products (line overcurrent detection, etc.)
  逆变器产品 (线路过流检测等)

产品特点：

- Isolation voltage above 5000V can be tolerated between input and output stages.
  输入与输出级间可以承受 5000V 以上的绝缘电压
- The signal is transmitted in one direction, the input end and the output end are completely electrically isolated, and the output signal has no influence on the input end.
  信号单向传输、 输入端与输出端完全实现电气隔离、 输输出信号对输入端无影响
- Strong anti-interference ability, stable work, no contact, long service life and high transmission efficiency.
  抗干扰能力强、 工作稳定、 无触点、 使用寿命长、 传输效率高
- Safety certification:CQC/UL/VDE/State grid certification
  安规认证 ： CQC/UL/VDE/SGS/ 国网认证等
- Product certification:SGS/ROHS&REACH
  产品认证 ： SGS/ROHS&REACH/ 无卤等

产品型号参数：

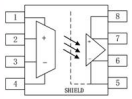
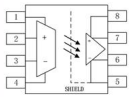
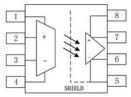
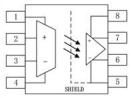
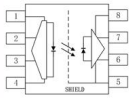
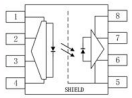
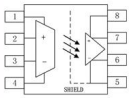
Part Number	Pin Configuration	Package	Gain Error at 25 ℃ Max (%)	Nonlinearity Typ (%)	Band width TYP(kHz)	VDD(V)	CMR Min (V/us)	Viso @1min (Vrms)
AT7840		DIP-8 SMD-8	±5	0.0037	100	5.5	10000	5000
ATC790		WSOP-8	±3	0.05	200	5.5	10000	5000
ATC79A		WSOP-8	±1	0.05	200	5.5	10000	5000
ATC79B		WSOP-8	±0.5	0.05	200	5.5	10000	5000
ATC87AT		WSOP-8	±1	0.05	100	5.5	10000	5000
ATC87BT		WSOP-8	±0.5	0.05	100	5.5	10000	5000
ATH790		LSOP-8	±3	0.05	200	5.5	15000	5000

Photo Coupler Selection Guide

2023.3.20

OPP

Ver: 1.5

www.aotesemi.com

奥特半导体

AOTE SEMICONDUCTOR

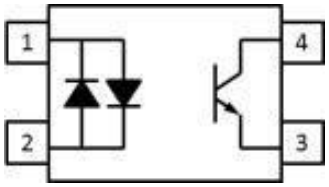
Introduction

The photo coupler is composed of a light emitter and a receiver and Coupling with light as the medium. It can be applied to a circuit design that requires isolation between input and output. AOTE provides a series of photo coupler for customers to choose that meet the needs in terms of communication, switch control and power control functions. According to the different internal structure of the photo coupler, they are divided into five categories, and AOTE provide Various of packaging types.

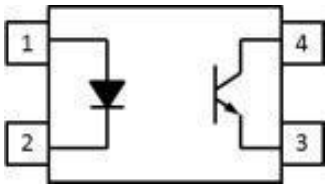
Transistor Output	General Purpose Coupler Darlington Transistor
Analog Output	20Kbps 100Kbps 1Mbps
Digital Output	5Mbps 10Mbps 15Mbps
Triac Output	Photo Triac
Power Triac	Photo Power Triac
Solid State Relay	General Purpose Solid State Relay
IGBT Gate Driver	IGBT/MOSFET Gate Driver
IPM	Intelligent Power Module(IPM) interface

Photo Coupler Product Lineup 1/2

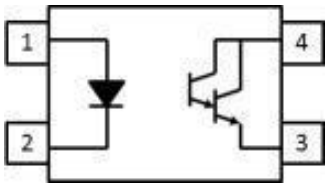
Transistor Output



AC Input

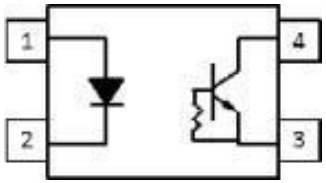


DC Input

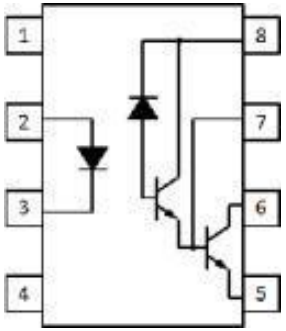


Darlington Transistor Output

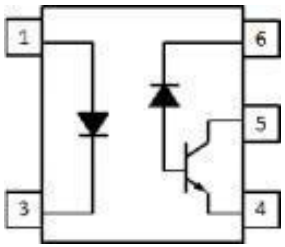
Analog Output



20Kbps

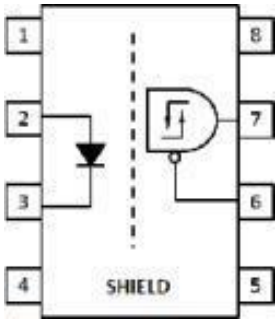


100Kbps

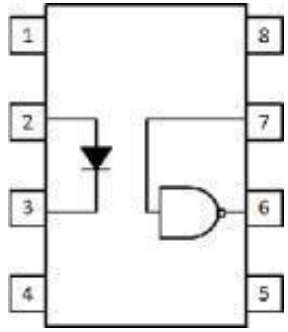


1Mbps

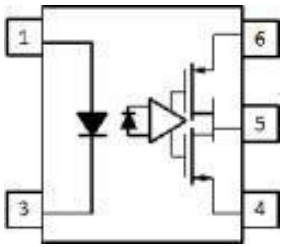
Digital Output



5Mbps



10Mbps



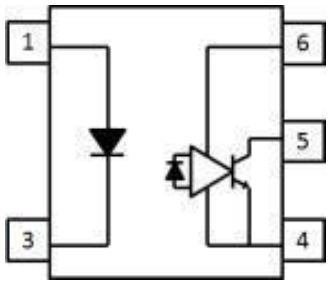
15Mbps

Press the coupler type above for detail information.

奥特半导体 AOTE SEMICONDUCTOR

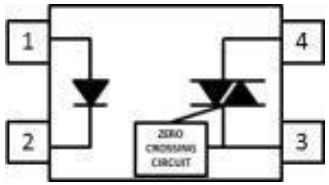
Photo Coupler Product Lineup 2/2

IPM

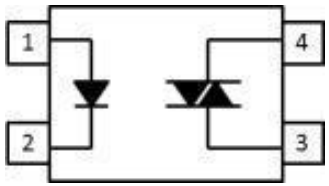


IPM interface

Triac Output

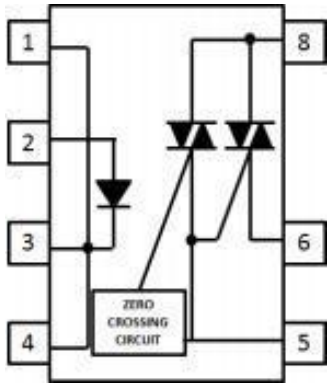


Zero Cross

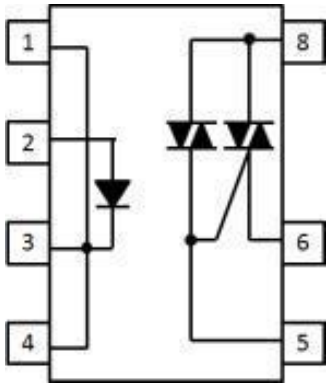


Random Phase

Power Triac

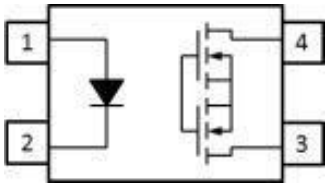


Zero Cross



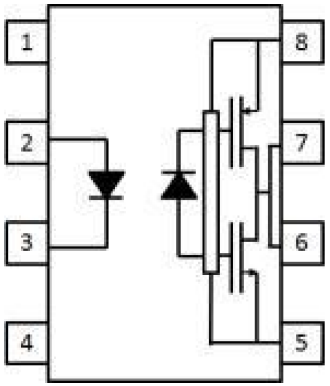
Random Phase

Solid State Relay



Form-A contact

IGBT Gate Driver



IGBT/MOSFET Gate Driver

Press the coupler type above for detail information.

奥特半导体 AOTE SEMICONDUCTOR

Application Selection 1/2

Communication

- Data transfer between two devices.
  (High Speed Coupler, Photo Coupler)

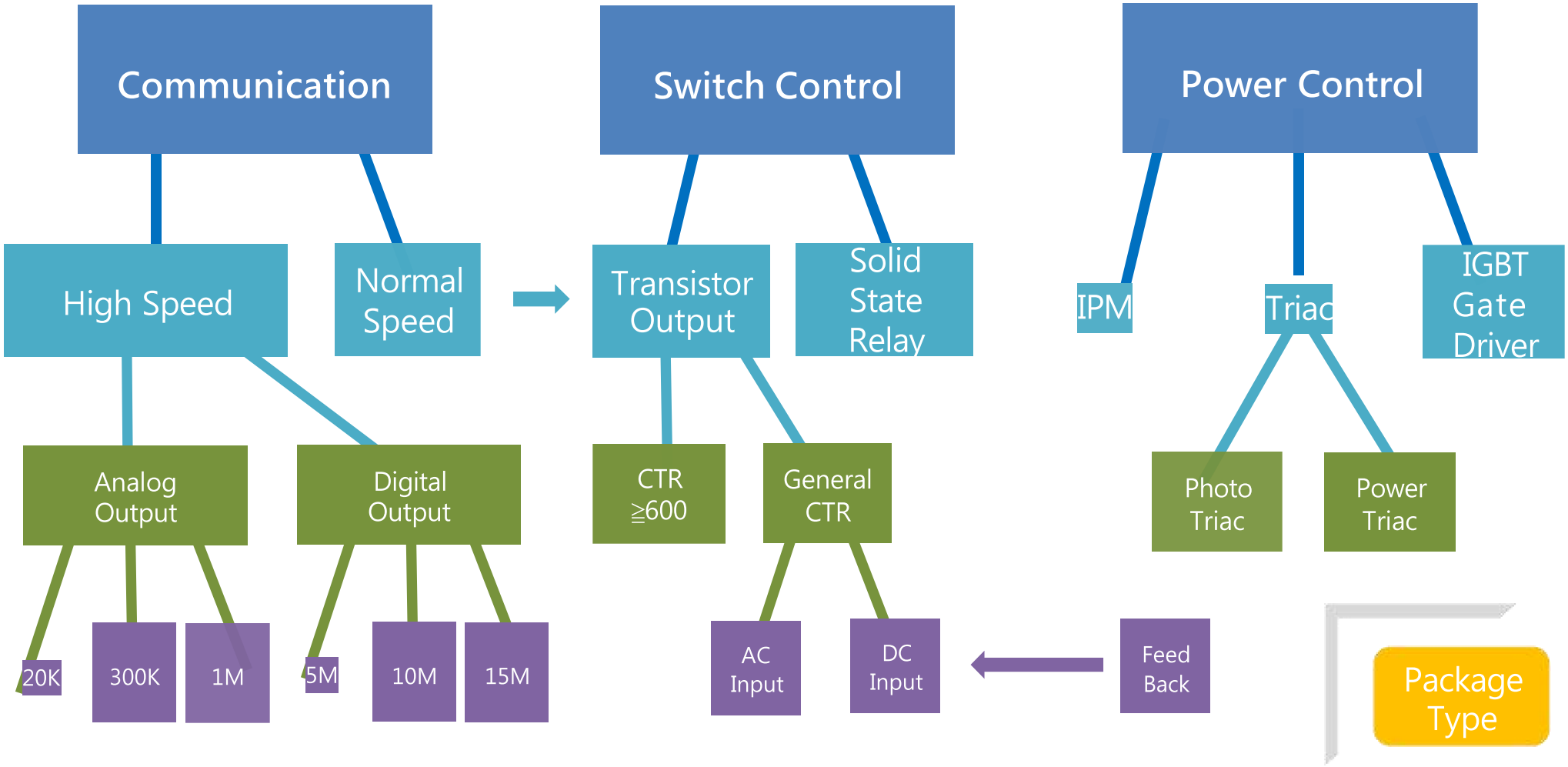
Switch Control

- Driving the next device to turn-on or turn-off.
  (Transistor & SSR)

Power Control

- AC power control component(Triac)
- Driving power IGBT(IGBT Gate Driver).
- Power supply output voltage feedback
  (Photo Coupler).
- isolated interfacing to an intelligent power module
  (IPM).

Application Selection 2/2



Select the most suitable Coupler model according to the selection flow and corresponding table.

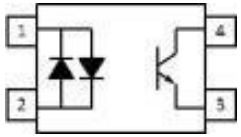
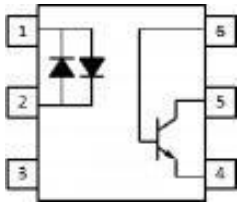
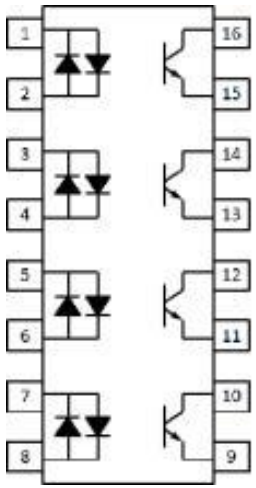
奥特半导体 AOTE SEMICONDUCTOR

Back

General Photo Coupler

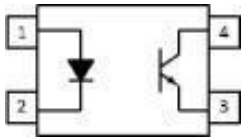
Transistor Output(AC Input)

Back

Input Type	Pin Configuration	Package Type	Part Number	CTR				BV_{CEO} (V)	V_{ISO}@1min.(V_{rms},
				Rank	Min.(%)	Max.(%)	@I_F/V_{CE} (mA)(V)		
AC		DIP,M,S1	AT814	-	20	300	±1/5	80	5000
				A	50	150			
		SOP-2.54	AT354N	-	20	300	±1/5	80	3750
				A	50	150			
		DIP, M, S1	H11AX	H11A1	20	-	±10/10	80	5000
				H11A2	10	-			
				H11A3	50	-			
				H11A4	100	-			
				H11A5	30	-			
		SSOP-1.27	ATQ3H	-	20	300	±1/5	80	3750

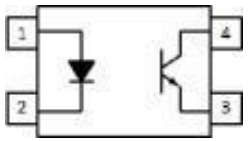
Transistor Output(DC Input)

Back

Input Type	Pin Configuration	Package Type	Part Number	CTR				BV_{CEO} (V)	V_{ISO}@1min. (V_{rms})
				Rank	Min.(%)	Max.(%)	@I_F/V_{CE} (mA)(V)		
DC		DIP, M, S1	AT816	-	50	600	5/5	80	5000
				A	80	160			
				B	130	260			
				C	200	400			
				D	300	600			
				X	100	200			
				Y	150	300			
				I	63	125	10/5		
				J	100	200			
				K	160	320			
				I	22	-	1/5		
				J	34	-			
				K	56	-			
			AT817	-	50	600	5/5	35	5000
				A	80	160			
				B	130	260			
				C	200	400			
				D	300	600			
				X	100	200			
				Y	150	300			

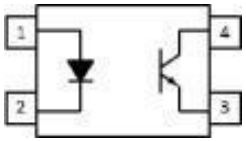
Transistor Output(DC Input)

Back

Input Type	Pin Configuration	Package Type	Part Number	CTR				$B V_{CEO}$ (V)	V_{ISO}@1min.(V_{rms})
				Rank	Min.(%)	Max.(%)	@I_F/V_{CE} (mA)(V)		
DC		LSOP-2.54	AT101X	AT1010	50	600	5/5	80	5000
				AT1017	80	160			
				AT1018	130	260			
				AT1019	200	400			
				AT1012	63	125	10/5		
				AT1013	100	200			
				AT1014	160	320			
				AT1012	22	-	1/5		
				AT1013	34	-			
				AT1014	56	-			
		SOP-2.54	AT357N	-	50	600	5/5	80	3750
				A	80	160			
				B	130	260			
				C	200	400			
				D	300	600			
				E	100	200			
				F	150	300			

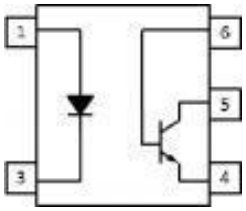
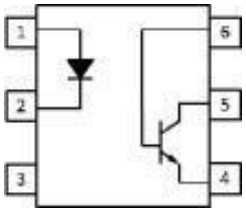
Transistor Output(DC Input)

Back

Input Type	Pin Configuration	Package Type	Part Number	CTR				BV_{CEO} (V)	V_{ISO}@1min.(V_{rms},
				Rank	Min.(%)	Max.(%)	@I_F/V_{CE} (mA)(V)		
DC		LSOP-2.54	AT357L	-	60	300	1/5	70	5000
				(A)	63	125			
				(B)	100	200			
		SSOP-1.27	AT3H7	-	50	600	5/5	80	3750
				A	80	160			
				B	130	260			
				C	200	400			
				D	300	600			
				E	100	200			
				F	150	300			
				H	40	80	10/5		
				I	63	125			
				J	100	200			
				K	160	320			
				-	50	400			
		SOP-2.54	AT121N	B	130	260	5/5	80	3750
				C	200	400			
				BC	130	400			
		CNY64/65	CNY64/65	-	50	300	5/5	80	8200
				A	63	125			
				B	100	200			

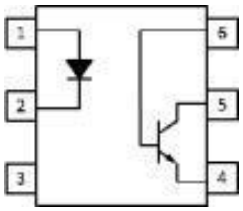
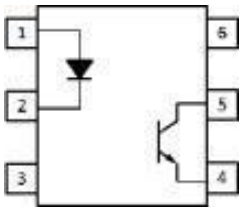
Transistor Output(DC Input)

Back

Input Type	Pin Configuration	Package Type	Part Number	CTR				BV_{CEO} (V)	V_{ISO}@1min.(V_{rms})
				Rank	Min.(%)	Max.(%)	@I_F/V_{CE} (mA)(V)		
DC		LSOP-1.27	AT111X	AT1110	50	600	5/5	80	5000
				AT1116	100	300			
				AT1117	80	160			
				AT1118	130	260			
				AT1119	200	400			
				AT1112	63	125	10/5		
				AT1113	100	200			
				AT1114	160	320			
				AT1112	22	-	1/5		
				AT1113	34	-			
				AT1114	56	-			
		DIP, M, S1	4N2X	4N25	100	-	10/10	80	5000
				4N26	20	-			
				4N27	20	-			
				4N28	10	-			
			4N3X	4N35	100	-	10/10	80	5000
				4N36	100	-			
				4N37	100	-			
				4N38	20	-			
			H11AX	H11A1	50	-	10/10	80	5000
				H11A2	20	-			
				H11A3	20	-			
				H11A4	10	-			
				H11A5	30	-			

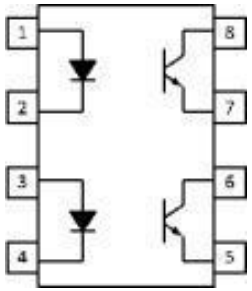
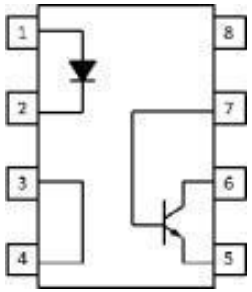
Transistor Output(DC Input)

Back

Input Type	Pin Configuration	Package Type	Part Number	CTR				BV_{CEO} (V)	V_{ISO}@1min. (V_{rms})
				Rank	Min.(%)	Max.(%)	@I_F/ V_{CE} (mA)(V)		
DC		DIP,M S, S1	TIL11X	TIL111	★	-	10/10	80	5000
				TIL117	50	-			
		DIP,M S, S1	MCT2X	MCT2	20	-	10/10	80	5000
				MCT2E	20	-			
		DIP,M S, S1	CNY17-X	CNY17-1	40	80	10/5	80	5000
				CNY17-2	63	125			
				CNY17-3	100	200			
				CNY17-4	160	320			
				CNY17-1	13	-	1/5		
				CNY17-2	22	-			
				CNY17-3	34	-			
				CNY17-4	56	-			
		DIP,M S, S1	CNY17F-X	CNY17F-1	40	80	10/5	80	5000
				CNY17F-2	63	125			
				CNY17F-3	100	200			
				CNY17F-4	160	320			
				CNY17F-1	13	-	1/5		
				CNY17F-2	22	-			
				CNY17F-3	34	-			
				CNY17F-4	56	-			

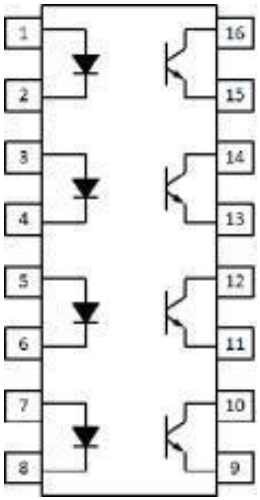
Transistor Output(DC Input)

Back

Input Type	Pin Configuration	Package Type	Part Number	CTR				$B V_{CE0}$ (V)	V_{ISO}@1min. (V_{rms})
				Rank	Min.(%)	Max.(%)	@I_F/ V_{CE} (mA)(V)		
DC		DIP, M, S1	AT827	-	50	600	5/5	80	5000
		SSOP-1.27	ATD3H7	-	50	600	5/5	80	3750
		SOP-1.27	ATD20X	ATD205	40	80	10/5	80	3750
				ATD206	63	125			
				ATD207	100	200			
				ATD205	13	-	1/5		
				ATD206	22	-			
				ATD207	34	-			
		SOP-1.27	ATD21X	ATD211	20	-	10/5	80	3750
				ATD213	100	-			
				ATD217	100	120	1/5		
		SOP-1.27	AT20X	AT205	40	80	10/5	80	3750
				AT206	63	125			
				AT207	100	200			
				AT208	160	320			
			AT21X	AT211	20	-	10/5	80	3750
				AT212	50	-			
				AT213	100	-			

Transistor Output(DC Input)

Back

Input Type	Pin Configuration	Package Type	Part Number	CTR				BV_{CE0} (V)	V_{ISO}@1min.(V_{rms},
				Rank	Min.(%)	Max.(%)	@I_F/V_{CE} (mA)(V)		
DC		DIP	AT847	-	50	600	5/5	80	5000
		SSOP-1.27	ATQ3H7	-	50	600	5/5	80	3750

Transistor Output(DC Input, 125℃)

Back

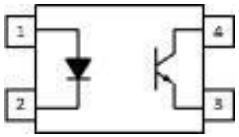
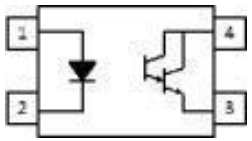
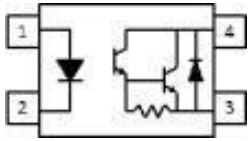
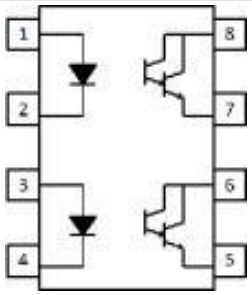
Input Type	Pin Configuration	Package Type	Part Number	CTR				BV_{CEO} (V)	V_{ISO}@1min. (V_{rms})
				Rank	Min.(%)	Max.(%)	@I_F/V_{CE} (mA)(V)		
DC		DIP, M, S1	AT817H	-	50	400	5/5	80	5000
				A	80	160			
				B	130	260			
				C	200	400			
		SSOP-1.27	AT3H7H	-	80	260	5/5	80	3750
				A	80	160			
				B	130	260			
		SOP-2.54	AT357NH	-	50	600	5/5	80	3750
				A	80	160			
				B	130	260			
				C	200	400			
		LSOP-2.54	AT101XH	AT1010H	50	600	5/5	80	5000
				AT1011H	100	200			
				AT1017H	80	160			
				AT1018H	100	300			
				AT1019H	200	400			

Photo Darlington Coupler

Transistor Output(Darlington)

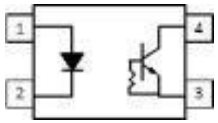
Back

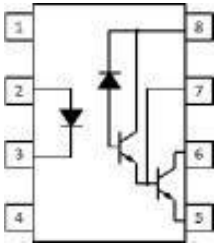
Input Type	Pin Configuration	Package Type	Part Number	CTR				BV_{CEO} (V)	V_{ISO}@1min.(V_{rms},
				Rank	Min.(%)	Max.(%)	@I_F/V_{CE} (mA)(V)		
DC		DIP, M, S1	AT815	-	600	7500	1/2	35	5000
		SOP-2.57	AT452	-	1000	-	1/2	350	3750
		DIP, M, S1	AT852	-	1000	15000	1/2	350	5000
		DIP, M, S1	AT825	-	600	7500	1/2	40	5000

High Speed Coupler

High Speed Coupler(20K、300Kbps)

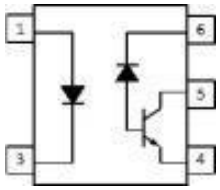
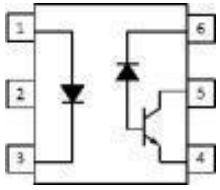
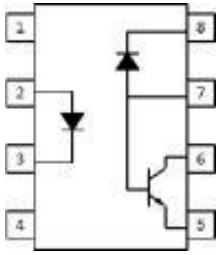
Back

Data Rate	Pin Configuration	Package Type	Part Number	CTR				T_{on}(μs) Max.	T_{off}(μs) Max.	V_{ISO}@1min .(V_{rms},
				Min.(%)	Typ.(%)	Max.(%)	@I_F(mA)			
20Kbps		DIP,M S, S1	AT2514	50	-	200	5	25	25	5000

Data Rate	Pin Configuration	Package Type	Part Number	CTR				T_{PHL}(μs) Max.	T_{PLH}(μs) Max.	V_{ISO}@1min .(V_{rms},
				Min.(%)	Typ.(%)	Max.(%)	@I_F(mA)			
300Kbps		SOP-1.27	AT0700	300	2000	-	1.6	10	35	3750
			AT0701	400	2500	-	0.5	25	60	
				500	2000	-	1.6	-	-	
		DIP, M S, S1	6N138	300	2000	-	1.6	10	35	5000
			6N139	400	2500	-	0.5	25	60	
				500	2000	-	1.6	-	-	

High Speed Coupler(1Mbps)

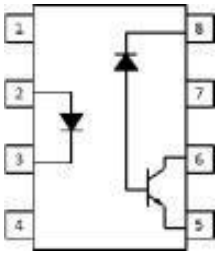
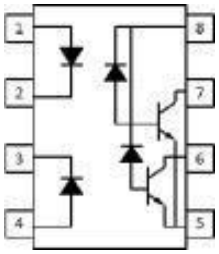
Back

Data Rate	Pin Configuration	Package Type	Part Number	CTR				T_{PHL}(+s) Max.	T_{PLH}(+s) Max.	V_{ISO}@1min . (V_{rms},
				Min.(%)	Typ.(%)	Max.(%)	@I_F(mA)			
1Mbps		SOP-1.27	ATM452	20	-	50	16	0.8	0.8	3750
			ATM453							
			★ATM453L	20	-	50	16	0.8	0.8	3750
		P-1.27	ATS511	20	-	-	16	1.5	1.5	5000
		SOP-1.27	AT0500	7	-	50	16	1.5	1.5	3750
			AT0501	19				0.8	0.8	
			★AT050L	7	-	50	16	2	2	3750
		DIP, M S, S1	6N135	7	-	50	16	1.5	1.5	5000
			6N136	19	-	50	16	0.8	0.8	5000
		DIP, S	ATW135	7	-	50	16	1.5	1.5	5000
			ATW136	19	-			0.8	0.8	

Note) ★ is Vcc pin support 3.3V.

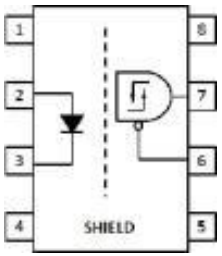
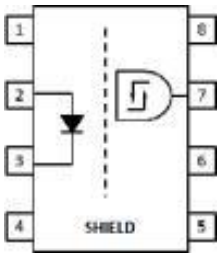
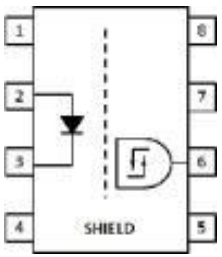
High Speed Coupler(1Mbps)

Back

Data Rate	Pin Configuration	Package Type	Part Number	CTR				T_{PHL}(+s) Max.	T_{PLH}(+s) Max.	V_{ISO}@1min .(V_{rms},
				Min.(%)	Typ.(%)	Max.(%)	@I_F(mA)			
1Mbps		SOP-1.27	AT0452	19	-	50	16	0.8	0.8	3750
			AT0453							
		DIP, M S, S1	AT4502	19	-	50	16	0.8	0.8	5000
			AT4503							
			AT4504	25		60	16	0.4	0.7	5000
		DIP, S	ATW4503	19	-	50	16	0.8	0.8	5000
		SOP-1.27	AT0530	7	-	50	16	1.5	1.5	3750
			AT0531	19				0.8	0.8	
		DIP, M S, S1	AT2530	7	-	50	16	1.5	1.5	5000
			AT2531	19				0.8	0.8	

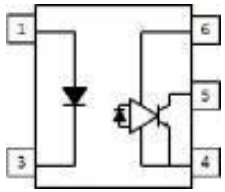
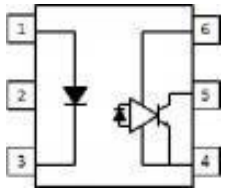
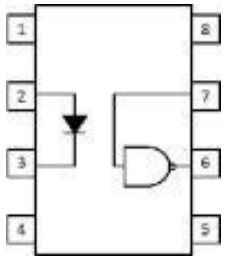
High Speed Coupler(5Mbps)

Back

Data Rate	Pin Configuration	Package Type	Part Number	Icc(H/L) (mA) Max. @Vcc=5.5V	I_F (mA) Max.	T_{PHL}(ns) Max.	T_{PLH}(ns) Max.	V_{ISO} @1min.(V_{rms},
5Mbps		DIP, M S, S1	AT2200	4.5/6	1.6	300	300	5000
			AT2201					
			AT2202					

High Speed Coupler(10Mbps)

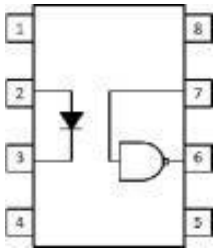
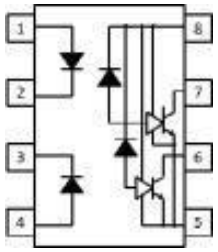
Back

Data Rate	Pin Configuration	Package Type	Part Number	Icc(H/L) (mA) Max. @Vcc=5.5V	I_F (mA) Max.	T_{PHL}(ns) Max.	T_{PLH}(ns) Max.	V_{ISO} @1min.(V_{rms})
10Mbps		SOP-1.27	ATM600	9/10	5	100	100	3750
			ATM601					
			ATM611					
		P-1.27	ATS611	13/15	5	100	100	5000
		SOP-1.27	AT0600	10/13	5	75	75	3750
			AT0601					
			AT0611					
		SOP-1.27	★AT060L	10/13	5	75	75	3750
		DIP, M S, S1	★AT260L	10/13	5	75	75	5000

Note) ★ is Vcc pin support 3.3V.

High Speed Coupler(10Mbps)

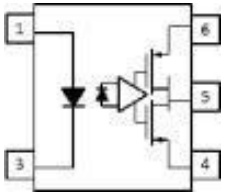
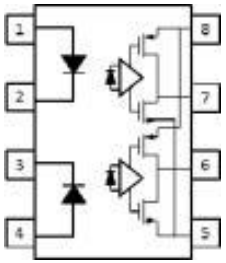
Back

Data Rate	Pin Configuration	Package Type	Part Number	Icc(H/L) (mA) Max. @Vcc=5.5V	I_F (mA) Max.	T_{PHL}(ns) Max.	T_{PLH}(ns) Max.	V_{ISO} @1min.(V_{rms})
10Mbps		DIP, M S, S1	6N137	10/13	5	75	75	5000
		DIP、S (WB)	ATW137	10/13	5	100	100	5000
		DIP, M S, S1	AT2601	10/13	5	75	75	5000
			AT2611					
		DIP、S (WB)	ATW2601	10/13	5	100	100	5000
			ATW2611					
		SOP-1.27	AT0630	18/21	5	100	100	3750
			AT0631					
		DIP, S	AT2630	18/21	5	100	100	5000
			AT2631					

Note) WB is WIDE BODY package.

High Speed Coupler(15Mbps)

Back

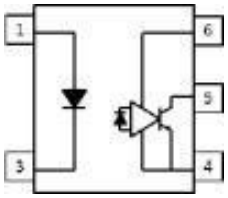
Data Rate	Pin Configuration	Package Type	Part Number	Icc(H/L) (mA) Max. @Vcc=5.5V	I_F (mA) Max.	T_{PHL}(ns) Max.	T_{PLH}(ns) Max.	V_{ISO} @1min. (V_{rms},
15Mbps		SOP-1.27	★ATM80L	6/6	5	65	65	3750
			★ATM81L					
		SOP-1.27	★AT083L	8/8	5	60	60	3750
			★AT086L					

Note) ★ is Vcc pin support 3.3V.

Intelligent Power Module

Intelligent Power Module (1Mbps)

Back

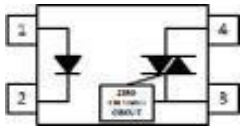
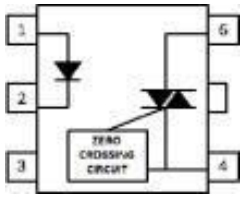
Data Rate	Pin Configuration	Package Type	Part Number	Icc(H/L) (mA) Max. @Vcc=5.5V	I_{TH} (mA) Max.	T_{PHL}(ns) TYP.	T_{PHL}(ns) TYP.	V_{ISO} @1min.(V_{rms},
1Mbps		SOP-1.27	ATM456	1.5/TBD	5	150	450	3750

奥特半导体 AOTE SEMICONDUCTOR

Photo Triac

Photo Triac(Zero Cross)

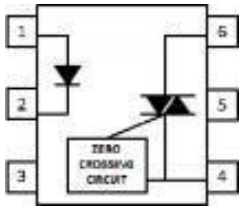
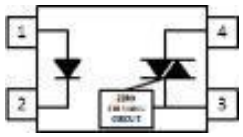
Back

Pin Configuration	Type	Package Type	Part Number	I_{FT}(mA)	$I_{T(RMS)}$(mA)	I_{TSM}(A)	V_{DRM}(V)	dv/dt min. (V/μs)	V_{ISO} @1min. (V_{rms})
	Zero corss	DIP, M S, S1	ATT3041	15	100	1	400	1000	5000
			ATT3042	10					
			ATT3043	5					
			ATT3061	15	100	1	600	1000	5000
			ATT3062	10					
			ATT3063	5					
			ATT3081	15	100	1	800	600	5000
			ATT3082	10					
			ATT3083	5					
	Zero corss	DIP, M S, S1	AT3031(P5)	15	100	1	250	1000	5000
			AT3032(P5)	10					
			AT3033(P5)	5					
			AT3041(P5)	15	100	1	400	1000	5000
			AT3042(P5)	10					
			AT3043(P5)	5					
			AT3061(P5)	15	100	1	600	1000	5000
			AT3062(P5)	10					
			AT3063(P5)	5					
			AT3081(P5)	15	100	1	800	600	5000
			AT3082(P5)	10					
			AT3083(P5)	5					

Note) The condition of I_{TSM} is Pulse width=100us, 120pps

Photo Triac(Zero Cross)

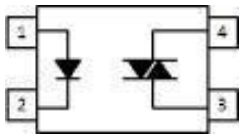
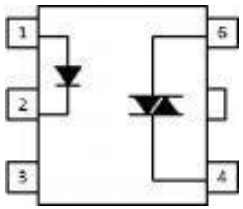
Back

Pin Configuration	Type	Package Type	Part Number	I_{FT}(mA)	$I_{T(RMS)}$(mA)	I_{TSM}(A)	V_{DRM}(V)	dv/dt min. (V/μs)	V_{ISO} @1min. (V_{rms})
	Zero corss	DIP, M S, S1	AT3031	15	100	1	250	1000	5000
			AT3032	10					
			AT3033	5					
			AT3041	15	100	1	400	1000	5000
			AT3042	10					
			AT3043	5					
			AT3061	15	100	1	600	1000	5000
			AT3062	10					
			AT3063	5					
			AT3081	15	100	1	800	600	5000
			AT3082	10					
			AT3083	5					
	Zero corss	SOP-2.54	ATM3042	10	100	1	400	1000	3750
			ATM3043	5					
			ATM3044	3					
			ATM3062	10	100	1	600	1000	3750
			ATM3063	5					
			ATM3064	3					
			ATM3082	10	100	1	800	1000	3750
			ATM3083	5					
			ATM3084	3					

Note) The condition of I_{TSM} is Pulse width=100us, 120pps

Photo Triac(Random Phase)

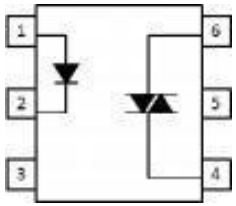
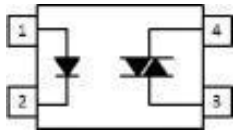
Back

Pin Configuration	Type	Package Type	Part Number	I_{FT}(mA)	$I_{T(RMS)}$(mA)	I_{TSM}(A)	V_{DRM}(V)	dv/dt min. (V/μs)	V_{ISO} @1min. (V_{rms})
	Random Phase	DIP, M S, S1	ATT3021	15	100	1	400	100	5000
			ATT3022	10					
			ATT3023	5					
			ATT3051	15	100	1	600	1000	5000
			ATT3052	10					
			ATT3053	5					
	Random Phase	DIP, M S, S1	AT3011(P5)	15	100	1	250	100	5000
			AT3012(P5)	10					
			AT3013(P5)	5					
			AT3021(P5)	15	100	1	400	100	5000
			AT3022(P5)	10					
			AT3023(P5)	5					
			AT3051(P5)	15	100	1	600	1000	5000
			AT3052(P5)	10					
			AT3053(P5)	5					
			AT3071(P5)	15	100	1	800	1500	5000
			AT3072(P5)	10					
			AT3073(P5)	5					

Note) The condition of I_{TSM} is Pulse width=100us, 120pps

Photo Triac(Random Phase)

Back

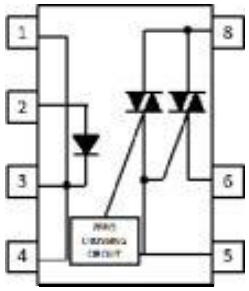
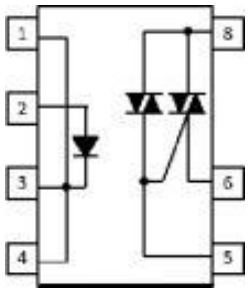
Pin Configuration	Type	Package Type	Part Number	I_{FT}(mA)	$I_{T(RMS)}$(mA)	I_{TSM}(A)	V_{DRM}(V)	dv/dt min. (V/μs)	V_{ISO} @1min. (V_{rms})
	Random Phase	DIP, M S, S1	AT3011	15	100	1	250	100	5000
			AT3012	10					
			AT3013	5					
			AT3020	30	100	1	400	100	5000
			AT3021	15					
			AT3022	10					
			AT3023	5					
			AT3051	15	100	1	600	1000	5000
			AT3052	10					
			AT3053	5					
			AT3071	15	100	1	800	1000	5000
			AT3072	10					
			AT3073	5					
	Random Phase	SOP-2.54	ATM3022	10	100	1	400	100	5000
			ATM3023	5					
			ATM3024	3					
			ATM3052	10	100	1	600	1000	5000
			ATM3053	5					
			ATM3054	3					

Note) The condition of I_{TSM} is Pulse width=100us, 120pps

Power Triac

Power Triac

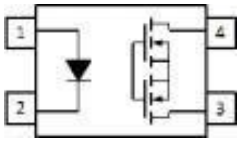
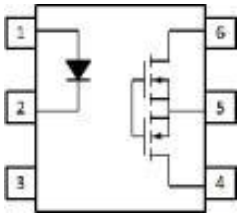
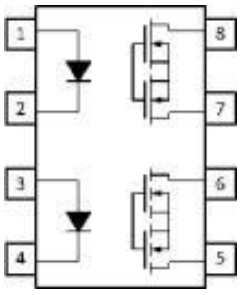
Back

Pin Configuration	Type	Package Type	Part Number	I_{FT} (mA)	$IT_{(RMS)}$ (A)	I_{TSM}(A)	V_{DRM}(V)	dv/dt min. (V/μs)	V_{ISO} (V_{RMS})
	Zero Cross	DIP, M, S1	ATR0213	10	0.3	3	600	200	5000
			ATR1213		0.6	6			
			ATR2213		0.9	9			
			ATR3213		1.2	12			
	Random Phase	DIP, M, S1	ATR0223	10	0.3	3	600	200	5000
			ATR1223		0.6	6			
			ATR2223		0.9	9			
			ATR3223		1.2	12			

Solid State Relay

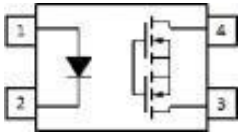
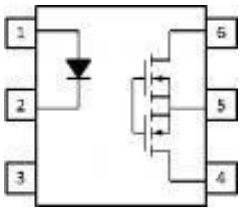
Solid State Relay

Back

Pin Configuration	Package Type	Part Number	I_L (mA) Max.	V_L (V) Max.	$R_{d(on)}$ (Ω) Max.	I_{Lpeak} (A) Max.	$I_{F(on,}$ (mA) Max.	$I_{F(off,}$ (mA) Min.	T_{on} (ms) Max.	T_{off} (ms) Max.
	DIP, M S1	AT406A	550	60	2.5	1.2	5	0.4	3	0.5
		AT425A	180	250	15	0.5				
		AT440A	120	400	30	0.3				
		AT460A	50	600	70	0.15				
	SOP Mini-Flat	ATM425A	180	250	15	0.5	5	0.2	0.5	0.5
		ATM440A	120	400	30	0.3				
		ATM460A	50	600	70	0.15				
	DIP, S1	AT606A	550	60	2.5	1.2	3	0.4	3	0.5
		AT625A	180	250	15	0.5				
		AT640A	120	400	30	0.3				
		AT660A	50	600	70	0.15				
	DIP, S1	AT840A	120	400	30	0.3	5	0.4	3	0.5
		AT860A	50	600	70	0.15				

Solid State Relay(I_L = 1A Up)

Back

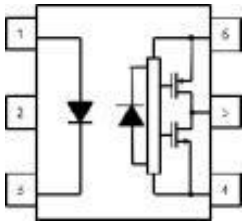
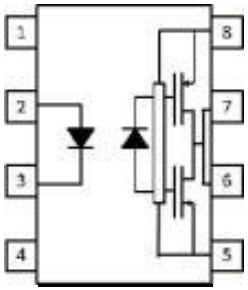
Pin Configuration	Package Type	Part Number	I_L(A) Max.	V_L(V) Max.	$R_{d(on)}$(Ω) Max.	I_{Lpeak}(A) Max.	$I_{F(on,}$(mA) Max.	$I_{F(off,}$(mA) Min.	T_{on}(ms) Max.	T_{off}(ms) Max.
	SOP Mini-Flat	ATM406A	1	60	2.5	2	5	0.1	5	0.5
	DIP, S1	AT606A3	2.5	60	1	-	5	0.4	5	0.5
		AT603A5	5	30	1	-				

Back

IGBT Gate Driver

IGBT Gate Driver

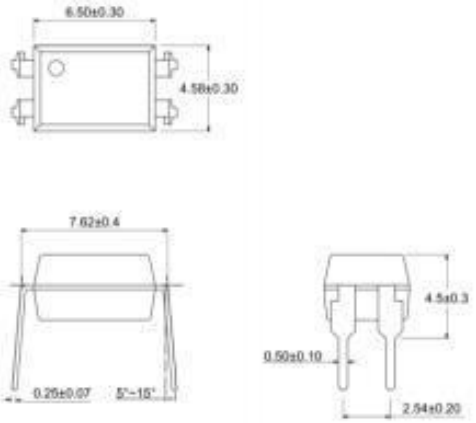
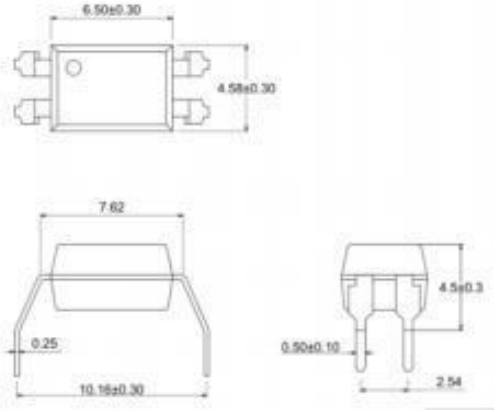
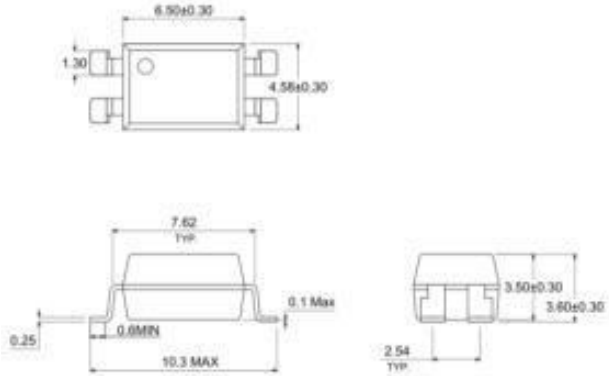
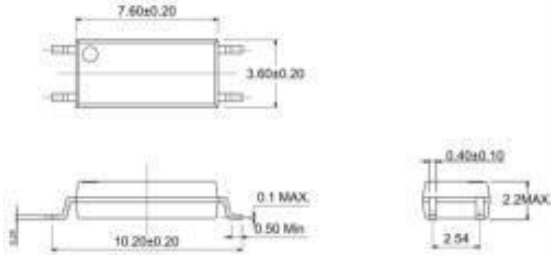
Back

I_{OP} (A)	Pin Configuration	Package Type	Part Number	I_{CC} (mA) Max.	I_{FLH} (mA) Max.	CMTI (kV/μs) Min.	T_{PHL} (ns) Max.	T_{PHL} (ns) Max.	V_{ISO} (V_{RMS})
2.5		P	ATS3120	3.2	5	25	300	300	5000
0.6			ATS3140			15	400	400	
1			ATS3150			15	400	400	
2.5		DIP, S1	AT3120	3.2	5	25	300	300	5000

Package Type

4PIN Package Type(1/2)

Back

DIP Type	M Type
 (Patch=2.54mm)	 (Patch=2.54mm)
S1 Type	**LSOP-2.54 Type**
 (Patch=2.54mm)	 (Patch=2.54mm)

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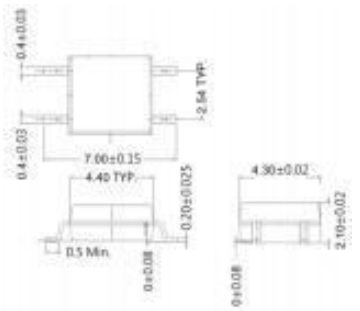
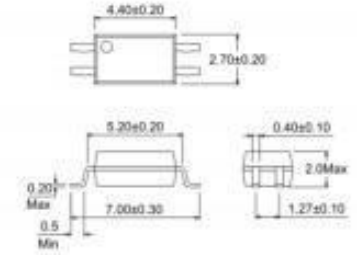
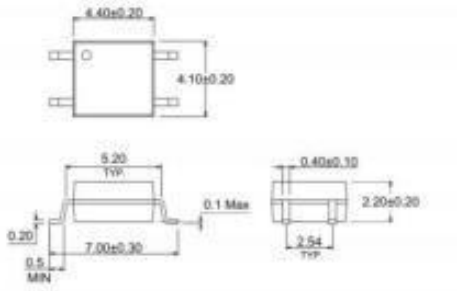
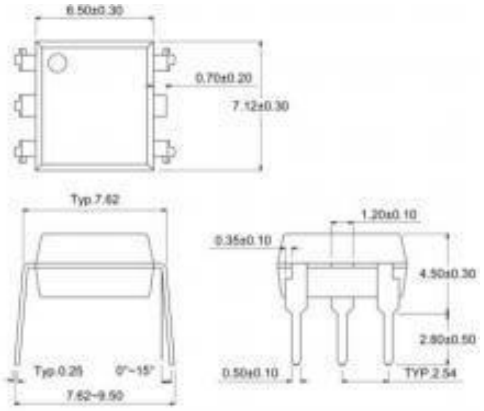
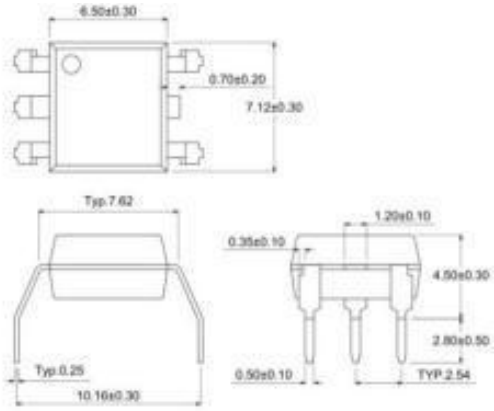
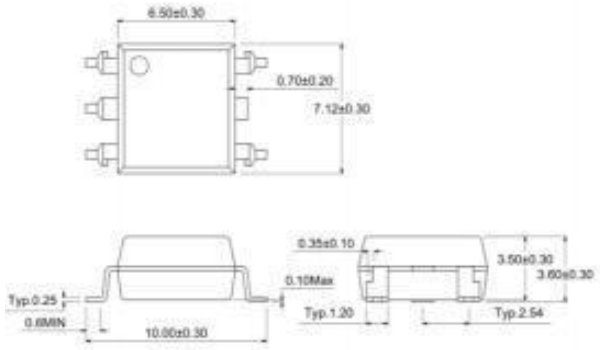
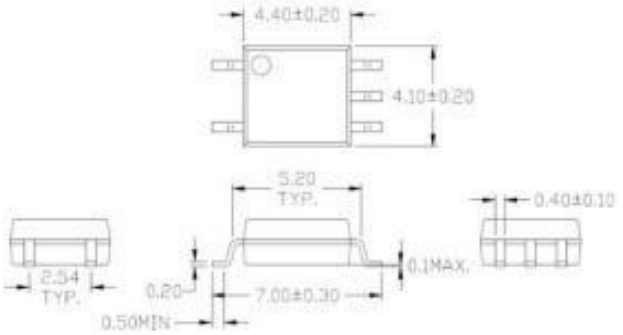
4PIN Package Type(1/2)

Back

SOP-2.54, Mini-Flat Type	SSOP-1.27 Type
 (Patch=2.54mm)	 (Patch=1.27mm)
SOP-2.54 Type	
 (Patch=2.54mm)	

5PIN Package Type(1/2)

Back

DIP Type	M Type
 (Patch=2.54mm)	 (Patch=2.54mm)
S1 Type	**SOP-1.27 Type**
 (Patch=2.54mm)	 (Patch=1.27mm)

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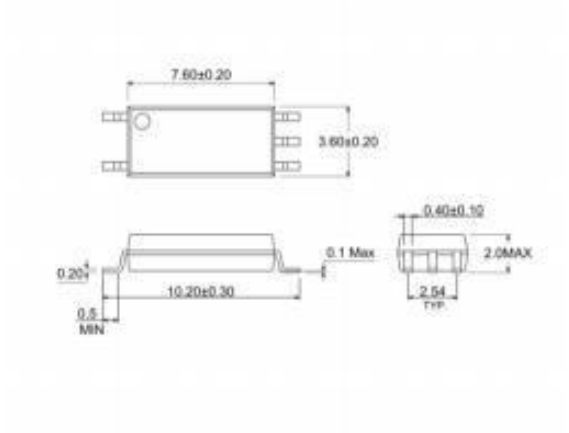
5PIN Package Type(2/2)

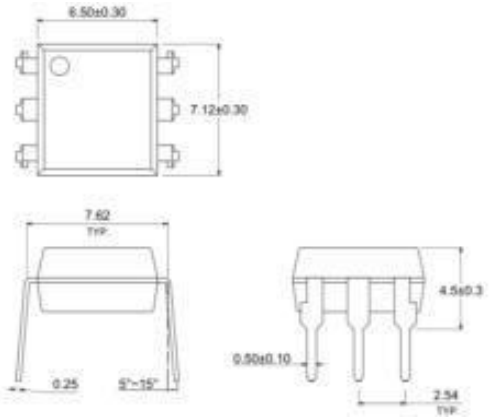
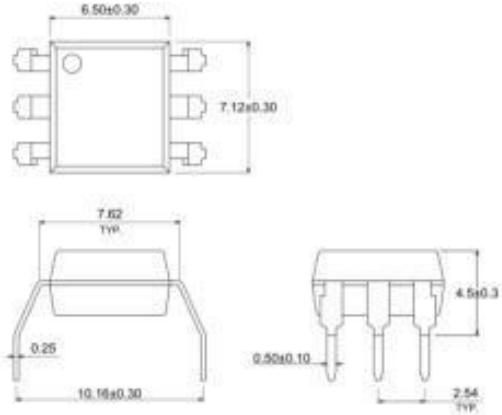
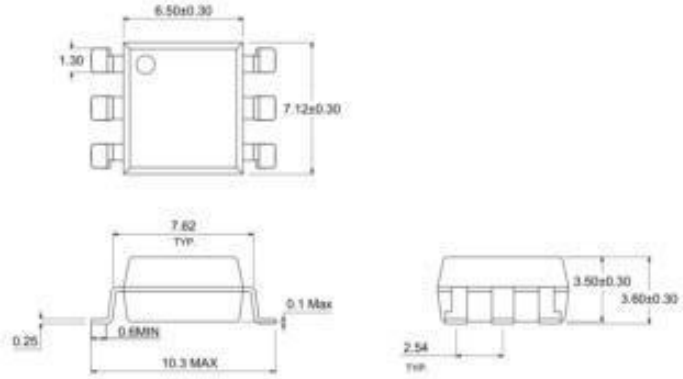
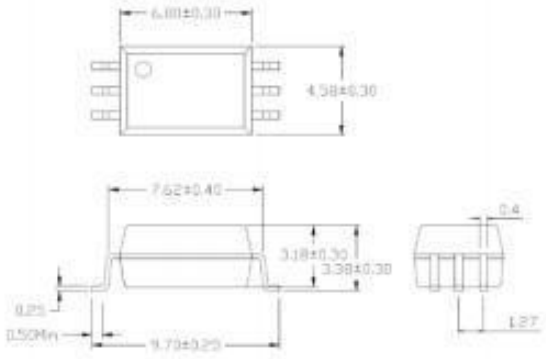
Back

LSOP-1.27 Type	
 (Patch=1.27mm)	

奥特半导体 AOTE SEMICONDUCTOR

6PIN Package Type

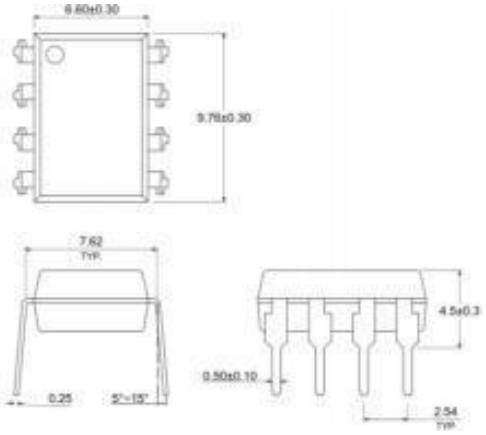
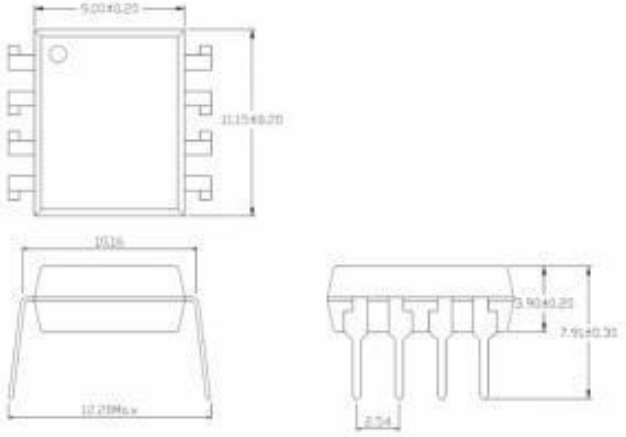
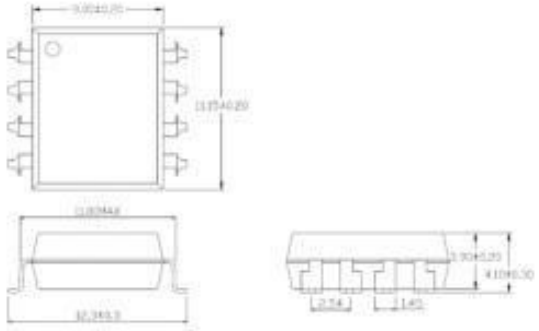
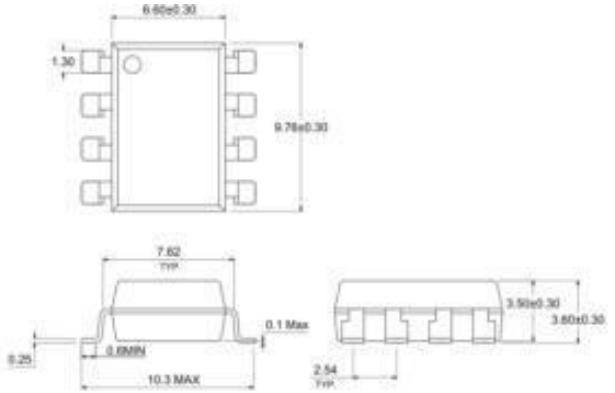
Back

DIP Type	M Type
 (Patch=2.54mm)	 (Patch=2.54mm)
S1 Type	**P-1.27 Type**
 (Patch=2.54mm)	 (Patch=1.27mm)

奥特半导体 AOTE SEMICONDUCTOR

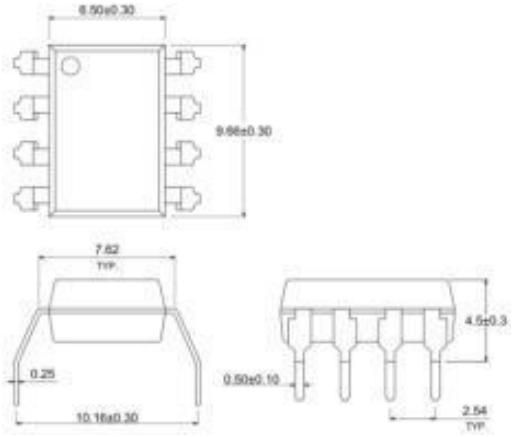
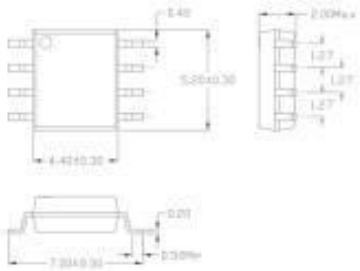
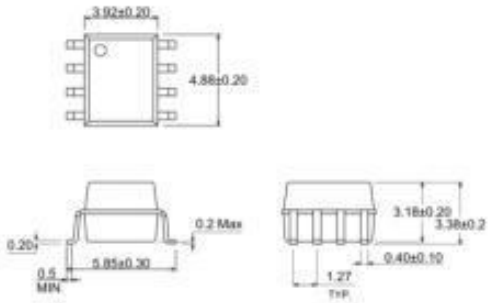
8PIN Package Type(1/2)

Back

DIP Type	DIP(WIDE BODY) Type
 (Patch=2.54mm)	 (Patch=2.54mm)
S(WIDE BODY) Type	**S1 Type**
 (Patch=2.54mm)	 (Patch=2.54mm)

8PIN Package Type(2/2)

Back

M Type	SSOP-1.27 Type
 (Patch=2.54mm)	 (Patch=1.27mm)
SOP-1.27 Type	
 (Patch=1.27mm)	

16PIN Package Type

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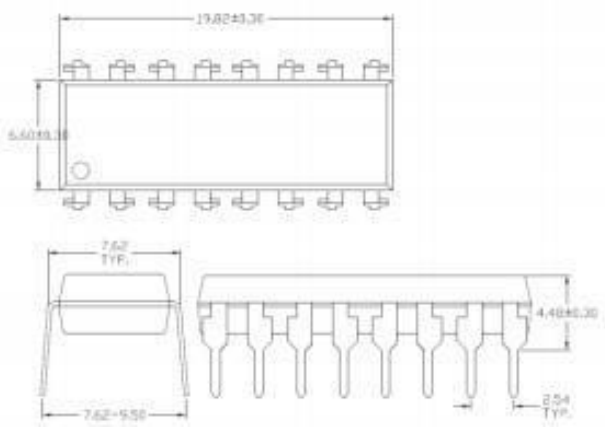
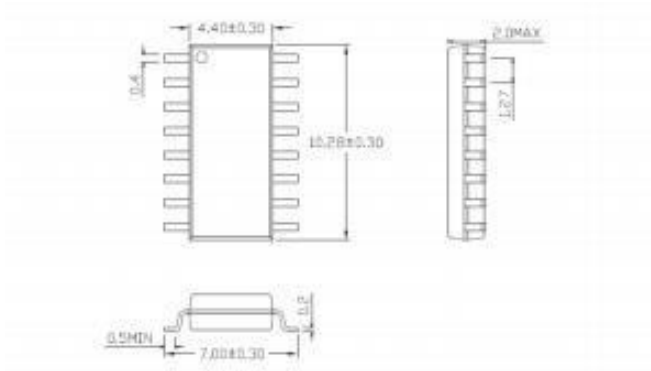
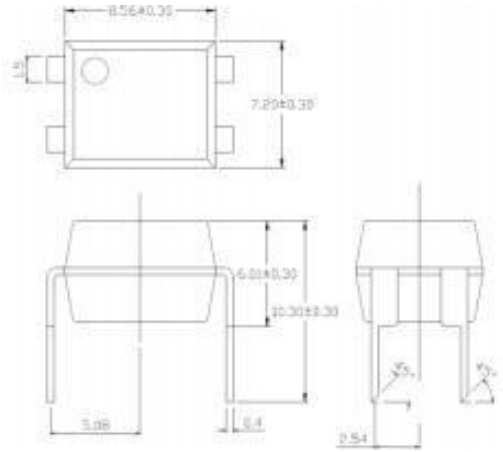
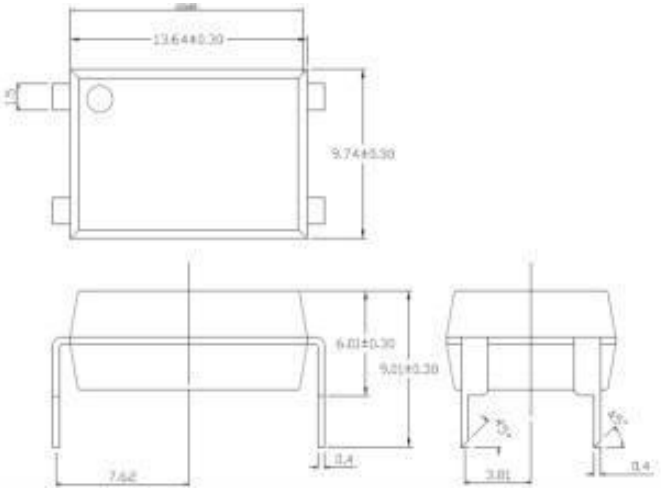
DIP Type	SSOP-1.27 Type
 (Patch=2.54mm)	 (Patch=1.27mm)

CNY64/65 Package Type

Back

CNY64 Type	CNY65 Type
 (Patch=5.08mm)	 (Patch=5.08mm)