

光电耦合器 PHOTO COUPLER

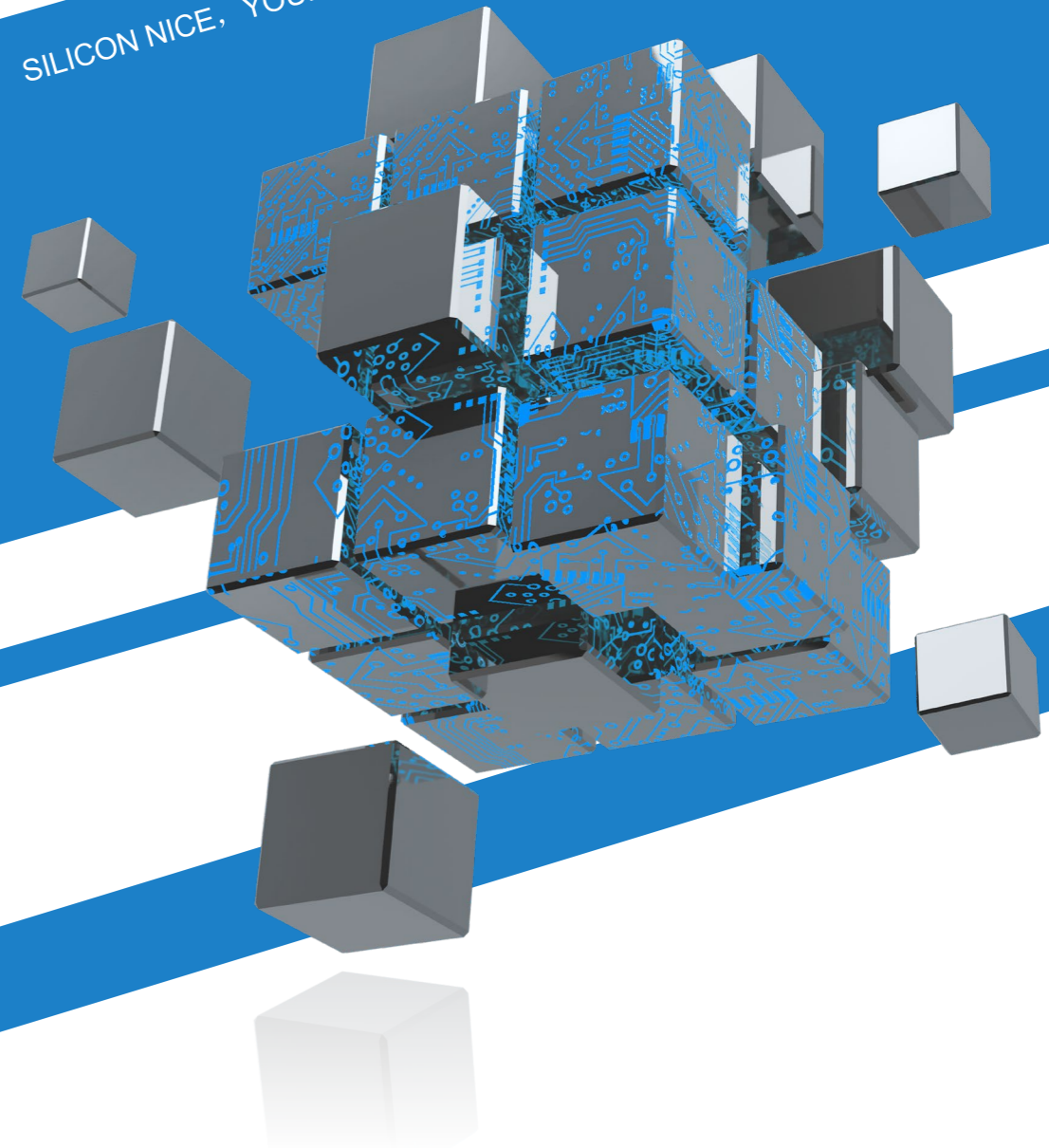
产品手册 PRODUCT MANUALS

SILICON NICE, YOUR BEST PARTNER

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GuiZhou Silicon Nice optoelectronic Co., Ltd.

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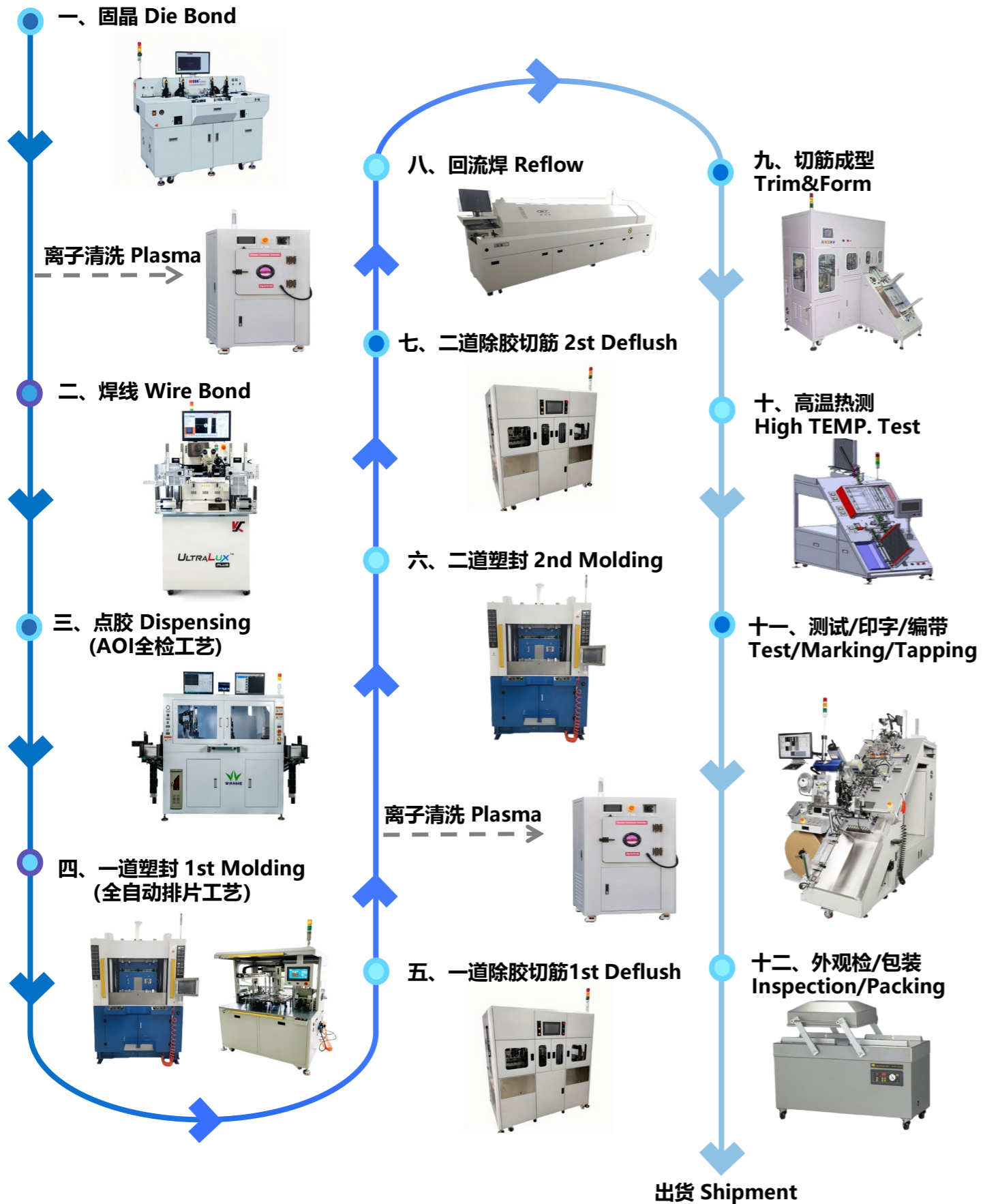
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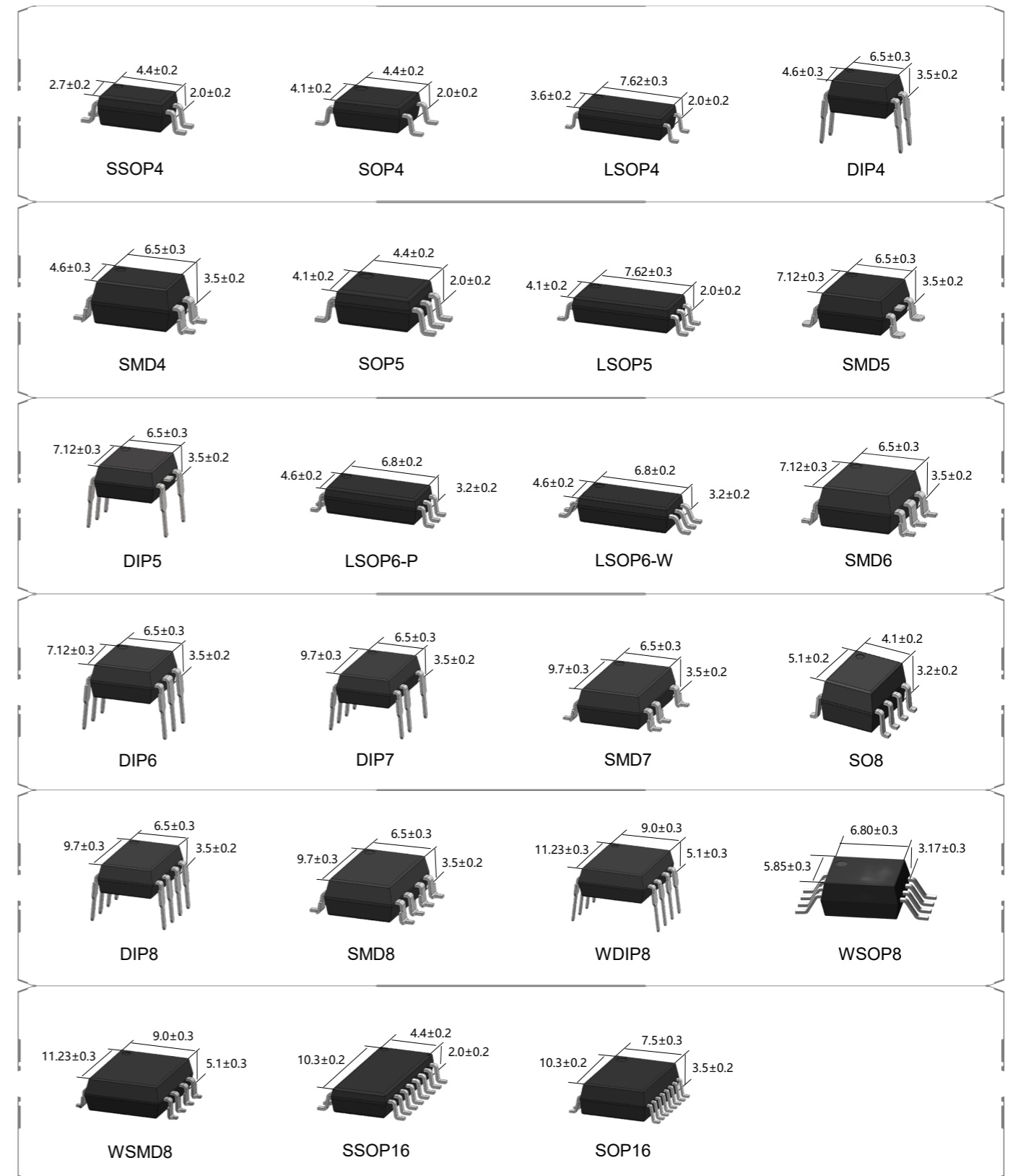
贵州硅耐光电科技有限公司，是一家专注于光电隔离器件研发、生产、销售的高新技术企业。公司总部坐落于中国贵州省黔东南州凯里市，同时在安徽、福建、浙江、深圳等多地布局服务站点，构建起覆盖全国的生产制造、产品销售与技术服务网络，高效响应客户需求。

自成立以来，公司始终秉持“深耕技术、坚守品质”的理念，聚焦工业控制、家用电器、通信设备、电源管理、新能源等核心领域，持续研发并供应高性能、高可靠性的光电隔离器件，凭借稳定的产品品质、专业的技术支撑与完善的服务体系，成为全球客户信赖的战略合作伙伴。

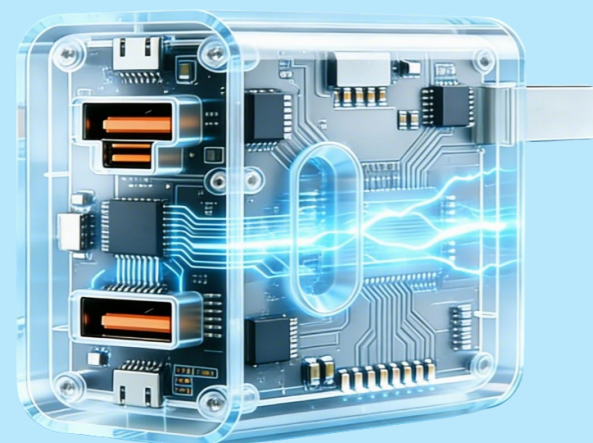
Guizhou Silicon Nice Optoelectronics Co., Ltd. is a high-tech enterprise specializing in the R&D, manufacturing and sales of optoelectronic isolation devices. Headquartered in Kaili City, Qiandongnan Prefecture, Guizhou Province, China, the company has also established service stations in Anhui, Fujian, Zhejiang, Shenzhen and other regions, building a nationwide network for manufacturing, product sales and technical services to deliver highly responsive support to customers. Since its establishment, the company has consistently adhered to the philosophy of "Deepening Technological Expertise, Upholding Quality Excellence". Focusing on core sectors including industrial control, household appliances, communication equipment, power management and new energy, it continuously R&Ds and supplies high-performance, high-reliability optoelectronic isolation devices. Leveraging stable product quality, professional technical support and a comprehensive service system, the company has emerged as a trusted strategic partner for customers worldwide.



封装尺寸图 Package Outline Drawing



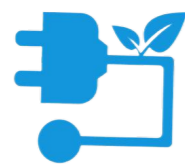
产品介绍 Product Introduction



晶体管光耦为发光元件、光敏元件两部分构成，利用光信号实现电信号隔离传输的半导体器件，其核心功能是在不直接电气连接的情况下实现输入与输出电路之间的信号传递与电气隔离，广泛应用于各类隔离场景。

Transistor optocoupler is a semiconductor device composed of two parts, namely a light-emitting component and a photosensitive component, which realizes isolated transmission of electrical signals by means of optical signals. Its core function is to achieve signal transmission and electrical isolation between input and output circuits without direct electrical connection, and it is widely used in various isolation scenarios.

应用场景 Application scenarios



电源适配器 Power Adapter



家用电器 Home Appliances



表计 Meters



开关电源 Switching Power Supply

产品型号参数表 Product Specifications Table

选型表 Product selection table

产品类型 Type	输入类型 Input Type	Viso (V)	DIP4 SMD4	SOP4	LSOP4	SSOP4	DIP6 SMD6	DIP8 SMD8	LSOP8	SSOP16
Transistor	DC	3750		Si-357 Si-356 Si-358 Si-351		Si-217				Si-Q217
		5000	Si-817 Si-816 Si-818 Si-851		Si-10XX (12, 13, 14, 17, 18, 19)		Si-4NXX (25-28 35-38)	Si-827 Si-826		
		7500							H67L H67R	

参数汇总表 Specifications Summary

产品料号 part number	电路图 Circuit	封装类型 Package	产品图 Product Drawing	CTR分档	CTR最小值/%	CTR最大值/%	IF/mA	IC/mA	VCE/V	Viso/V
Si-816		DIP4/SMD4		ABCD D1 D2	80	600	<50	<50	>80	>5000
Si-817				ABCD	80	600	<50	<50	>80	
Si-818				NONE	80	600	<50	<50	>70	
Si-851				NONE	80	600	<50	<50	>350	
Si-356		SOP4		ABCD D1 D2	80	600	<50	<50	>80	>3750
Si-357				ABCD	80	600	<50	<50	>80	
Si-358				NONE	80	600	<50	<50	>70	
Si-127				ABCD	80	600	<50	<50	>80	
Si-351		LSOP4		NONE	80	600	<50	<50	>350	>5000
Si-101 (0~9)				12, 13, 14, 17, 18, 19	50	600	<50	<50	>80	
Si-L351				NONE	50	600	<50	<50	>350	
Si-217		SSOP4		ABCD	80	600	<50	<50	>80	>3750
Si-4NXX (25-28, 35-38)		DIP6/SMD6		(25-28, 35-38)	10	-	<60	<100	>40	>5000
Si-827		DIP8/SMD8		NONE	80	600	<50	<50	>80	>5000
Si-826				NONE	200	600	<50	<50	>80	>5000

产品型号参数表 Product Specifications Table

参数汇总表 Specifications Summary

产品料号 part number	电路图 Circuit	封装类型 Package	产品图 Product Drawing	CTR分档	CTR最小值/%	CTR最大值/%	IF/mA	IC/mA	VCE/V	Viso/V
Si-H67L		LSOP8		ABC	80	400	<50	<50	>80	>7500
Si-H67R				ABC	80	400	<50	<50	>80	>7500
Si-Q217		SSOP16		NONE	80	600	<50	<50	>80	>3750

产品型号参数表 Product Specifications Table

选型表 AC Product selection table

产品类型 Type	输入类型 Input Type	Viso (V)	DIP4 SMD4	SOP4	LSOP4	SSOP4	DIP6 SMD6	DIP8 SMD8	LSOP8	SSOP16
Transistor	AC	3750		Si-354		Si-214				Si-Q214
		5000	Si-814		Si-14XX (12, 13, 14, 17, 18, 19)		Si-824			
		7500						H64L H64R		

参数表 AC Parameter table

产品料号 part number	电路图 Circuit	封装类型 Package	产品图 Product Drawing	CTR分档	CTR最小值/%	CTR最大值/%	IF/mA	IC/mA	VCE/V	Viso/V
Si-814		DIP4/SMD4		AB	50	300	<±50	<50	>80	>5000
Si-354		SOP4		AB	50	300	<±50	<50	>80	>3750
Si-214		SSOP4		AB	50	300	<±50	<50	>80	>3750
Si-141 (0~9)		LSOP4			50	400	<±50	<50	>80	>5000
Si-824		DIP8/SMD8		NONE	50	300	<±50	<50	>80	>5000
Si-H64L		LSOP8		ABC	80	400	<50	<50	>80	>7500
Si-H64R				ABC	80	400	<50	<50	>80	>7500
Si-Q214		SSOP16		NONE	50	300	<±50	<50	>80	>3750

达林顿光耦 Photo Darlington

产品介绍 Product Introduction

达林顿光耦是一种基于达林顿晶体管结构的光耦合器件，通过两级晶体管放大显著提升电流增益，在小电流输入状态下驱动更大输出电流。适用于需要高灵敏度或大电流驱动的隔离场景。

A Darlington optocoupler is an optocoupling device based on the Darlington transistor structure. It significantly boosts current gain through a two-stage transistor amplification, enabling it to drive larger output currents with small input currents. It is suitable for isolation scenarios requiring high sensitivity or high-current drive.



应用场景 Application scenarios



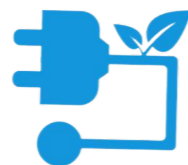
家用电器
Home Appliances



开关
Switching



表计
Meters



电源适配器
Power Adapter

产品型号参数表 Product Specifications Table

选型表 Product selection table

产品类型 Type	Viso (V)	DIP4 SMD4	SOP4	LSOP4	SSOP4	DIP6 SMD6	DIP8 SMD8	SSOP16
Darlington	3750		Si-355 Si-352		Si-215			Si-Q215
	5000	Si-815 Si-852		Si-L355 Si-L352		Si-4NXX (29-33)	Si-825 Si-6N139	

参数汇总表 Specifications Summary

产品料号 part number	电路图 Circuit	封装类型 Package	产品图 Product Drawing	CTR分档	CTR最小值/%	CTR最大值/%	IF/mA	IC/mA	VCE/V	Viso/V
Si-815		DIP4/SMD4		NONE	600	-	<50	<90	>40	>5000
Si-852				NONE	1000	-	<50	<150	>350	>5000
Si-315		SOP4		NONE	600	-	<50	<90	>40	>3750
Si-352				NONE	1000	-	<50	<150	>350	>3750
Si-215		SSOP4		NONE	600	-	<50	<90	>40	>3750
Si-L352		LSOP4		NONE	1000	-	<50	<150	>350	>5000
Si-L315				NONE	600	-	<50	<90	>40	>3750
Si-4NXX (29-33)		DIP6/SMD6		(29-33)	50	-	<60	<100	>40	>5000
Si-825		DIP8/SMD8		NONE	600	-	<50	<90	>40	>5000
Si-6N138		DIP8/SMD8		NONE	300	-	<40	<60	-	>5000
Si-6N139				NONE	400	-	<40	<60	-	>5000
Si-Q215		SSOP16		NONE	600	-	<50	<90	>40	>3750
Si-6N139		WDIP8/WSMD8		NONE	400	-	<40	<60	-	>5000

产品介绍 Product Introduction

光继电器是一种基于光电耦合技术的高性能电子开关元器件，通过光控半导体器件实现输入与输出的电气隔离及负载通断控制。它结合光电隔离与功率半导体技术的优势，具备无触点、长寿命和高可靠性的特点广泛应用于工业自动化控制、BMS系统、通信设备、测试测量设备、新能源系统等。

An optical relay is a high-performance electronic switching component based on optocoupling technology. It achieves electrical isolation between input and output and load on/off control through optically controlled semiconductor devices. Combining the advantages of opto-isolation and power semiconductor technology, it features contactless operation, long service life, and high reliability, and is widely used in industrial automation control, BMS systems, communication equipment, test and measurement equipment, new energy systems, and other applications.

应用场景 Application scenarios



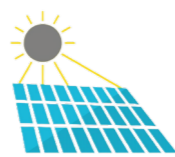
BMS系统
Battery Management System



检测仪器
Testing Instruments



工业控制
Industrial Control



光伏逆变
Inverter

产品型号参数表 Product Specifications Table

选型表 Product selection table

产品类型 Type	Viso (V)	SOP4	DIP4 SMD4	DIP5 SMD5	DIP6 SMD6	DIP8 SMD8	SOP16
Photo Relay	3750	Si-R170 Si-R1702 Si-R171 Si-R172 Si-R174 Si-R176 Si-R177					
	5000		Si-R210 Si-R2102 Si-R211 Si-R211A Si-R211B Si-R212 Si-R214 Si-R216	Si-RY258 Si-RY259	Si-RV25A Si-RV25B Si-RV251 Si-RV251A Si-RV251B Si-RV252 Si-RV254 Si-RV256	Si-R220 Si-R2202 Si-R221 Si-R221A Si-R221B Si-R222 Si-R224 Si-R226	Si-RS258 Si-RS259

参数汇总表 Specifications Summary

产品料号 part number	电路图 Circuit	封装类型 Package	产品图 Product Drawing	V _L (MAX) (V)	I _L (MAX) (A)	I _{pon} (MAX) (mA)	R _{on} (TYP) (Ω)	T _{on} (MAX) (ms)	T _{off} (MAX) (ms)	V _{iso} (V)
Si-R210		DIP4/SMD4		60	0.55	3	0.8	2	1	>5000
Si-R2102				60	2	3	0.1	5	1	>5000
Si-R211				100	1.25	3	0.25	1	1	>5000
Si-R211A				100	2	3	0.08	2	1	>5000
Si-R211B				100	3	3	0.05	2	1	>5000
Si-R212				200	0.18	3	2.5	2	1	>5000
Si-R214				400	0.12	3	16	2	1	>5000
Si-R216				600	0.04	3	35	2	1	>5000

产品型号参数表 Product Specifications Table

参数汇总表 Specifications Summary

产品料号 part number	电路图 Circuit	封装类型 Package	产品图 Product Drawing	V _L (MAX) (V)	I _L (MAX) (A)	I _{Fon} (MAX) (mA)	R _{on} (TYP) (Ω)	T _{on} (MAX) (ms)	T _{off} (MAX) (ms)	V _{iso} (V)
Si-R170		SOP4		60	0.55	3	0.8	2	1	>3750
Si-R1702				60	2	3	0.1	5	1	>3750
Si-R171				100	1.25	3	0.25	1	1	>3750
Si-R172				200	0.18	3	2.5	2	1	>3750
Si-R174				400	0.12	3	16	2	1	>3750
Si-R176				600	0.05	3	35	2	1	>3750
Si-R177				1000	0.02	3	48	2	1	>3750
Si-RY258					DIP5/SMD5		1500	0.02	3	108
Si-RY259	1800	0.35	3				2.5	2	1	>5000
Si-RV25A		DIP6/SMD6		60	2	3	0.08	5	1	>5000
Si-RV25B				60	3.5	3	0.05	5	0.5	>5000
Si-RV251				100	1.25	3	0.25	1	1	>5000
Si-RV251A				100	2	3	0.08	2	1	>5000
Si-RV251B				100	3	3	0.05	2	1	>5000
Si-RV252				200	0.18	3	2.5	2	1	>5000
Si-RV254				400	0.12	3	16	2	1	>5000
Si-RV256				600	0.04	3	35	2	1	>5000

产品型号参数表 Product Specifications Table

参数汇总表 Specifications Summary

产品料号 part number	电路图 Circuit	封装类型 Package	产品图 Product Drawing	V _L (MAX) (V)	I _L (MAX) (A)	I _{Fon} (MAX) (mA)	R _{on} (TYP) (Ω)	T _{on} (MAX) (ms)	T _{off} (MAX) (ms)	V _{iso} (V)			
Si-R220		DIP8/SMD8		60	0.55	3	0.8	2	1	>5000			
Si-R2202				60	2	3	0.1	5	1	>5000			
Si-R221				100	1.25	3	0.25	1	1	>5000			
Si-R221A				100	2	3	0.08	2	1	>5000			
Si-R221B				100	3	3	0.05	2	1	>5000			
Si-R222				200	0.18	3	2.5	2	1	>5000			
Si-R224				400	0.12	3	19	2	1	>5000			
Si-R226				600	0.05	3	28	2	1	>5000			
Si-RS258					SOP16		1500	0.02	3	108	1.5	0.5	>5000
Si-RS259							1800	0.35	3	2.5	2	1	>5000

可控硅光耦 Photo Triac

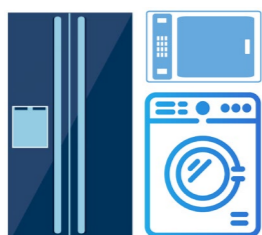
产品介绍 Product Introduction

可控硅光耦是一种专为交流负载控制设计的隔离器件，其核心优势在于无触点、长寿命及对高压交流电的直接驱动能力，广泛应用于调光、电机控制及加热系统等领域。

A TRIAC optocoupler is an isolation device for AC load control, featuring contactless operation, long life, and direct high-voltage AC drive, widely used in dimming, motor control and heating systems.



应用场景 Application scenarios



家用电器
Home Appliances



灯光控制器
Lighting Control



工业控制
Industrial Control



高压交流开关
High-Voltage AC Switch

产品型号参数表 Product Specifications Table

选型表 Product selection table

产品类型 Type	Viso (V)	DIP4 SMD4	SOP4	DIP5 SMD5	LSOP4	DIP6 SMD6	DIP7 SMD7
Photo Triac	3750		Si-M30XX				
	5000	Si-10XX		Si-20XX	Si-L30XX	Si-30XX	Si-RX213 Si-RX223

参数汇总表 Specifications Summary

产品料号 part number	电路图 Circuit	封装类型 Package	产品图 Product Drawing	VDRM分档	IFT分档	IF/mA	ITSM/A	Viso/V
Si-10XX (RP)		DIP4/SMD4		Si-102X (>400V) Si-105X (>600V) Si-107X (>800V)	Si-10X1 (<15mA) Si-10X2 (<10mA) Si-10X3 (<5mA)	<60	<1A	>5000
Si-M30XX (RP)		SOP4		Si-M302X (>400V) Si-M305X (>600V) Si-M307X (>800V)	Si-M30X1 (<15mA) Si-M30X2 (<10mA) Si-M30X3 (<5mA)	<60	<1A	3750
Si-L30XX (RP)		LSOP4		Si-L302X (>400V) Si-L305X (>600V) Si-L307X (>800V)	Si-L30X1 (<15mA) Si-L30X2 (<10mA) Si-L30X3 (<5mA)	<60	<1A	>5000
Si-20XX (RP)		DIP5/SMD5		Si-202X (>400V) Si-205X (>600V) Si-207X (>800V)	Si-20X1 (<15mA) Si-20X2 (<10mA) Si-20X3 (<5mA)	<60	<1A	>5000
Si-30XX (RP)		DIP6/SMD6		Si-302X (>400V) Si-305X (>600V) Si-307X (>800V)	Si-30X1 (<15mA) Si-30X2 (<10mA) Si-30X3 (<5mA)	<60	<1A	>5000

产品型号参数表 Product Specifications Table

参数汇总表 Specifications Summary

产品料号 part number	电路图 Circuit	封装类型 Package	产品图 Product Drawing	VDRM分档	IFT分档	IF/mA	ITSM/A	Viso/V
Si-10XX (ZC)		DIP4/SMD4		Si-104X (>400V) Si-106X (>600V) Si-108X (>800V)	Si-10X1 (<15mA) Si-10X2 (<10mA) Si-10X3 (<5mA)	<60	<1A	>5000
Si-M30XX (ZC)		SOP4		Si-M304X (>400V) Si-M306X (>600V) Si-M308X (>800V)	Si-M30X1 (<15mA) Si-M30X2 (<10mA) Si-M30X3 (<5mA)	<60	<1A	3750
Si-L30XX (ZC)		LSOP4		Si-L304X (>400V) Si-L306X (>600V) Si-L308X (>800V)	Si-L30X1 (<15mA) Si-L30X2 (<10mA) Si-L30X3 (<5mA)	<60	<1A	>5000
Si-20XX (ZC)		DIP5/SMD5		Si-204X (>400V) Si-206X (>600V) Si-208X (>800V)	Si-20X1 (<15mA) Si-20X2 (<10mA) Si-20X3 (<5mA)	<60	<1A	>5000
Si-30XX (ZC)		DIP6/SMD6		Si-304X (>400V) Si-306X (>600V) Si-308X (>800V)	Si-30X1 (<15mA) Si-30X2 (<10mA) Si-30X3 (<5mA)	<60	<1A	>5000

产品型号参数表 Product Specifications Table

参数汇总表 Specifications Summary

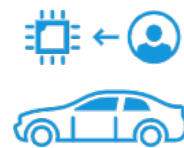
产品料号 part number	电路图 Circuit	封装类型 Package	产品图 Product Drawing	IT(RMS)分档	ITSM分档	IF/mA	VDRM/V	Viso/V
Si-RX213 (ZC)		DIP7/SMD7		Si-R0213 (<0.3A) Si-R1213 (<0.6A) Si-R2213 (<0.9A) Si-R3213 (<1.2A)	Si-R0213 (<3A) Si-R1213 (<6A) Si-R2213 (<9A) Si-R3213 (<12A)	<60	>600V	>5000
Si-RX223 (RP)				Si-R0223 (<0.3A) Si-R1223 (<0.6A) Si-R2223 (<0.9A) Si-R3223 (<1.2A)	Si-R0223 (<3A) Si-R1223 (<6A) Si-R2223 (<9A) Si-R3223 (<12A)	<60	>600V	>5000

产品介绍 Product Introduction

高速光耦是一种专为高频信号隔离传输设计的光电耦合器。其核心优势在于低传输延迟、高共模抑制比，同时保持电器隔离能力。

A high-speed optocoupler is designed for isolated high-frequency signal transmission, offering low propagation delay, high CMRR, and reliable electrical isolation.

应用场景 Application scenarios



电车应用
Electric Vehicle



数控设备
CNC Equipment



工业控制
Industrial Control



通讯隔离
Communication Isolation

产品型号参数表 Product Specifications Table

选型表 Product selection table

产品类型 Type	Viso (V)	DIP6 SMD6	SOP5	LSOP5	SOP6	S08	DIP8 SMD8	WDIP8 WSMD8
High-Speed Optocouplers (1Mbit/s)	3750		Si-M501 Si-M511			Si-0501 Si-0531		
	5000	Si-H11LX (Schmitt Trigger)		Si-L501 Si-L511	Si-W501 Si-W511		Si-6N13X	Si-6W13X

参数汇总表 Specifications Summary

产品料号 part number	电路图 Circuit	封装类型 Package	产品图 Product Drawing	分料型号 Gearid models	DTR (Mbps)	Output tR (ns)	Output tF (ns)	Vcc (V)	tPHL Max (us)	tPLH Max (us)	CMR Min (V/us)	Viso (V)
SI-M5X1 (1M)		SOP5		M501	1	15	50	30	0.8	0.8	5000	>3750
				M511	1	15	50	30	0.8	0.8	10000	>3750
SI-L5X1 (1M)		LSOP5		L501	1	15	50	30	0.8	0.8	5000	>5000
				L511	1	15	50	30	0.8	0.8	10000	>5000
SI-W5X1 (1M)		SOP6-P/SOP6-W		W501	1	15	50	30	0.8	0.8	5000	>5000
				W511	1	15	50	30	0.8	0.8	10000	>5000
SI-6N13X (1M)		DIP8/SMD8		6N135	1	5	50	30	2	1	10000	>5000
				6N136	1	15	50	30	2	1	10000	>5000
SI-6W13X (1M)		WDIP8/WSMD8		6W135	1	5	50	30	1.5	1.5	10000	>5000
				6W136	1	15	50	30	1	1	10000	>5000
SI-05X1 (1M)		S08		0501	1	15	50	30	0.8	0.8	5000	>3750
				0511	1	15	50	30	0.8	0.8	5000	>3750
				0530	1	-	-	30	1.5	1.5	1000	>3750
SI-053X (1M)				0531	1	-	-	30	0.8	0.8	1000	>3750

产品料号 part number	电路图 Circuit	封装类型 Package	产品图 Product Drawing	DTR (Mbps)	Output tR (us)	Output tF (us)	Vcc (V)	tPHL Max (ns)	tPLH Max (ns)	IF (on) Max (mA)	IF (off) Typ (mA)	Viso (V)
SI-H11L1 (施密特触发型)		DIP6/SMD6		1	0.1	0.1	15	4	4	1.6	1	>5000
SI-H11L2 (施密特触发型)				1	0.1	0.1	15	4	4	10	1	>5000
SI-H11L3 (施密特触发型)				1	0.1	0.1	15	4	4	5	1	>5000

产品型号参数表 Product Specifications Table

选型表 Product selection table

产品类型 Type	Viso (V)	DIP6 SMD6	SOP5	LSOP5	SOP6	S08	DIP8 SMD8	WDIP8 WSMD8
High-Speed Optocouplers (≥10Mbit/s)	3750		Si-M60 (10M) Si-M61 (10M) Si-M70 (15M) Si-M71 (15M)			Si-O60 (10M) Si-O63 (10M) Si-O75 (15M) Si-O72 (15M)		
	5000			Si-L60 (10M) Si-L61 (10M) Si-L70 (15M) Si-L71 (15M)	Si-W60 (10M) Si-W61 (10M) Si-W70 (15M) Si-W71 (15M)		Si-6N137 (10M)	Si-6W137 (10M)

参数汇总表 Specifications Summary

产品料号 part number	电路图 Circuit	封装类型 Package	产品图 Product Drawing	DTR (Mbps)	Vcc (V)	tPHL Max (ns)	tPLH Max (ns)	CMR Min (V/us)	Viso (V)
Si-M601 (10M)		SOP5		10	5.5	0.1	0.1	5000	> 3750
Si-M611 (10M)				10	5.5	0.1	0.1	20000	> 3750
Si-L601 (10M)		LSOP5		10	5.5	0.1	0.1	5000	> 5000
Si-L611 (10M)				10	5.5	0.1	0.1	20000	> 5000
Si-W601 (10M)		LSOP6-P/LSOP6-W		10	5.5	0.1	0.1	5000	> 5000
Si-W611 (10M)				10	5.5	0.1	0.1	20000	> 5000
Si-6N137 (10M)		DIP8/SMD8		10	5.5	0.1	0.1	5000	> 5000
Si-O601 (10M)		S08		10	5.5	0.075	0.075	5000	> 3750
Si-O611 (10M)				10	5.5	0.075	0.075	20000	> 3750
Si-O630 (10M)		S08		10	5.5	0.075	0.075	5000	> 3750
Si-O631 (10M)				10	5.5	0.075	0.075	10000	> 3750
Si-6W137 (10M)		WDIP8/WSMD8		10	5.5	0.1	0.1	5000	> 5000

产品型号参数表 Product Specifications Table

参数汇总表 Specifications Summary

产品料号 part number	电路图 Circuit	封装类型 Package	产品图 Product Drawing	DTR (Mbps)	Output tR (ns)	Output tF (ns)	Vcc (V)	tPHL Max (ns)	tPLH Max (ns)	CMR Min (V/us)	Viso (V)
Si-M701		SOP5		15	30	30	5.5	55	55	10000	> 3750
Si-L701		LSOP5		15	30	30	5.5	55	55	10000	> 3750
Si-W701		SOP6-P/SOP6-W		15	30	30	5.5	55	55	10000	> 5000
Si-O720		S08		15	20	25	6	50	50	10000	> 3750
Si-O75L		S08		15	20	25	6	50	50	10000	> 3750

栅极驱动光耦 Gate Drive Optocouplers



产品介绍 Product Introduction

栅极驱动光耦是一种专为功率半导体器件(如MOSFET、IGBT)栅极驱动设计的隔离器件。其核心价值在于简化驱动电路设计,适用于电力电子系统中的安全隔离与高效驱动。

A gate drive optocoupler is an isolation device for driving MOSFET/IGBT gates, simplifying drive design and enabling safe isolation and efficient drive in power electronics.

应用场景 Application scenarios



新能源
New Energy



变频器
Frequency Inverter



伺服电机
Servo Motor



可再生能源系统
Renewable Energy

产品型号参数表 Product Specifications Table

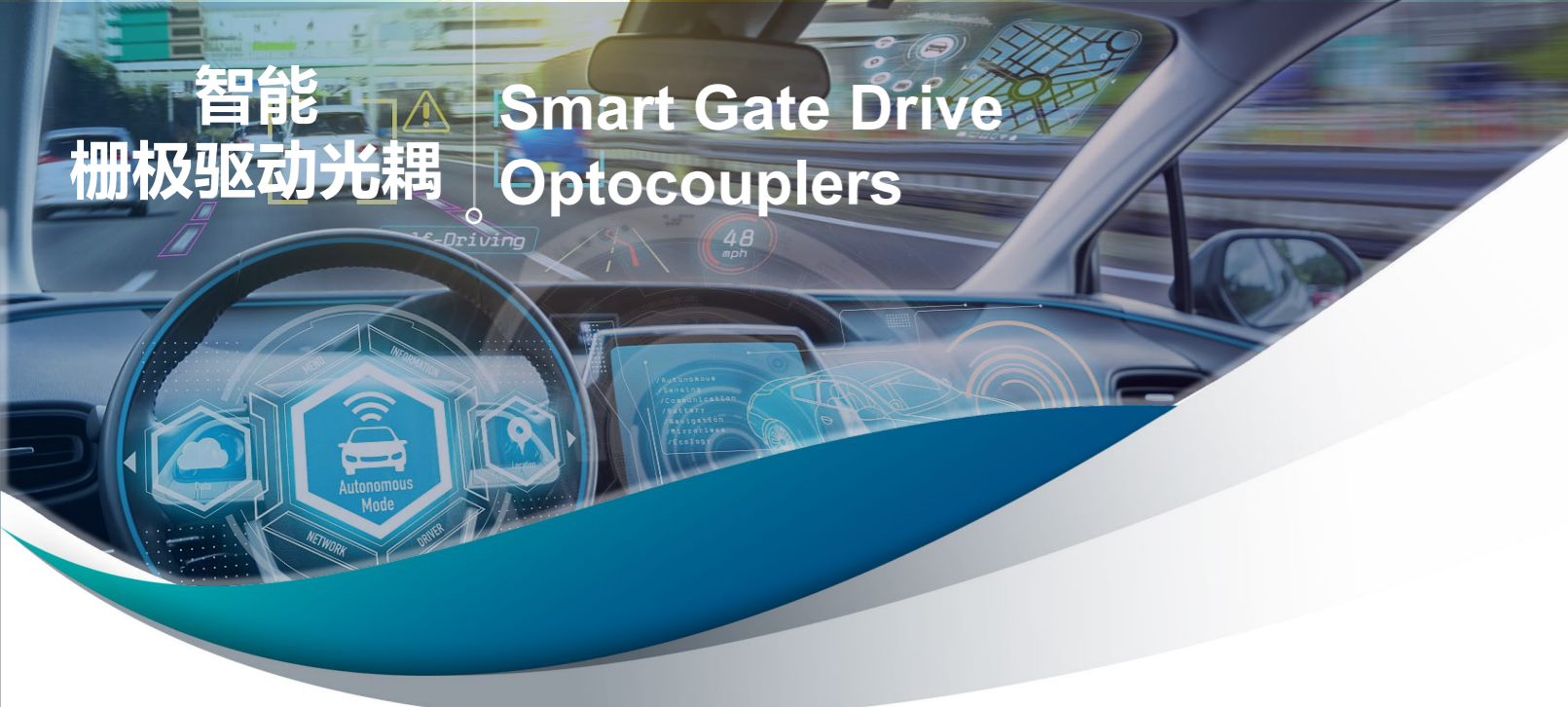
选型表 Product selection table

产品类型 Type	V _{iso} (V)	SOP5	SOP6-P SOP6-W	DIP8 SMD8	WDIP8 WSMD8
Gate Drive	3750	Si-M152 Si-M155 Si-M314 Si-M341 Si-M343			
	5000		Si-314 Si-341 Si-343	Si-3120 Si-3150	Si-W3120 Si-W3150

参数汇总表 Specifications Summary

产品料号 part number	电路图 Circuit	封装类型 Package	产品图 Product Drawing	I _{OPK} (MAX) (A)	V _{CC} (MAX) (V)	I _{FLH} (MAX) (mA)	T _{PR} (MAX) (μS)	T _{PLH} (MAX) (μS)	CMR (MIN) (V/μS)	V _{iso} (V)
Si-M152		SOP5		3	30	2	0.11	0.11	20000	>3750
Si-M155				1	30	5	0.11	0.11	20000	>3750
Si-M314				1	30	2	0.11	0.11	20000	>3750
Si-M341				3	30	2	0.11	0.11	20000	>3750
Si-M343				4	30	2	0.11	0.11	20000	>3750
Si-314		SOP6-P/SOP6-W		1	30	2	0.11	0.11	20000	>5000
Si-341				3	30	2	0.11	0.11	20000	>5000
Si-343				4	30	2	0.11	0.11	20000	>5000
Si-3120		DIP8/SMD8		3	30	5	0.11	0.11	35000	>5000
Si-3150				1	30	5	0.25	0.25	35000	>5000
Si-W3120		WDIP8/WSMD8		3	30	5	0.11	0.11	35000	>5000
Si-W3150				1	30	5	0.25	0.25	35000	>5000

智能栅极驱动光耦 Smart Gate Drive Optocouplers

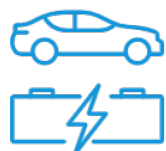


产品介绍 Product Introduction

智能栅极驱动光耦是传统栅极驱动光耦的高阶进化版本，集成了传感、保护、诊断与通信功能。适用于高可靠性、高复杂度电力电子系统(如新能源、电动汽车、工业驱动)。其核心价值在于将“隔离驱动”升级为“智能驱动”，显著提升系统安全性与能效。

A gate drive optocoupler is an isolation device for driving MOSFET/IGBT gates, simplifying drive design and enabling safe isolation and efficient drive in power electronics.

应用场景 Application scenarios



汽车驱动、电控系统
Automotive Drive and Electronic Control System



变频器
Frequency Inverter



UPS电源
Uninterruptible Power Supply



逆变器、变流器
Inverter、Converter

产品型号参数表 Product Specifications Table

选型表 Product selection table

产品类型 Type	V _{iso} (V)	SOP16
Smart Gate Drive	5000	Si-330J Si-331J Si-332J Si-333J

参数汇总表 Specifications Summary

产品料号 part number	电路图 Circuit	封装类型 Package	产品图 Product Drawing	I _{PEAK} (MAX)	V _{CC} (MAX) (V)	I _{FON} (MAX) (mA)	T _{PHL} (MAX) (μS)	T _{PLH} (MAX) (μS)	CMR (MIN) (V/μS)	V _{ISO} (V)
Si-316J		SOP16		2.5	30	8	0.5	0.5	15000	>5000
Si-330J				1.5	30	8	0.25	0.25	15000	>5000
Si-331J				1.5	30	8	0.25	0.25	15000	>5000
Si-332J				2.5	30	8	0.25	0.25	15000	>5000
Si-333J				2.5	30	8	0.25	0.25	15000	>5000

产品介绍 Product Introduction

智能功率模块接口光耦是一种专为智能功率模块 (IPM) 设计的高性能光电耦合器, 集成了信号隔离、驱动控制和保护功能。

The IPM interface optocoupler is a high-performance photoelectric coupler specially designed for intelligent power modules (IPMs), integrating signal isolation, drive control and protection functions.



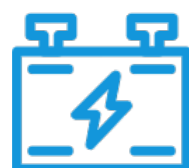
应用场景 Application scenarios



IPM接口隔离
IPM Interface Isolation



工业变频器
Industrial Frequency Inverter



电机驱动
Motor Drive



通讯设备
Communication Equipment

产品型号参数表 Product Specifications Table

选型表 Product selection table

产品类型 Type	V _{iso} (V)	SOP5	SOP6-P SOP6-W	DIP8 SMD8
IPM	3750	Si-M480 Si-M481		
	5000		Si-480 Si-481 Si-456	Si-4506

参数汇总表 Specifications Summary

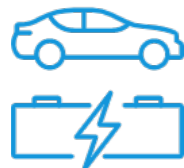
产品料号 part number	电路图 Circuit	封装类型 Package	产品图 Product Drawing	I _{For} (MAX) (mA)	T _{PHL} (MAX) (μs)	T _{PLH} (MAX) (μs)	CMR (MIN) (V/μs)	V _{iso} (V)
Si-480		SOP6-P/SOP6-W		2	0.22	0.22	20000	>5000
Si-481				2	0.22	0.22	20000	>5000
Si-456				5	0.4	0.6	20000	>5000
Si-M480		SOP5		2	0.22	0.22	20000	>5000
Si-M481				2	0.22	0.22	20000	>5000
Si-4506		DIP8/SMD8		5	0.4	0.6	20000	>5000

产品介绍 Product Introduction

隔离运算放大器光耦是一种结合了光电隔离技术与运算放大器功能的高性能器件，专为高精度信号隔离与放大设计。

The isolated operational amplifier optocoupler is a high-performance device that integrates photoelectric isolation technology and operational amplifier functions, specially designed for high-precision signal isolation and amplification.

应用场景 Application scenarios



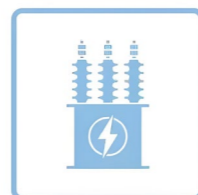
汽车驱动、电控系统
Automotive Drive and Electronic Control System



工业控制
Industrial Control



信号采集
Signal Acquisition



电力系统
Power System



产品型号参数表 Product Specifications Table

选型表 Product selection table

产品类型 Type	V _{iso} (V)	WSOP8	LSOP8	DIP8 SMD8
Isolation Amplifier	5000	Si-C790 Si-C79A Si-C79B Si-C87AT Si-C87BT	Si-H790	Si-7840

参数汇总表 Specifications Summary

产品料号 part number	电路图 Circuit	封装类型 Package	产品图 Product Drawing	Gain Error at 25 °C Max (%)	Nonlinearity Typ (%)	Band width Typ (kHz)	VDD (V)	CMR Min (V/μs)	V _{iso} @1min (Vrms)
Si-7840		DIP8 SMD8		±5	0.0037	100	5.5	10000	>5000
Si-C790		WSOP8		±3	0.05	200	5.5	10000	>5000
Si-C79A		WSOP8		±1	0.05	200	5.5	10000	>5000
Si-C79B		WSOP8		±0.5	0.05	200	5.5	10000	>5000
Si-C87AT		WSOP8		±1	0.05	100	5.5	10000	>5000
Si-C87BT		WSOP8		±0.5	0.05	100	5.5	10000	>5000
Si-H790		LSOP8		±3	0.05	200	5.5	15000	>5000

产品介绍

Product Introduction

线性光耦是专为模拟信号隔离传输设计的核心器件。其核心优势在于兼具电气隔离、抗共模干扰及温度稳定性。

The linear optocoupler is a core device specially designed for the isolated transmission of analog signals. Its core advantages lie in the integration of electrical isolation, common-mode interference rejection and temperature stability.

应用场景

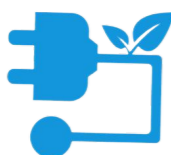
Application scenarios



工业控制
Industrial Control



电机驱动
Motor Drive



电源适配器
Power Adapter



医疗设备
Medical Equipment

产品型号参数表 Product Specifications Table

选型表 Product selection table

产品类型 Type	V _{iso} (V)	DIP4 SMD4	WDIP8 WSMD8
Linear analog optocouplers	5000	Si-N100	Si-N200 Si-N201

参数汇总表 Specifications Summary

产品料号 part number	电路图 Circuit	封装类型 Package	产品图 Product Drawing	分档	K	IF/mA	IPD/mA	V _{pd} /V	V _{iso} @1min (V _{rms})
Si-N100		DIP4/SMD4		None	0.1-1.5	25	<0.1	>30	>5000

产品料号 part number	电路图 Circuit	封装类型 Package	产品图 Product Drawing	K1, K2	K	IF/mA	IC/mA	V _{pd} /V	V _{iso} @1min (V _{rms})
Si-N200		WDIP8/WSMD8		0.25-0.75	0.85-1.15	25	<0.1	>30	>5000
Si-N201				0.35-0.72	0.95-1.05	25	<0.1	>30	>5000