



**标准&定制开关连接器产品制造商**  
DONG GUAN XI BANG ELECTRONICS CO., LTD.

# 规格书

## SPECIFICATION

CUSTOMER NAME	客户名称:	_____
CUSTOMER NO.	客户编号:	_____
SERIES	系列:	光耦元件
MODEL NO.	型号:	光耦图耦合器选择指南1.5版
DRAWING NO.	图形号:	Photo Coupler Selection Guide Ver1.5

If specification of this product meets your request, please confirm all the items of it and return to us with signature and stamp, it will be basis of our production and record. Thanks your cooperation in advance!

若此产品规格符合贵司要求, 敬请确认此规格书内所有项目  
并签名和盖章后回传给我司, 以作我司产品制作之  
依据和存档之用, 多谢合作!

### EXAMINE & APPROVAL 审批

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Quality core! Afterburner for Made in China!



东莞市溪榜电子有限公司  
DONG GUAN XI BANG ELECTRONICS CO., LTD

## Photo Coupler Selection Guide

2023.12.8

OPP

Ver: 1.5

[www.alpsr.cn](http://www.alpsr.cn)  
[www.alpsr.com](http://www.alpsr.com)

# Introduction

The photocoupler 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. Xi Bang provides a series of photocoupler 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 photocoupler, they are divided into five categories, and Xi Bang provide various of packaging types.

## Transistor Output

- General Purpose Coupler
- Darlington Transistor

## Power Triac

- Photo Power Triac

## Analog Output

- 20Kbps
- 100Kbps
- 1Mbps

## Solid State Relay

- General Purpose Solid State Relay

## Digital Output

- 5Mbps
- 10Mbps
- 15Mbps

## IGBT Gate Driver

- IGBT/MOSFET Gate Driver

## Triac Output

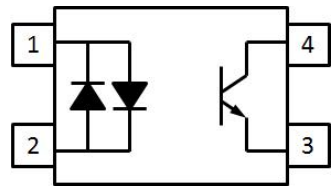
- Photo Triac

## IPM

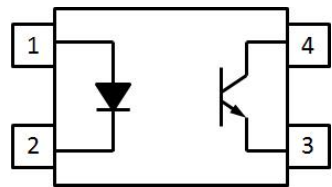
- Intelligent Power Module (IPM) interface

# Photo Coupler Product Lineup 1/2

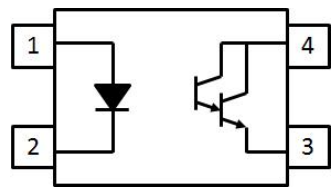
## Transistor Output



AC Input

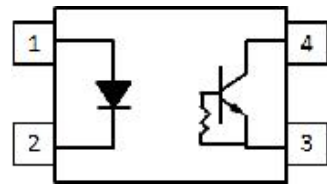


DC Input

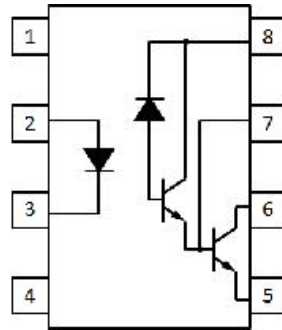


Darlington Transistor Output

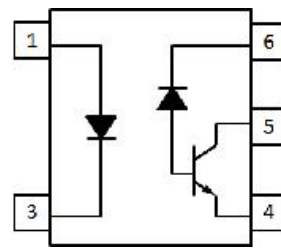
## Analog Output



20Kbps

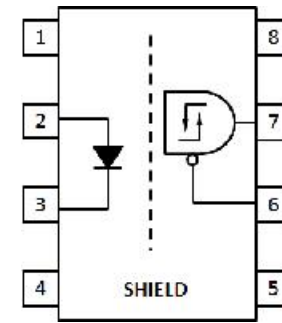


100Kbps

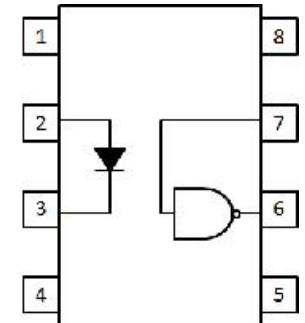


1Mbps

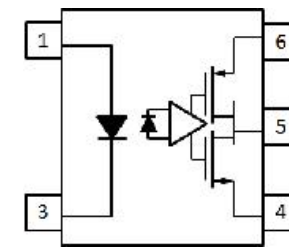
## Digital Output



5Mbps



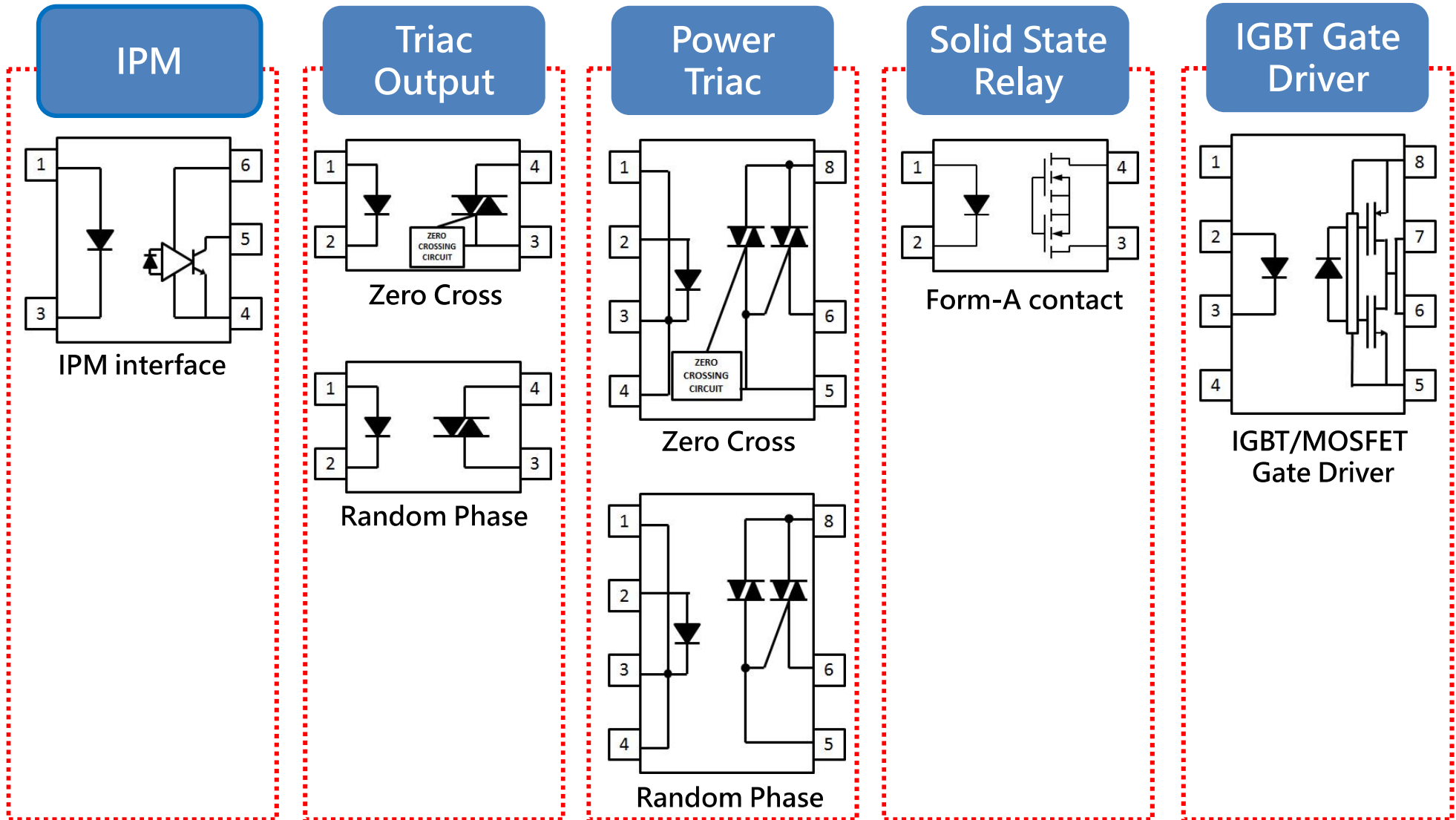
10Mbps



15Mbps

Press the coupler type above for detail information.

# Photo Coupler Product Lineup 2/2



Press the coupler type above for detail information.

# Application Selection 1/2

## Communication

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

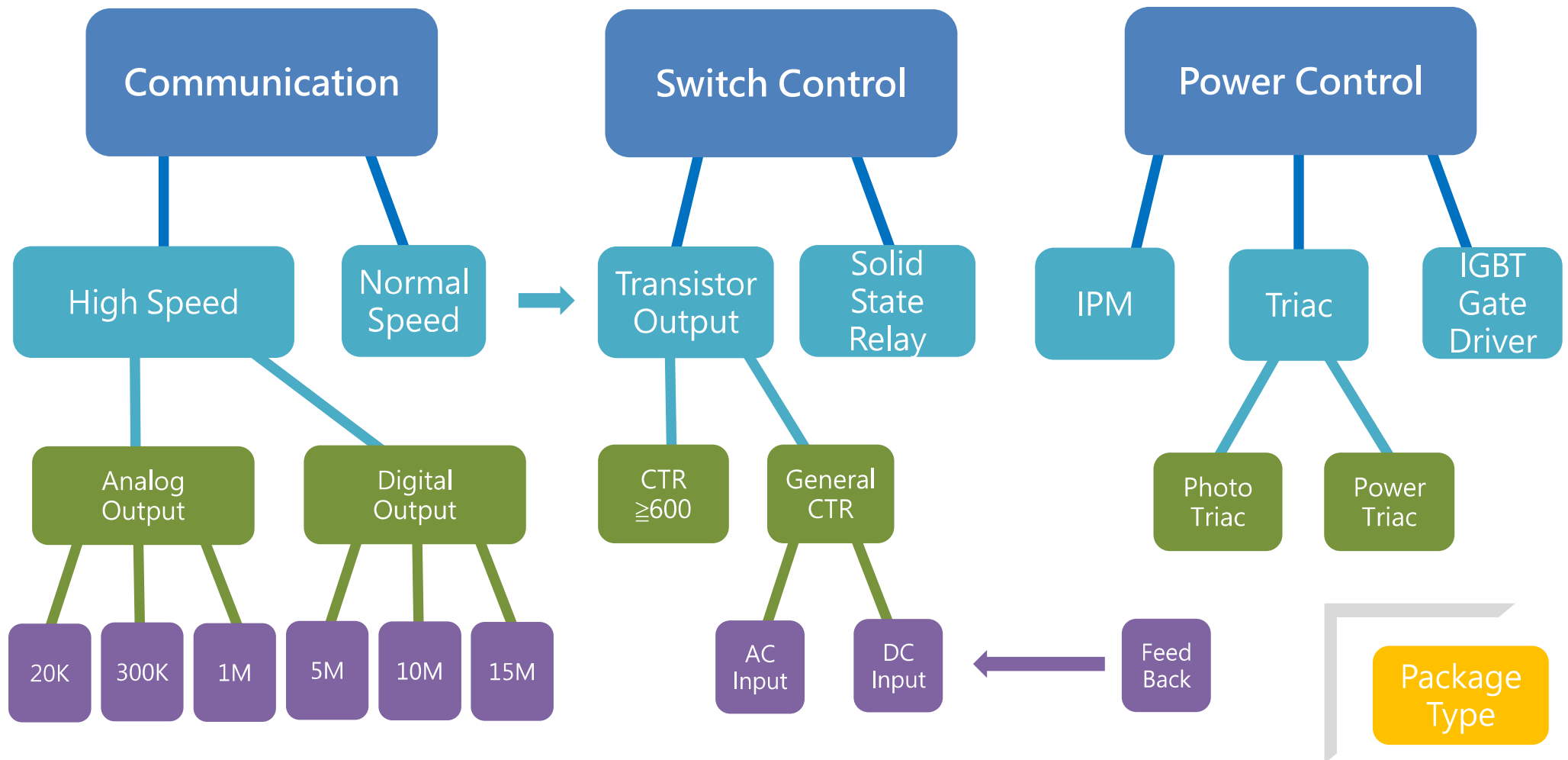
## Switch Control

- 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

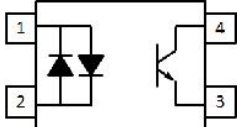
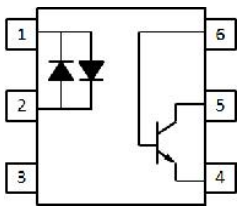
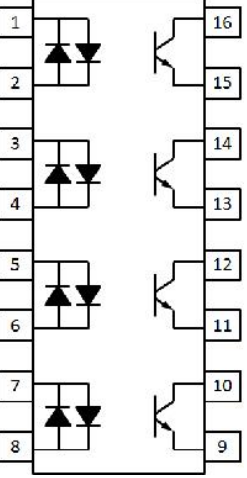


Select the most suitable Coupler model according to the selection flow and corresponding table.

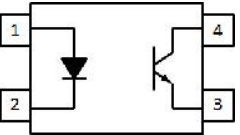
# General Photo Coupler



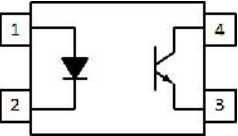
# Transistor Output(AC Input)

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)
AC		DIP,M,S1	EL814	-	20	300	±1/5	80	5000
				A	50	150			
		SOP-2.54	EL354N	-	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	ELQ3H	-	20	300	±1/5	80	3750

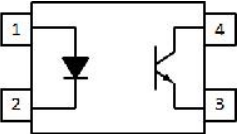
# Transistor Output(DC Input)

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, M, S1	EL816	-	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	-				
			EL817	-	50	600	5/5	35	5000
				A	80	160			
				B	130	260			
				C	200	400			
				D	300	600			
				X	100	200			
			Y	150	300				

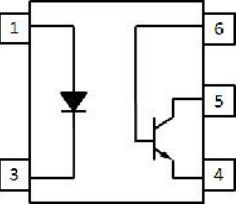
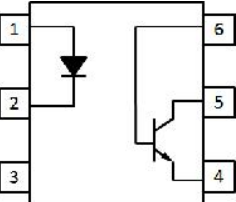
# Transistor Output(DC Input)

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	EL101X	EL1010	50	600	5/5	80	5000
				EL1017	80	160			
				EL1018	130	260			
				EL1019	200	400			
				EL1012	63	125	10/5		
				EL1013	100	200			
				EL1014	160	320			
				EL1012	22	-	1/5		
				EL1013	34	-			
				EL1014	56	-			
		SOP-2.54	EL357N	-	50	600	5/5	80	3750
				A	80	160			
				B	130	260			
				C	200	400			
				D	300	600			
				E	100	200			
				F	150	300			

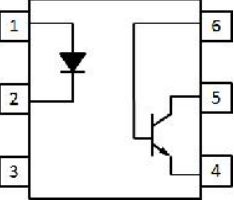
# Transistor Output(DC Input)

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	EL357L	-	60	300	1/5	70	5000		
				(A)	63	125					
				(B)	100	200					
		SSOP-1.27	EL3H7			-	50	600	5/5	80	3750
						A	80	160			
						B	130	260			
						C	200	400			
						D	300	600			
						E	100	200			
						F	150	300	10/5		
						H	40	80			
						I	63	125			
						J	100	200			
						K	160	320			
		-	50	400							
		SOP-2.54	EL121N			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					

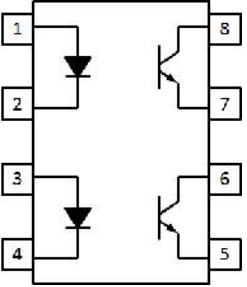
# Transistor Output(DC Input)

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		LSOP-1.27	EL111X	EL1110	50	600	5/5	80	5000	
				EL1116	100	300				
				EL1117	80	160				
				EL1118	130	260				
				EL1119	200	400				
				EL1112	63	125	10/5			
				EL1113	100	200				
				EL1114	160	320				
				EL1112	22	-	1/5			
				EL1113	34	-				
	EL1114	56	-							
		DIP, M, S1	4N2X	4N25	100	-	10/10	80	5000	
				4N26	20	-				
				4N27	20	-				
				4N28	10	-				
			4N3X	4N35	100	-	10/10			
				4N36	100	-				
				4N37	100	-				
				4N38	20	-				
			H11AX	H11A1	50	-	10/10			80
H11A2				20	-					
H11A3	20	-								
H11A4	10	-								
H11A5	30	-								

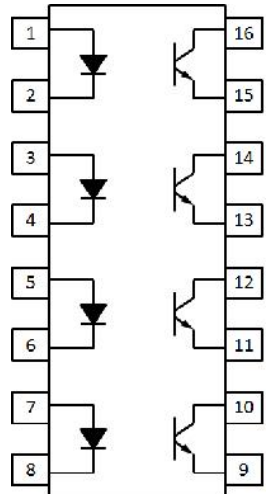
# Transistor Output(DC Input)

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)

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	EL827	-	50	600	5/5	80	5000
		SSOP-1.27	ELD3H7	-	50	600	5/5	80	3750
		SOP-1.27	ELD20X	ELD205	40	80	10/5	80	3750
				ELD206	63	125			
				ELD207	100	200			
				ELD205	13	-	1/5		
				ELD206	22	-			
				ELD207	34	-			
		SOP-1.27	ELD21X	ELD211	20	-	10/5	80	3750
				ELD213	100	-			
	ELD217			100	120	1/5			
	SOP-1.27	EL20X	EL205	40	80	10/5	80	3750	
			EL206	63	125				
			EL207	100	200				
			EL208	160	320				
		EL21X	EL211	20	-	10/5	80	3750	
EL212			50	-					
EL213			100	-					

# Transistor Output(DC Input)

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	EL847	-	50	600	5/5	80	5000
		SSOP-1.27	ELQ3H7	-	50	600	5/5	80	3750

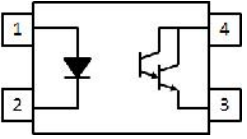
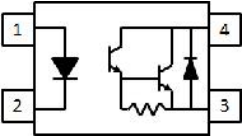
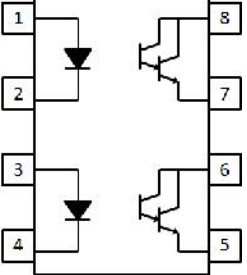


# Transistor Output(DC Input, 125°C)

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	EL817H	-	50	400	5/5	80	5000
				A	80	160			
				B	130	260			
				C	200	400			
		SSOP-1.27	EL3H7H	-	80	260	5/5	80	3750
				A	80	160			
				B	130	260			
		SOP-2.54	EL357NH	-	50	600	5/5	80	3750
				A	80	160			
				B	130	260			
				C	200	400			
		LSOP-2.54	EL101XH	EL1010H	50	600	5/5	80	5000
				EL1011H	100	200			
				EL1017H	80	160			
				EL1018H	100	300			
				EL1019H	200	400			

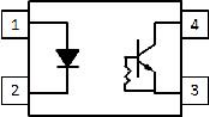
# Photo Darlington Coupler

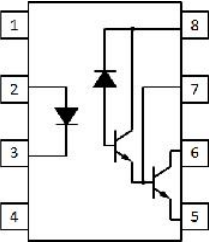
# Transistor Output(Darlington)

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	EL815	-	600	7500	1/2	35	5000
		SOP-2.57	EL452	-	1000	-	1/2	350	3750
		DIP, M, S1	EL852	-	1000	15000	1/2	350	5000
		DIP, M, S1	EL825	-	600	7500	1/2	40	5000

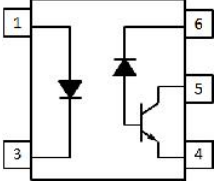
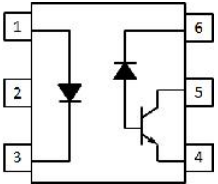
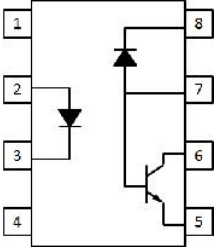
# High Speed Coupler

# High Speed Coupler(20K、300Kbps)

Data Rate	Pin Configuration	Package Type	Part Number	CTR				$T_{on}(\mu s)$ Max.	$T_{off}(\mu s)$ Max.	$V_{ISO@1min.}$ ( $V_{rms}$ )
				Min.(%)	Typ.(%)	Max.(%)	@ $I_F$ (mA)			
20Kbps		DIP,M S, S1	EL2514	50	-	200	5	25	25	5000

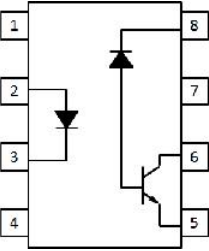
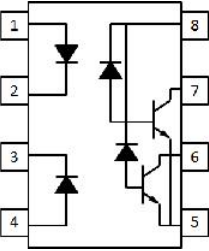
Data Rate	Pin Configuration	Package Type	Part Number	CTR				$T_{PHL}(\mu s)$ Max.	$T_{PLH}(\mu s)$ Max.	$V_{ISO@1min.}$ ( $V_{rms}$ )
				Min.(%)	Typ.(%)	Max.(%)	@ $I_F$ (mA)			
300Kbps		SOP-1.27	EL0700	300	2000	-	1.6	10	35	3750
			EL0701	400	2500	-	0.5	25	60	
		DIP, M S, S1	6N138	300	2000	-	1.6	10	35	5000
			6N139	400	2500	-	0.5	25	60	
				500	2000	-	1.6	-	-	
				500	2000	-	1.6	-	-	

# High Speed Coupler(1Mbps)

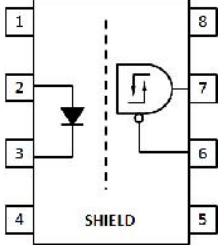
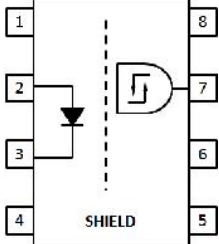
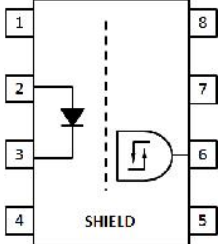
Data Rate	Pin Configuration	Package Type	Part Number	CTR				$T_{PHL}(\mu s)$ Max.	$T_{PLH}(\mu s)$ Max.	$V_{ISO@1min.}$ ( $V_{rms}$ )
				Min.(%)	Typ.(%)	Max.(%)	@ $I_F$ (mA)			
1Mbps		SOP-1.27	ELM452	20	-	50	16	0.8	0.8	3750
			ELM453							
			★ELM453L							
		P-1.27	ELS511	20	-	-	16	1.5	1.5	5000
		SOP-1.27	EL0500	7	-	50	16	1.5	1.5	3750
			EL0501	19				0.8	0.8	
			★EL050L	7				-	50	
		DIP, M S, S1	6N135	7	-	50	16	1.5	1.5	5000
			6N136	19	-	50	16	0.8	0.8	5000
		DIP, S	ELW135	7	-	50	16	1.5	1.5	5000
ELW136	19		-	0.8	0.8					

Note) ★ is Vcc pin support 3.3V.

# High Speed Coupler(1Mbps)

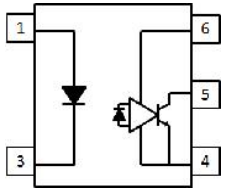
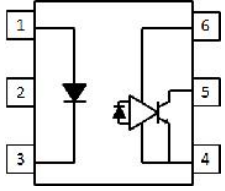
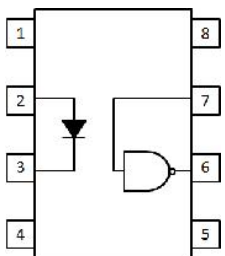
Data Rate	Pin Configuration	Package Type	Part Number	CTR				$T_{PHL}(\mu s)$	$T_{PLH}(\mu s)$	$V_{ISO}@1min.$ ( $V_{rms}$ )
				Min.(%)	Typ.(%)	Max.(%)	@ $I_F(mA)$	Max.	Max.	
1Mbps		SOP-1.27	EL0452	19	-	50	16	0.8	0.8	3750
			EL0453							
		DIP, M S, S1	EL4502	19	-	50	16	0.8	0.8	5000
			EL4503							
			EL4504							
	DIP, S	ELW4503	19	-	50	16	0.8	0.8	5000	
		SOP-1.27	EL0530	7	-	50	16	1.5	1.5	3750
			EL0531	19				0.8	0.8	
		DIP, M S, S1	EL2530	7	-	50	16	1.5	1.5	5000
			EL2531	19				0.8	0.8	

# High Speed Coupler(5Mbps)

Data Rate	Pin Configuration	Package Type	Part Number	I <sub>cc</sub> (H/L) (mA) Max. @V <sub>cc</sub> =5.5V	I <sub>F</sub> (mA) Max.	T <sub>PHL</sub> (ns) Max.	T <sub>PLH</sub> (ns) Max.	V <sub>ISO</sub> @1min.(V <sub>rms</sub> )
5Mbps		DIP, M S, S1	EL2200	4.5/6	1.6	300	300	5000
			EL2201					
			EL2202					

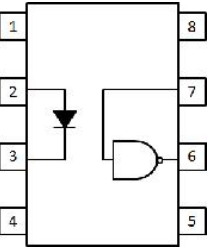
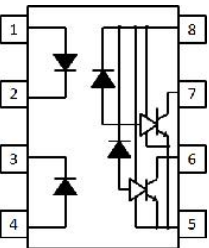


# High Speed Coupler(10Mbps)

Data Rate	Pin Configuration	Package Type	Part Number	I <sub>cc</sub> (H/L) (mA) Max. @V <sub>cc</sub> =5.5V	I <sub>F</sub> (mA) Max.	T <sub>PHL</sub> (ns) Max.	T <sub>PLH</sub> (ns) Max.	V <sub>ISO</sub> @1min.(V <sub>rms</sub> )
10Mbps		SOP-1.27	ELM600	9/10	5	100	100	3750
			ELM601					
			ELM611					
		P-1.27	ELS611	13/15	5	100	100	5000
				SOP-1.27	ELO600	10/13	5	75
	ELO601							
	ELO611							
SOP-1.27	★ELO60L	10/13		5	75	75	3750	
DIP, M S, S1	★EL260L	10/13	5	75	75	5000		

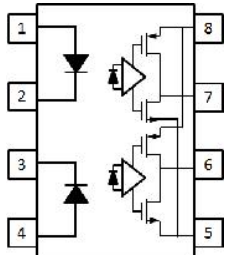
Note) ★ is V<sub>cc</sub> pin support 3.3V.

# High Speed Coupler(10Mbps)

Data Rate	Pin Configuration	Package Type	Part Number	I <sub>cc</sub> (H/L) (mA) Max. @V <sub>cc</sub> =5.5V	I <sub>F</sub> (mA) Max.	T <sub>PHL</sub> (ns) Max.	T <sub>PLH</sub> (ns) Max.	V <sub>ISO</sub> @1min.(V <sub>rms</sub> )
10Mbps		DIP, M S, S1	6N137	10/13	5	75	75	5000
		DIP, S (WB)	ELW137	10/13	5	100	100	5000
		DIP, M S, S1	EL2601	10/13	5	75	75	5000
			EL2611					
	DIP, S (WB)	ELW2601	10/13	5	100	100	5000	
		ELW2611						
		SOP-1.27	EL0630	18/21	5	100	100	3750
			EL0631					
DIP, S		EL2630	18/21	5	100	100	5000	
		EL2631						

Note) WB is WIDE BODY package.

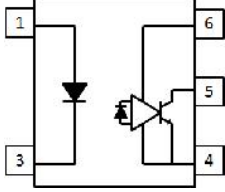
# High Speed Coupler(15Mbps)

Data Rate	Pin Configuration	Package Type	Part Number	I <sub>cc</sub> (H/L) (mA) Max. @V <sub>cc</sub> =5.5V	I <sub>F</sub> (mA) Max.	T <sub>PHL</sub> (ns) Max.	T <sub>PLH</sub> (ns) Max.	V <sub>ISO</sub> @1min.(V <sub>rms</sub> )
15Mbps		SOP-1.27	★ELM80L	6/6	5	65	65	3750
			★ELM81L					
		SOP-1.27	★EL083L	8/8	5	60	60	3750
			★EL086L					

Note) ★ is V<sub>cc</sub> pin support 3.3V.

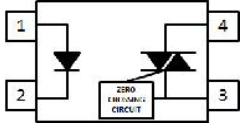
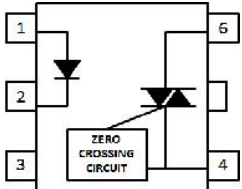
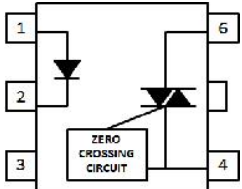
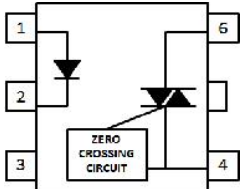
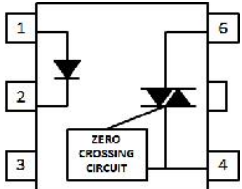
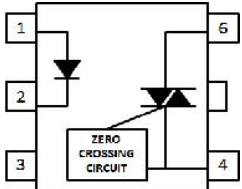
# Intelligent Power Module

# Intelligent Power Module (1Mbps)

Data Rate	Pin Configuration	Package Type	Part Number	I <sub>cc</sub> (H/L) (mA) Max. @V <sub>cc</sub> =5.5V	I <sub>TH</sub> (mA) Max.	T <sub>PHL</sub> (ns) TYP.	T <sub>PHL</sub> (ns) TYP.	V <sub>ISO</sub> @1min.(V <sub>rms</sub> )
1Mbps		SOP-1.27	ELM456	1.5/TBD	5	150	450	3750

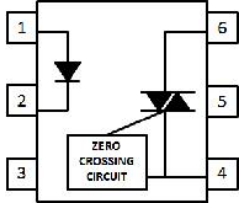
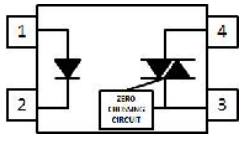
# Photo Triac

# Photo Triac(Zero Cross)

Pin Configuration	Type	Package Type	Part Number	$I_{FT}(mA)$	$I_{T(RMS)}(mA)$	$I_{TSM}(A)$	$V_{DRM}(V)$	dv/dt min. (V/ $\mu$ s)	$V_{Iso}$ @1min. ( $V_{rms}$ )						
	Zero corss	DIP, M S, S1	ELT3041	15	100	1	400	1000	5000						
			ELT3042	10											
			ELT3043	5											
				Zero corss	DIP, M S, S1	EL3031(P5)	15	100	1	250	1000	5000			
						EL3032(P5)	10								
						EL3033(P5)	5								
							Zero corss	DIP, M S, S1	EL3041(P5)	15	100	1	400	1000	5000
									EL3042(P5)	10					
EL3043(P5)	5														
	Zero corss	DIP, M S, S1							EL3061(P5)	15	100	1	600	1000	5000
									EL3062(P5)	10					
			EL3063(P5)	5											
				Zero corss	DIP, M S, S1				EL3081(P5)	15	100	1	800	600	5000
									EL3082(P5)	10					
	Zero corss	DIP, M S, S1	EL3083(P5)	5											

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

# Photo Triac(Zero Cross)

Pin Configuration	Type	Package Type	Part Number	$I_{FT}(mA)$	$I_{T(RMS)}(mA)$	$I_{TSM}(A)$	$V_{DRM}(V)$	dv/dt min. (V/ $\mu$ s)	$V_{ISO}$ @1min. ( $V_{rms}$ )
	Zero corss	DIP, M S, S1	EL3031	15	100	1	250	1000	5000
			EL3032	10					
			EL3033	5					
			EL3041	15	100	1	400	1000	5000
			EL3042	10					
			EL3043	5					
			EL3061	15	100	1	600	1000	5000
			EL3062	10					
			EL3063	5					
			EL3081	15	100	1	800	600	5000
			EL3082	10					
			EL3083	5					
	Zero corss	SOP-2.54	ELM3042	10	100	1	400	1000	3750
			ELM3043	5					
			ELM3044	3					
			ELM3062	10	100	1	600	1000	3750
			ELM3063	5					
			ELM3064	3					
			ELM3082	10	100	1	800	1000	3750
			ELM3083	5					
			ELM3084	3					

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

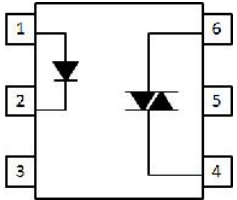
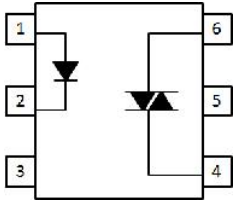
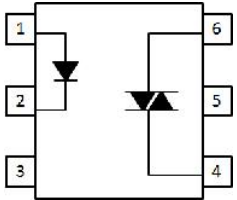
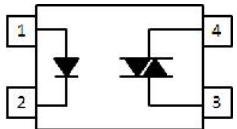
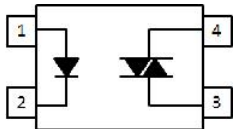


# Photo Triac(Random Phase)

Pin Configuration	Type	Package Type	Part Number	$I_{FT}$ (mA)	$I_{T(RMS)}$ (mA)	$I_{TSM}$ (A)	$V_{DRM}$ (V)	dv/dt min. (V/ $\mu$ s)	$V_{ISO}$ @1min. ( $V_{rms}$ )			
	Random Phase	DIP, M S, S1	ELT3021	15	100	1	400	100	5000			
			ELT3022	10								
			ELT3023	5								
				Random Phase	DIP, M S, S1	EL3011(P5)	15	100	1	250	100	5000
						EL3012(P5)	10					
						EL3013(P5)	5					
	Random Phase	DIP, M S, S1				EL3021(P5)	15	100	1	400	100	5000
						EL3022(P5)	10					
						EL3023(P5)	5					
				Random Phase	DIP, M S, S1	EL3051(P5)	15	100	1	600	1000	5000
						EL3052(P5)	10					
						EL3053(P5)	5					
	Random Phase	DIP, M S, S1				EL3071(P5)	15	100	1	800	1500	5000
						EL3072(P5)	10					
						EL3073(P5)	5					

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

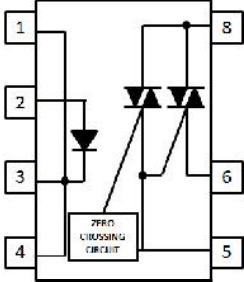
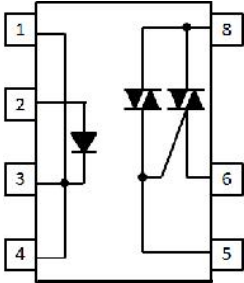
# Photo Triac(Random Phase)

Pin Configuration	Type	Package Type	Part Number	$I_{FT}$ (mA)	$I_{T(RMS)}$ (mA)	$I_{TSM}$ (A)	$V_{DRM}$ (V)	dv/dt min. (V/ $\mu$ s)	$V_{ISO}$ @1min. ( $V_{rms}$ )			
	Random Phase	DIP, M, S, S1	EL3011	15	100	1	250	100	5000			
			EL3012	10								
			EL3013	5								
				Random Phase	DIP, M, S, S1	EL3020	30	100	1	400	100	5000
						EL3021	15					
						EL3022	10					
						EL3023	5					
						EL3051	15					
						EL3052	10					
				Random Phase	DIP, M, S, S1	EL3053	5	100	1	600	1000	5000
						EL3071	15					
						EL3072	10					
						EL3073	5					
	Random Phase	SOP-2.54	ELM3022	10	100	1	400	100	5000			
			ELM3023	5								
			ELM3024	3								
				Random Phase	SOP-2.54	ELM3052	10	100	1	600	1000	5000
						ELM3053	5					
						ELM3054	3					

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

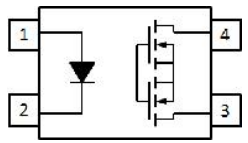
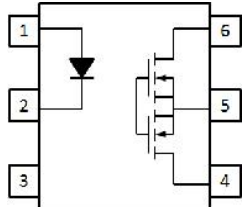
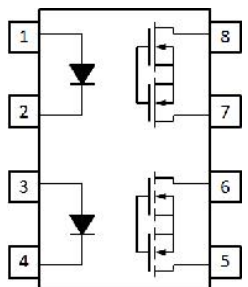
# Power Triac

# Power Triac

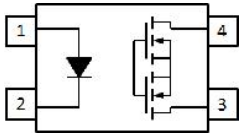
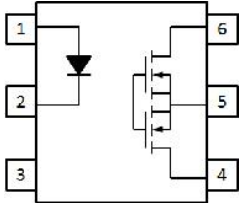
Pin Configuration	Type	Package Type	Part Number	$I_{FT}$ (mA)	$I_{T(RMS)}$ (A)	$I_{TSM}$ (A)	$V_{DRM}$ (V)	dv/dt min. (V/ $\mu$ s)	$V_{ISO}$ ( $V_{RMS}$ )
	Zero Cross	DIP, M, S1	ELR0213	10	0.3	3	600	200	5000
			ELR1213		0.6	6			
			ELR2213		0.9	9			
			ELR3213		1.2	12			
	Random Phase	DIP, M, S1	ELR0223	10	0.3	3	600	200	5000
			ELR1223		0.6	6			
			ELR2223		0.9	9			
			ELR3223		1.2	12			

# Solid State Relay

# Solid State Relay

Pin Configuration	Package Type	Part Number	$I_L$ (mA) Max.	$V_L$ (V) Max.	$R_{d(on)}$ ( $\Omega$ ) 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	EL406A	550	60	2.5	1.2	5	0.4	3	0.5
		EL425A	180	250	15	0.5				
		EL440A	120	400	30	0.3				
		EL460A	50	600	70	0.15				
	SOP Mini-Flat	ELM425A	180	250	15	0.5	5	0.2	0.5	0.5
		ELM440A	120	400	30	0.3				
ELM460A		50	600	70	0.15					
	DIP, S1	EL606A	550	60	2.5	1.2	3	0.4	3	0.5
		EL625A	180	250	15	0.5				
		EL640A	120	400	30	0.3				
		EL660A	50	600	70	0.15				
	DIP, S1	EL840A	120	400	30	0.3	5	0.4	3	0.5
		EL860A	50	600	70	0.15				

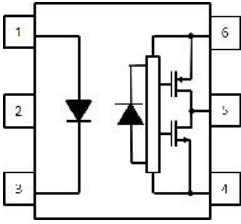
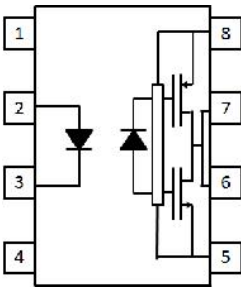
# Solid State Relay ( $I_L = 1A$ up)

Pin Configuration	Package Type	Part Number	$I_L$ (A) Max.	$V_L$ (V) Max.	$R_{d(on)}$ ( $\Omega$ ) 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	ELM406A	1	60	2.5	2	5	0.1	5	0.5
	DIP, S1	EL606A3	2.5	60	1	-	5	0.4	5	0.5
		EL603A5	5	30	1	-				

# IGBT Gate Driver

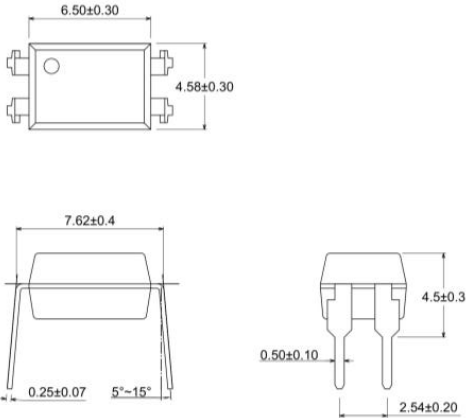
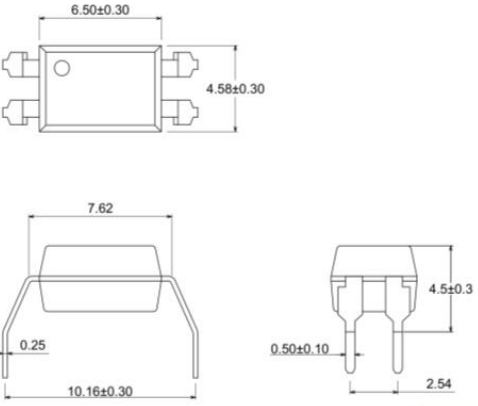
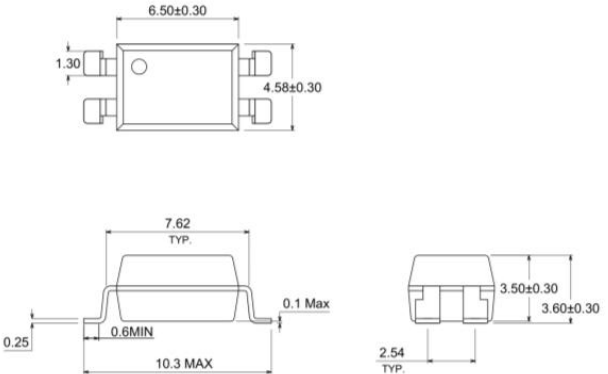
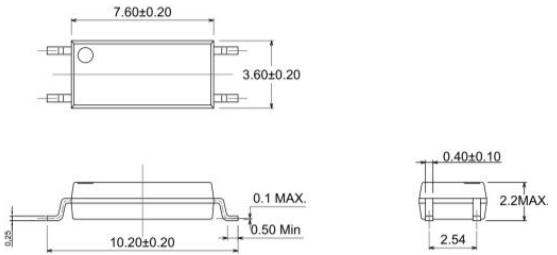


# IGBT Gate Driver

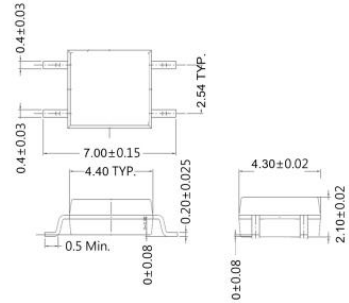
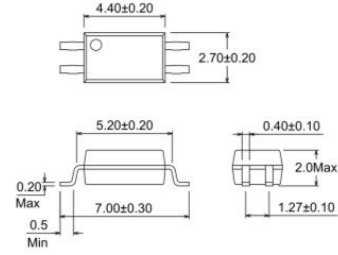
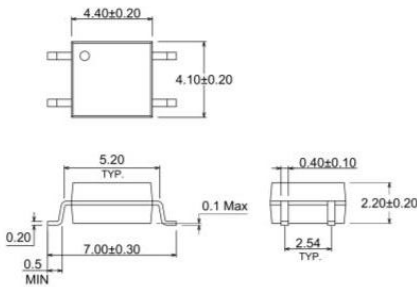
$I_{OP}$ (A)	Pin Configuration	Package Type	Part Number	$I_{CC}$ (mA) Max.	$I_{FLH}$ (mA) Max.	CMTI (kV/ $\mu$ s) Min.	$T_{PHL}$ (ns) Max.	$T_{PHL}$ (ns) Max.	$V_{ISO}$ ( $V_{RMS}$ )
2.5		P	ELS3120	3.2	5	25	300	300	5000
0.6			ELS3140			15	400	400	
1			ELS3150			15	400	400	
2.5		DIP, S1	EL3120	3.2	5	25	300	300	5000

# Package Type

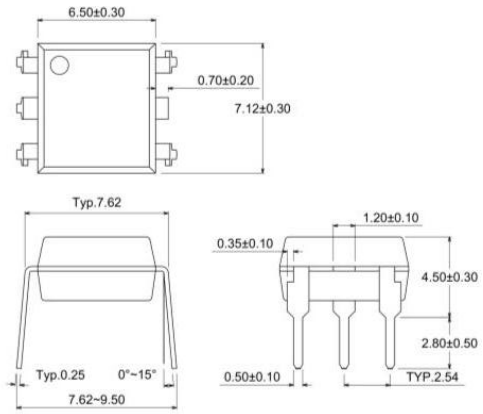
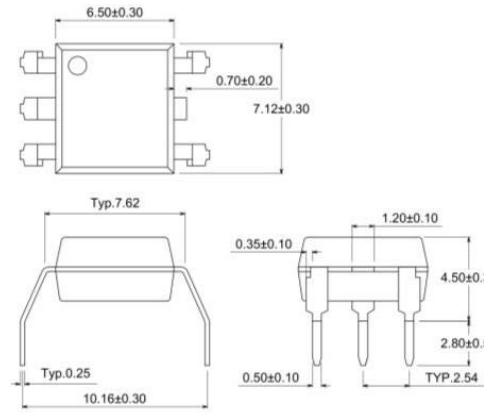
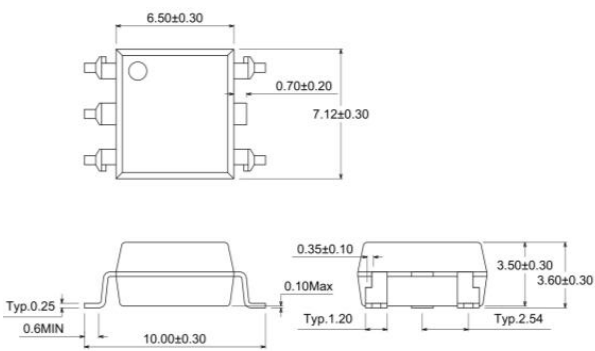
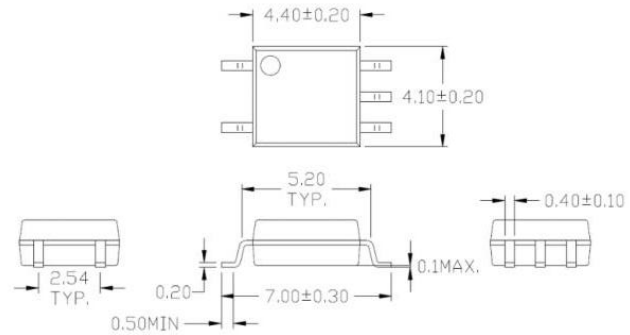
# 4PIN Package Type(1/2)

DIP Type	M Type
 <p>(Patch=2.54mm)</p>	 <p>(Patch=2.54mm)</p>
S1 Type	LSOP-2.54 Type
 <p>(Patch=2.54mm)</p>	 <p>(Patch=2.54mm)</p>

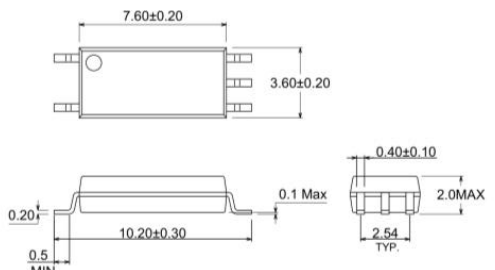
# 4PIN Package Type(1/2)

SOP-2.54, Mini-Flat Type	SSOP-1.27 Type
 <p>(Patch=2.54mm)</p>	 <p>(Patch=1.27mm)</p>
SOP-2.54 Type	
 <p>(Patch=2.54mm)</p>	

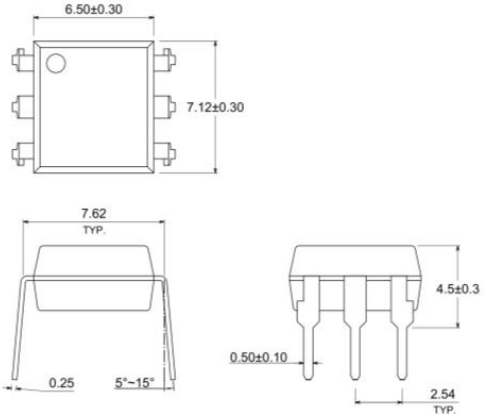
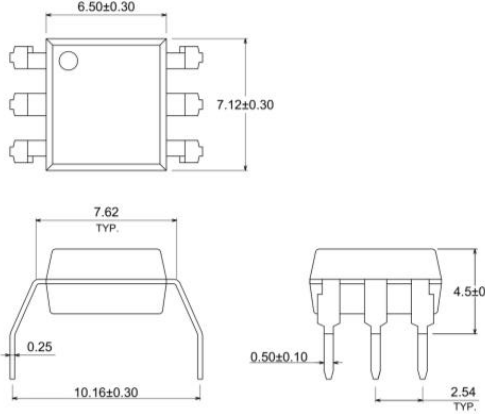
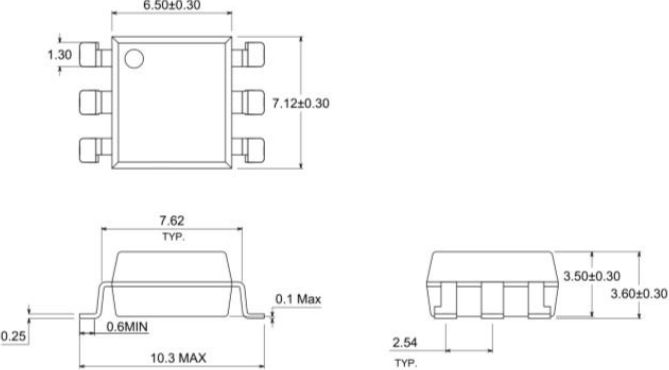
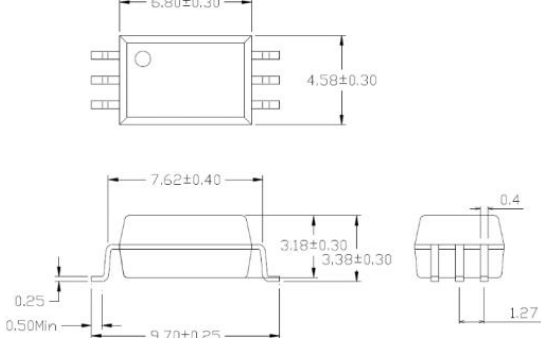
# 5PIN Package Type(1/2)

DIP Type	M Type
 <p>(Patch=2.54mm)</p>	 <p>(Patch=2.54mm)</p>
S1 Type	SOP-1.27 Type
 <p>(Patch=2.54mm)</p>	 <p>(Patch=1.27mm)</p>

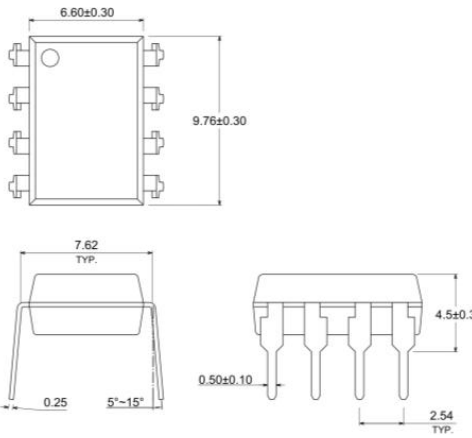
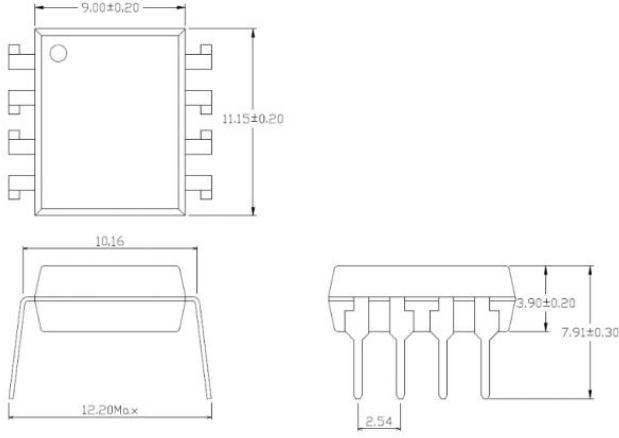
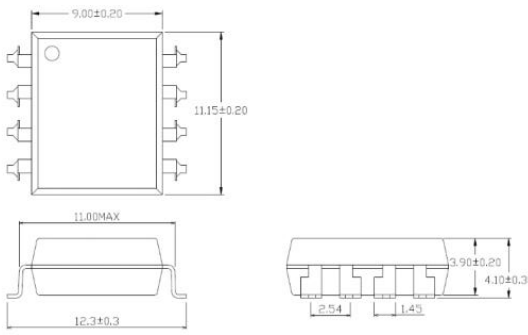
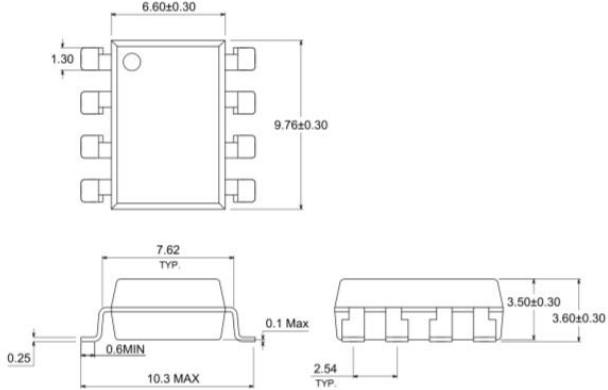
# 5PIN Package Type(2/2)

LSOP-1.27 Type	
 <p>(Patch=1.27mm)</p>	

# 6PIN Package Type

DIP Type	M Type
 <p>(Patch=2.54mm)</p>	 <p>(Patch=2.54mm)</p>
S1 Type	P-1.27 Type
 <p>(Patch=2.54mm)</p>	 <p>(Patch=1.27mm)</p>

# 8PIN Package Type(1/2)

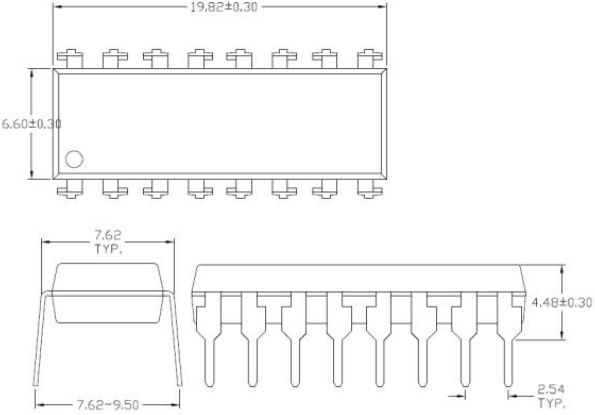
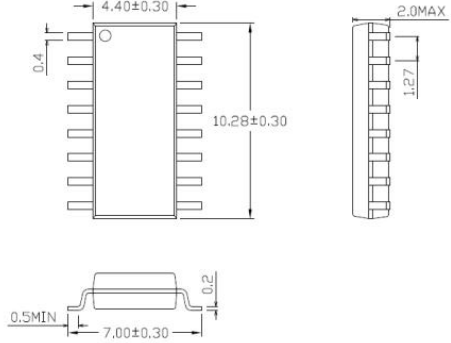
DIP Type	DIP(WIDE BODY) Type
 <p>(Patch=2.54mm)</p>	 <p>(Patch=2.54mm)</p>
S(WIDE BODY) Type	S1 Type
 <p>(Patch=2.54mm)</p>	 <p>(Patch=2.54mm)</p>



# 8PIN Package Type(2/2)

M Type	SSOP-1.27 Type
<p>(Patch=2.54mm)</p>	<p>(Patch=1.27mm)</p>
SOP-1.27 Type	
<p>(Patch=1.27mm)</p>	

# 16PIN Package Type

DIP Type	SSOP-1.27 Type
 <p>(Patch=2.54mm)</p>	 <p>(Patch=1.27mm)</p>

# CNY64/65 Package Type

CNY64 Type	CNY65 Type
<p>(Patch=5.08mm)</p>	<p>(Patch=5.08mm)</p>