



ISOCOM
COMPONENTS



Manufacturer of Optocouplers / Optoisolators

2559

www.isocom.com



ISOCOM
COMPONENTS



Welcome to the **Isocom Components** Shortform Catalogue

Contents

Index	pg 1
About Isocom Components	pg 2
Which optocouplers to choose	pg 3
Part Number Index	pg 4-5
4 Pin DIL & SMD Optocouplers	pg 6-7
6 Pin DIL & SMD Optocouplers	pg 8-11
8 Pin DIL & SMD Optocouplers	pg 12-13
16 Pin DIL & SMD Optocouplers	pg 14-15
6 Pin DIL and SMD Triac Optocouplers	pg 16-17
4 Pin Mini Flat Triac Optocouplers	pg 18
6 Pin DIL & SMD Schmitt Trigger Optocouplers	pg 19
4 Pin Mini Flat Package Optocouplers	pg 20-21
Half Pitch Optocouplers	pg 22-24
4 Pin Long Creepage Optocouplers	pg 25
IGBT/MOSFET Gate / IPM Drive Optocoupler	pg 26-27
1M High Speed Optocouplers	pg 28-31
10M High Speed Optocouplers	pg 32-34
Split Darlington High Speed Optocouplers	Pg 35
Solid State Relays (PhotoMOS)	Pg 36-38
Optical Switches	Pg 39
IGBT/MOSFET Gate Drive and High Speed Optocouplers Cross Reference	Pg 40
Ordering Information and Options	Pg 41

About Isocom Components

Isocom Components has been a leading supplier of infrared optoelectronic devices for over 25 years with product families including all popular commercial optocoupler industry standard types including many no longer supplied by other manufacturers. We also offer special parametric selections to meet customer's specific circuit design requirements.

Isocom Components undertakes final assembly, marking, lead forming, testing and quality control at its production facility in the UK. Original components are sourced from world class approved suppliers in the Far East and elsewhere to ensure cost competitiveness and the very high quality standards.

We offer the shortest manufacturing lead times in the world for many parts and are proud of our fast turnaround capability whilst maintaining excellent product quality.

Why settle for lengthy lead times when we can deliver your components at a time when you need them ?

For all the latest news and new product offerings
please visit our website at :

www.isocom.com



Optocouplers

Why use an Optocoupler?

Optocouplers provide a low cost, space efficient, easy to use solution to high voltage isolation requirements. With careful PCB design the input can be electronically isolated from the output stage for up to 7,500 volts peak differential.

Which optocoupler to choose?

For those new to optocouplers the array of varieties may seem bewildering but by considering the specific application the right optocoupler can usually be selected easily.

Transistor

Transistor optocouplers can be used in most circumstances. If the base lead of the output transistor is not required in the circuit then the packages with no base lead connection provide additional protection against noise. The special dual and quad packages provide excellent PCB space savings where several optocouplers are required on the same circuit board.

AC Input

AC input devices, as the name implies, switch on the output transistor when an AC voltage (or a DC voltage of either polarity) is applied to the input. A typical application of this device is to detect the presence, or lack of, an AC voltage.

Darlington

Where high gain is required a darlington pair output device can provide up to 100% Current Transfer Ratio (CTR).

Schmitt Trigger

Where hysteresis control is needed together with a degree of speed, the Schmitt trigger devices provide an ideal solution.

Triac

Triac optocouplers provide control of AC voltages. For very high current applications, Isocom Components' Triac optocouplers can be used to control an external Power Triac.

IGBT Octocoupler

Isocom's newly developed ICPL3120 incorporates an infrared emitting diode optically coupled to an integrated circuit with a Power Output stage. It is suited for driving power IGBT's and MOSFETS in motor control applications.

Mini Flat Packages

A range of space saving optocouplers with various outputs including Zero Crossing Triacs and Random Phase Triacs.

Half Pitch Packages

A range of super small devices with both AC & DC inputs coupled with a phototransistor output.

High Speed

A range of industry standard High Speed optocouplers with data rates in excess of 10Mbits/sec.

Solid State Relays (PhotoMOS)

A range of Photo MOSFET optocouplers in 1 Form A configuration. Suitable for controls and data transmission in industrial controls and meter reading.

Index - Part No. Many More Available

4N25	Pg 8	H11B1	Pg 10	ICPLW2601	Pg 32	IS3011	Pg 16	IS660	Pg 11
4N26	Pg 8	H11B2	Pg 10	ICPLW2611	Pg 32	IS3012	Pg 16	IS661	Pg 11
4N27	Pg 8	H11B3	Pg 10	ICPLW4503	Pg 28	IS3020	Pg 16	IS6003	Pg 16
4N28	Pg 8	H11G1	Pg 11	ICPLW50L	Pg 29	IS3021	Pg 16	IS6005	Pg 16
4N29	Pg 10	H11G2	Pg 11	IL1	Pg 8	IS3022	Pg 16	IS6010	Pg 16
4N30	Pg 10	H11G3	Pg 11	IL2	Pg 8	IS3023	Pg 16	IS6015	Pg 16
4N31	Pg 10	H11J1	Pg 16	IL5	Pg 8	IS3030	Pg 16	IS6030	Pg 16
4N32	Pg 10	H11J2	Pg 16	IL74	Pg 8	IS3031	Pg 16	IS725	Pg 11
4N33	Pg 10	H11J3	Pg 16	ILD1	Pg 13	IS3032	Pg 16	IS733	Pg 10
4N35	Pg 8	H11J4	Pg 16	ILD2	Pg 13	IS3033	Pg 16	IS74	Pg 8
4N36	Pg 8	H11J5	Pg 16	ILD5	Pg 13	IS3040	Pg 16	IS829	Pg 13
4N37	Pg 8	H11L1	Pg 19	ILD74	Pg 13	IS3041	Pg 16	IS849	Pg 15
4N38	Pg 8	H11L2	Pg 19	ILQ1	Pg 15	IS3042	Pg 16	ISD1	Pg 13
4N38A	Pg 8	H11L3	Pg 19	ILQ2	Pg 15	IS3043	Pg 16	ISD2	Pg 13
6N135	Pg 28	H11L4	Pg 19	ILQ5	Pg 15	IS3051	Pg 16	ISD201	Pg 13
6N136	Pg 28	H21A1	Pg 26	ILQ74	Pg 15	IS3052	Pg 16	ISD202	Pg 13
6N137	Pg 32	H21A2	Pg 26	IS06	Pg 37	IS3060	Pg 16	ISD203	Pg 13
6N138	Pg 35	H21A3	Pg 26	IS1	Pg 8	IS3061	Pg 16	ISD204	Pg 13
6N139	Pg 35	H22A1	Pg 26	IS121	Pg 20	IS3062	Pg 17	ISD204-1	Pg 13
CNX62A	Pg 9	H22A2	Pg 26	IS126	Pg 20	IS3063	Pg 17	ISD204-2	Pg 13
CNX72A	Pg 8	H22A3	Pg 26	IS127	Pg 20	IS3080	Pg 17	ISD204-3	Pg 13
CNX82A	Pg 9	ICPL0452	Pg 28	IS180	Pg 20	IS3081	Pg 17	ISD5	Pg 13
CNX83AG	Pg 8	ICPL0453	Pg 28	IS181	Pg 20	IS3082	Pg 17	ISD74	Pg 13
CNY17-1	Pg 8	ICPL0500	Pg 28	IS2	Pg 8	IS3083	Pg 17	ISLT1001	Pg 25
CNY17-2	Pg 8	ICPL0501	Pg 28	IS201	Pg 8	IS314W	Pg 26	ISLT1002	Pg 25
CNY17-3	Pg 8	ICPL0530	Pg 29	IS202	Pg 8	IS354	Pg 20	ISLT1003	Pg 25
CNY17-4	Pg 8	ICPL0531	Pg 29	IS203	Pg 8	IS354A	Pg 20	ISLT1004	Pg 25
CNY17-5	Pg 8	ICPL0600	Pg 32	IS204	Pg 8	IS355	Pg 20	ISLT1007	Pg 25
CNY17F-1	Pg 9	ICPL0601	Pg 32	IS204-1	Pg 8	IS357	Pg 20	ISLT1008	Pg 25
CNY17F-2	Pg 9	ICPL0611	Pg 32	IS204-2	Pg 8	IS357A	Pg 20	ISLT1009	Pg 25
CNY17F-3	Pg 9	ICPL0630	Pg 33	IS204-3	Pg 8	IS357B	Pg 20	ISP06	Pg 36
CNY17F-4	Pg 9	ICPL0631	Pg 33	IS205	Pg 9	IS357C	Pg 20	ISP25	Pg 36
CNY17F-5	Pg 9	ICPL2530	Pg 29	IS205-1	Pg 9	IS357D	Pg 20	ISP321-1	Pg 6
CNY35	Pg 10	ICPL2531	Pg 29	IS205-2	Pg 9	IS3H4	Pg 23	ISP321-2	Pg 12
CNY75A	Pg 8	ICPL2601	Pg 32	IS205-3	Pg 9	IS3H7	Pg 22	ISP321-4	Pg 14
CNY75B	Pg 8	ICPL2611	Pg 32	IS206	Pg 9	IS40	Pg 37	ISP40	Pg 36
CNY75C	Pg 8	ICPL2630	Pg 33	IS25	Pg 37	IS452	Pg 20	ISP480	Pg 26
CCY80	Pg 8	ICPL2631	Pg 33	IS2701-1	Pg 20	IS4N45	Pg 11	ISP521-1	Pg 6
H11A1	Pg 8	ICPL3120	Pg 26	IS2702-1	Pg 20	IS4N46	Pg 11	ISP521-2	Pg 12
H11A2	Pg 8	ICPL3150	Pg 26	IS2705-1	Pg 20	IS5	Pg 8	ISP521-4	Pg 14
H11A3	Pg 8	ICPL4502	Pg 28	IS2732-1	Pg 20	IS60	Pg 37	ISP60	Pg 36
H11A4	Pg 8	ICPL4503	Pg 28	IS280	Pg 23	IS604	Pg 10	ISP620-1	Pg 6
H11A5	Pg 8	ICPLM452	Pg 28	IS2801-1	Pg 22	IS607	Pg 16	ISP620-2	Pg 12
H11AA1	Pg 10	ICPLM453	Pg 28	IS2801-4	Pg 22	IS608	Pg 16	ISP620-4	Pg 14
H11AA2	Pg 10	ICPLM600	Pg 32	IS2805	Pg 23	IS609	Pg 19	ISP621-1	Pg 6
H11AA3	Pg 10	ICPLM601	Pg 32	IS2805-4	Pg 23	IS620	Pg 17	ISP621-2	Pg 12
H11AA4	Pg 10	ICPLM611	Pg 32	IS281	Pg 22	IS621	Pg 17	ISP621-4	Pg 14
H11AV1	Pg 8	ICPLW135	Pg 28	IS281-4	Pg 22	IS622	Pg 17	ISP624-1	Pg 6
H11AV2	Pg 8	ICPLW136	Pg 28	IS3009	Pg 16	IS623	Pg 17	ISP624-2	Pg 12
H11AV3	Pg 8	ICPLW137	Pg 32	IS3010	Pg 16	IS627	Pg 7	ISP624-4	Pg 14

Index - Part No. Many More Available

ISP626-1	Pg 6	MCT2200	Pg 8	MOC3041	Pg 17	SFH601-3	Pg 9	TIL195B	Pg 12
ISP626-2	Pg 12	MCT2201	Pg 8	MOC3042	Pg 17	SFH601-4	Pg 9	TIL196	Pg 14
ISP626-4	Pg 14	MCT2202	Pg 9	MOC3043	Pg 17	SFH609-1	Pg 9	TIL196A	Pg 14
ISP814	Pg 6	MCT270	Pg 9	MOC3051	Pg 16	SFH609-2	Pg 9	TIL196B	Pg 14
ISP814-1	Pg 6	MCT271	Pg 9	MOC3052	Pg 16	SFH609-3	Pg 9	TIL197	Pg 7
ISP814-2	Pg 6	MCT272	Pg 9	MOC3060	Pg 17	SFH609-4	Pg 8	TIL197A	Pg 7
ISP814-3	Pg 6	MCT2E	Pg 8	MOC3061	Pg 17	SFH615A-1	Pg 6	TIL197B	Pg 7
ISP815	Pg 7	MCT6	Pg 13	MOC3062	Pg 17	SFH615A-2	Pg 6	TIL198	Pg 12
ISP815-1	Pg 7	MCT61	Pg 13	MOC3063	Pg 17	SFH615A-3	Pg 6	TIL198A	Pg 12
ISP815-2	Pg 7	MCT62	Pg 13	MOC3080	Pg 17	SFH615A-4	Pg 6	TIL198B	Pg 12
ISP815-3	Pg 7	MCT66	Pg 13	MOC3081	Pg 17	SFH617A-1	Pg 6	TIL199	Pg 14
ISP817	Pg 6	MF3009	Pg 18	MOC3082	Pg 17	SFH617A-2	Pg 6	TIL199A	Pg 14
ISP824	Pg 12	MF3010	Pg 18	MOC3083	Pg 17	SFH617A-3	Pg 6	TIL199B	Pg 14
ISP825	Pg 12	MF3011	Pg 18	MOC5007	Pg 19	SFH617A-4	Pg 6	TLP321	Pg 6
ISP825-1	Pg 12	MF3012	Pg 18	MOC5008	Pg 19	SFH618A-2	Pg 6	TLP321-2	Pg 12
ISP825-2	Pg 12	MF3020	Pg 18	MOC5009	Pg 19	SFH618A-3	Pg 6	TLP321-4	Pg 14
ISP825-3	Pg 12	MF3021	Pg 18	MOC8020	Pg 11	SFH618A-4	Pg 6	TLP521	Pg 6
ISP827	Pg 12	MF3022	Pg 18	MOC8021	Pg 11	SFH618A-5	Pg 6	TLP521-2	Pg 12
ISP844	Pg 14	MF3023	Pg 18	MOC8030	Pg 11	SFH620-1	Pg 6	TLP521-4	Pg 14
ISP845	Pg 14	MF3030	Pg 18	MOC8050	Pg 11	SFH620-2	Pg 6	TLP620-1	Pg 7
ISP845-1	Pg 14	MF3031	Pg 18	MOC8080	Pg 10	SFH620-3	Pg 6	TLP620-2	Pg 12
ISP845-2	Pg 14	MF3032	Pg 18	MOC8101	Pg 9	SFH620A-1	Pg 6	TLP620-4	Pg 14
ISP845-3	Pg 14	MF3033	Pg 18	MOC8102	Pg 9	SFH620A-2	Pg 6	TLP621	Pg 6
ISP847	Pg 14	MF3040	Pg 18	MOC8103	Pg 10	SFH620A-3	Pg 6	TLP621-2	Pg 12
ISPD60	Pg 11	MF3041	Pg 18	MOC8104	Pg 10	SFH628-2	Pg 6	TLP621-4	Pg 14
ISPD61	Pg 11	MF3042	Pg 18	MOC8105	Pg 10	SFH628-3	Pg 6	TLP624	Pg 6
ISPD62	Pg 11	MF3043	Pg 18	MOC8106	Pg 10	SFH628-4	Pg 6	TLP624-2	Pg 12
ISPD63	Pg 11	MF3051	Pg 18	MOC8107	Pg 10	SFH628A-2	Pg 7	TLP624-4	Pg 14
ISPD64	Pg 11	MF3052	Pg 18	MOC8108	Pg 10	SFH628A-3	Pg 7	TLP626-1	Pg 7
ISPD65	Pg 11	MF3060	Pg 18	MOC8111	Pg 10	SFH628A-4	Pg 7	TLP626-2	Pg 12
ISQ1	Pg 15	MF3061	Pg 18	MOC8112	Pg 10	TIL111	Pg 9	TLP626-4	Pg 14
ISQ2	Pg 15	MF3062	Pg 18	MOC8113	Pg 10	TIL113	Pg 10		
ISQ201	Pg 15	MF3063	Pg 18	MOCD207	Pg 22	TIL114	Pg 9		
ISQ202	Pg 15	MF3080	Pg 18	MOCD217	Pg 22	TIL116	Pg 9		
ISQ203	Pg 15	MF3081	Pg 18	PS2501-1	Pg 6	TIL117	Pg 9		
ISQ204	Pg 15	MF3082	Pg 18	PS2501-2	Pg 12	TIL119	Pg 11		
ISQ204-1	Pg 15	MF3083	Pg 18	PS2501-4	Pg 14	TIL191	Pg 6		
ISQ204-2	Pg 15	MOC3009	Pg 16	PS2502-1	Pg 7	TIL191A	Pg 6		
ISQ204-3	Pg 15	MOC3010	Pg 16	PS2502-2	Pg 12	TIL191B	Pg 6		
ISQ5	Pg 15	MOC3011	Pg 16	PS2502-4	Pg 14	TIL192	Pg 12		
ISQ74	Pg 15	MOC3012	Pg 16	PS2505-1	Pg 6	TIL192A	Pg 12		
ISTS105A	Pg 26	MOC3020	Pg 16	PS2505-2	Pg 12	TIL192B	Pg 12		
MCA2230	Pg 10	MOC3021	Pg 16	PS2505-4	Pg 14	TIL193	Pg 14		
MCA2231	Pg 10	MOC3022	Pg 16	SFH600-0	Pg 9	TIL193A	Pg 14		
MCA2255	Pg 10	MOC3023	Pg 16	SFH600-1	Pg 9	TIL193B	Pg 14		
MCA230	Pg 10	MOC3030	Pg 17	SFH600-2	Pg 9	TIL194	Pg 7		
MCA231	Pg 10	MOC3031	Pg 17	SFH600-3	Pg 9	TIL194A	Pg 7		
MCA255	Pg 10	MOC3032	Pg 17	SFH600-4	Pg 9	TIL194B	Pg 7		
MCT2	Pg 8	MOC3033	Pg 17	SFH601-1	Pg 9	TIL195	Pg 12		
MCT210	Pg 8	MOC3040	Pg 17	SFH601-2	Pg 9	TIL195A	Pg 12		

4 Pin DIL & SMD Optocouplers

Transistor Output

Part Number	Features	Current Transfer Ratio $I_F = 5\text{mA}$ $V_{CE} = 5\text{V}$ Min (%)	Isolation Voltage Min (kV)	Continuous Forward Current Max (mA)	V_{BR} $I_R = 10\mu\text{A}$	BV_{CEO} $I_C = 0.5\text{mA}$	$I_{CEO(\text{Dark})}$ $V_{CE} = 20\text{V}$	$V_{CE(\text{SAT})}$ $I_F = 8\text{mA}$ $I_C = 2.4\text{mA}$
ISP321-1	Single channel Optocoupler with a Phototransistor Output	50-600	7.5(pk) 5.3(rms)	50	6	80	100	0.4 $0.2(I_F = 20\text{mA}) (I_C = 1\text{mA})$ $0.4(I_F = 1\text{mA}) (I_C = 0.5\text{mA})$ $0.3(I_F = 10\text{mA}) (I_C = 2\text{mA})$
ISP521-1		50-600						
ISP621-1		50-600						
ISP817		50-600						
ISP624-1		100-1200 ¹						
PS2501-1		80-600						
SFH615A-1		40-80/13 ($I_F = 10\text{mA}/1\text{mA}$)						
SFH615A-2		63-125/22 ($I_F = 10\text{mA}/1\text{mA}$)						
SFH615A-3		100-200/34 ($I_F = 10\text{mA}/1\text{mA}$)						
SFH615A-4		160-320/56 ($I_F = 10\text{mA}/1\text{mA}$)						
SFH617A-1		40-80/13 ($I_F = 10\text{mA}/1\text{mA}$)						
SFH617A-2		63-125/22 ($I_F = 10\text{mA}/1\text{mA}$)						
SFH617A-3		100-200/34 ($I_F = 10\text{mA}/1\text{mA}$)						
SFH617A-4		160-320/56 ($I_F = 10\text{mA}/1\text{mA}$)						
SFH618A-2		63-125 ¹					55	$0.4(I_F = 1\text{mA}) (I_C = 0.32\text{mA})$ $0.4(I_F = 1\text{mA}) (I_C = 0.5\text{mA})$
SFH618A-3		100-200 ¹						
SFH618A-4		160-320 ¹					55	$0.4(I_F = 1\text{mA}) (I_C = 0.8\text{mA})$ $0.4(I_F = 1\text{mA}) (I_C = 1.25\text{mA})$
SFH618A-5		250-500 ¹						
TIL191		20					35	$0.4(I_F = 5\text{mA}) (I_C = 1\text{mA})$
TIL191A		50						
TIL191B		100					80	0.4
TLP321		50-600						
TLP521		50-600					55	$0.4(I_F = 1\text{mA}) (I_C = 0.5\text{mA})$
TLP621		50-600						
TLP624		100-1200 ¹						

Note 1 Test Condition: $I_F = 1\text{mA}$ $V_{CE} = 0.5\text{V}$

AC Input

Part Number	Features	Current Transfer Ratio $I_F = \pm 10\text{mA}$ $V_{CE} = 5\text{V}$	Isolation Voltage	Continuous Forward Current	V_F $I_F = \pm 20\text{mA}$	BV_{CEO} $I_C = 1\text{mA}$	$I_{CEO(\text{Dark})}$ $V_{CE} = 20\text{V}$	$V_{CE(\text{SAT})}$
ISP620-1	Single channel Optocoupler with two infrared LED's wired in inverse parallel allowing operation with AC input voltage	40-125 ¹	7.5(pk) 5.3(rms)	50mA	1.4	55 ($I_C = 0.5\text{mA}$)	100 ($V_{CE} = 24\text{V}$)	$0.4(I_F = \pm 8\text{mA}) (I_C = 2.4\text{mA})$ $0.4(I_F = \pm 1\text{mA}) (I_C = 0.5\text{mA})$
ISP626-1		100 ² 50 ³						
ISP814		20-300 ⁴					35	$0.2(I_F = \pm 20\text{mA}) (I_C = 1\text{mA})$ $0.4(I_F = \pm 1\text{mA}) (I_C = 0.8\text{mA})$
ISP814-1		80 ⁵						
ISP814-2		/40/80 ⁵					70	$0.4(I_F = \pm 0.5\text{mA}) (I_C = 0.2\text{mA})$ $0.4(I_F = \pm 0.25\text{mA}) (I_C = 0.05\text{mA})$
ISP814-3		20/40/80 ⁵						
PS2505-1		80-600					80	0.3($I_F = \pm 10\text{mA}$) ($I_C = 2\text{mA}$)
SFH620-1		40-125						
SFH620-2		63-200					70	$0.4(I_F = \pm 10\text{mA}) (I_C = 2.5\text{mA})$
SFH620-3		100-320						
SFH620A-1		40-125					50	$0.4(I_F = \pm 1\text{mA}) (I_C = 0.5\text{mA})$ $0.4(I_F = \pm 1\text{mA}) (I_C = 0.8\text{mA})$
SFH620A-2		63-200						
SFH620A-3		100-320					100	$0.4(I_F = \pm 1\text{mA}) (I_C = 1.25\text{mA})$
SFH628-2		63-200 ²						
SFH628-3		100-320 ²					55	$0.4(I_F = \pm 1\text{mA}) (I_C = 0.5\text{mA})$ $0.4(I_F = \pm 1\text{mA}) (I_C = 0.8\text{mA})$
SFH628-4		160-500 ²						

4 Pin DIL & SMD Optocouplers

AC Input

Part Number	Features	Current Transfer Ratio $I_F = \pm 10mA$ $V_{CE} = 5V$ Min (%)	Isolation Voltage Min (kV)	Continuous Forward Current Max (mA)	V_F $I_F = \pm 20mA$	BV_{CEO} $I_C = 1mA$	$I_{CEO}(\text{Dark})$ $V_{CE} = 20V$	$V_{CE(\text{SAT})}$
SFH628A-2	Single channel Optocoupler with two infrared LED's wired in reverse parallel allowing operation with AC input voltage	63-200 ²	7.5(pk) 5.3(rms)	± 50	1.4	55	200 ($V_{CE}=10V$)	0.4($I_F=\pm 1mA$) ($I_C=0.5mA$)
SFH628A-3		100-320 ²						0.4($I_F=\pm 1mA$) ($I_C=0.8mA$)
SFH628A-4		160-500 ²						0.4($I_F=\pm 1mA$) ($I_C=1.25mA$)
TIL194		20						
TIL194A		50				35	100 ($V_{CE}=24V$)	0.4($I_F=\pm 5mA$) ($I_C=1mA$)
TIL194B		100				55		0.4($I_F=\pm 8mA$) ($I_C=2.4mA$)
TLP620-1		40-125 ¹						0.4($I_F=\pm 1mA$) ($I_C=0.5mA$)
TLP626-1		100 ² 50 ³						

Note 1: Test Condition $I_F = \pm 5mA$

Note 2: Test Condition $I_F = \pm 1mA$, $V_{CE} = 0.5V$

Note 3 :Test Condition $I_F = \pm 0.5mA$, $V_{CE} = 1.5V$

Note 4: Test Condition $I_F = \pm 1mA$

Note 5 :Test Condition $I_F = \pm 0.25 / \pm 0.5 / \pm 1mA$, $V_{CE} = 5V$

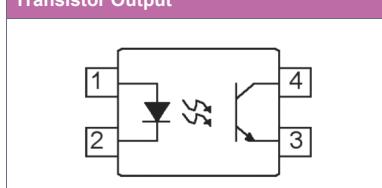
Darlington Output

Part Number	Features	Current Transfer Ratio $I_F = \pm 1mA$ $V_{CE} = 1V$ Min (%)	Isolation Voltage Min (kV)	Continuous Forward Current Max (mA)	V_F $I_F = 20mA$	V_{BR} $I_R = 10\mu A$	BV_{CEO} $I_C = 1mA$	$I_{CEO}(\text{Dark})$ $V_{CE} = 10V$	$V_{CE(\text{SAT})}$	
IS627	Single channel Optocoupler with a Photo-Darlington Transistor	1000-15000 ($V_{CE}=2V$)	7.5(pk) 5.3(rms)	50	1.4	6	300 ² ($I_C=0.1mA$)	200 ($V_{CE}=200V$)	1.2($I_F=10mA$) ($I_C = 100mA$)	
ISP815		600-7500 ($V_{CE}=2V$)							1($I_F=20mA$, $I_C=5mA$)	
ISP815-1		/800 ¹							1($I_F=1mA$) ($I_C=8mA$)	
ISP815-2		/400/800 ¹							1($I_F=0.5mA$) ($I_C=2mA$)	
ISP815-3		200/400/800 ¹				70	70	100	1($I_F=0.25mA$) ($I_C=0.5mA$)	
PS2502-1		200-2000							1($I_F=1mA$) ($I_C=2mA$)	
TIL197		500-7500				80	80			
TIL197A		1000-7500								
TIL197B		1500-7500				35	35		1($I_F= mA$) ($I_C=10mA$)	

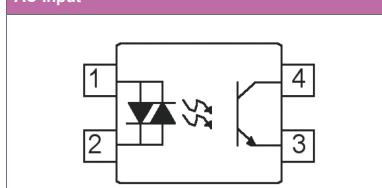
Note 1: Test Condition $I_F = 0.25 / 0.5 / 1 mA$, $V_{CE}=1V$

Note 2: Device has a reverse biased diode connected between pins 3 and 4 giving high breakdown stability

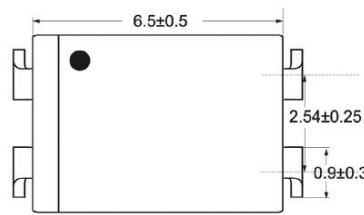
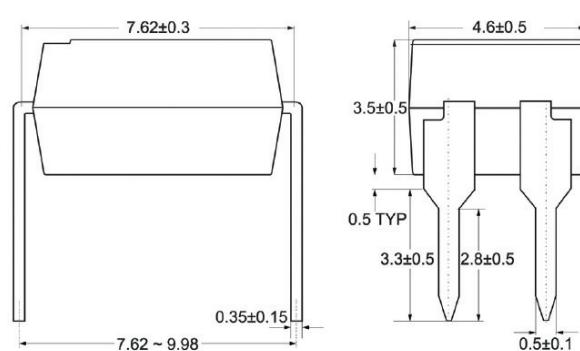
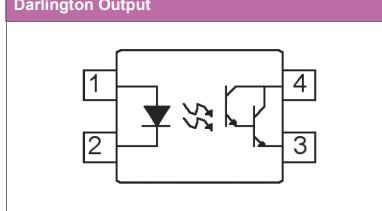
Transistor Output



AC Input



Darlington Output



6 Pin DIL & SMD Optocouplers

Transistor Output - Base Connected								
Part Number	Features	Current Transfer Ratio $I_F = 10\text{mA}$ $V_{CE} = 10\text{V}$ Min (%)	Isolation Voltage	Continuous Forward Current	V_F $I_F=10\text{mA}$	BV_{CEO} $I_C=1\text{mA}$	$I_{CEO(\text{Dark})}$ $V_{CE}=10\text{V}$	$V_{CE(\text{SAT})}$
4N25	Single channel Optocoupler with a Phototransistor Output	20	7.5(pk) 5.3(rms)	50mA	1.4	30	50	0.5($I_F=50\text{mA}$) ($I_C=2\text{mA}$)
4N26		10						
4N27		100						
4N28		20 ($V_{CE}=1\text{V}$)				80	50 ($V_{CE}=60\text{V}$)	1.0($I_F=20\text{mA}$) ($I_C=4\text{mA}$)
4N35		40-160 ($V_{CE}=0.4\text{V}$)				30	50	0.4($I_F=10\text{mA}$) ($I_C=4\text{mA}$)
4N36		40 ($V_{CE}=0.4\text{V}$)				50		
4N37		40-80 ($V_{CE}=5\text{V}$)				70	50	0.4($I_F=10\text{mA}$) ($I_C=2.5\text{mA}$)
4N38		63-125 ($V_{CE}=5\text{V}$)						
4N38A		100-200 ($V_{CE}=5\text{V}$)						
CNX72A		160-320 ($V_{CE}=5\text{V}$)				90	150 ($V_{CE}=20\text{V}$)	0.3($I_F=10\text{mA}$) ($I_C=1\text{mA}$)
CNX83AG		200-400 ($V_{CE}=5\text{V}$)				32	200 ($V_{CE}=20\text{V}$)	
CNY17-1		50 ($V_{CE}=5\text{V}$)			30	70	50	0.4($I_F=10\text{mA}$) ($I_C=0.5\text{mA}$)
CNY17-2		100-200 ($V_{CE}=5\text{V}$)						
CNY17-3		160-320 ($V_{CE}=5\text{V}$)						
CNY17-4		200-400 ($V_{CE}=5\text{V}$)			50	70	50	0.4($I_F=16\text{mA}$) ($I_C=2\text{mA}$)
CNY17-5		50 ($V_{CE}=5\text{V}$)						
CNY75A		100-200 ($V_{CE}=5\text{V}$)						
CNY75B		160-320 ($V_{CE}=5\text{V}$)			70	50	100	0.4($I_F=10\text{mA}$) ($I_C=0.5\text{mA}$)
CNY75C		200-400 ($V_{CE}=5\text{V}$)						
CQY80		50 ($V_{CE}=5\text{V}$)						
H11A1		50			30	70	70	0.4($I_F=20\text{mA}$) ($I_C=2\text{mA}$)
H11A2		20						
H11A3		20						
H11A4		10			50	50	50	0.4($I_F=16\text{mA}$) ($I_C=2\text{mA}$)
H11A5		30						
H11AV1		100-300						
H11AV2		50			70	70	100	0.4($I_F=10\text{mA}$) ($I_C=2.5\text{mA}$)
H11AV3		20						
IL1		20-300						
IL2		100-500			50	50	100	0.4($I_F=10\text{mA}$) ($I_C=0.5\text{mA}$)
IL5		50-400						
IL74		12.5 ($I_F=16\text{mA}$)						
IS1		20			70	70	70	0.4($I_F=10\text{mA}$) ($I_C=2\text{mA}$)
IS2		100						
IS201		75/10 ($I_F=10\text{mA}/1\text{mA}$)						
IS202		125-250/30 ($I_F=10\text{mA}/1\text{mA}$)			50	50	100	0.4($I_F=16\text{mA}$) ($I_C=2\text{mA}$)
IS203		225-450/30 ($I_F=10\text{mA}/1\text{mA}$)						
IS204		200-400 ($I_F=10\text{mA}/1\text{mA}$)						
IS204-1		/50 ¹			70	70	70	0.4($I_F=10\text{mA}$) ($I_C=2\text{mA}$)
IS204-2		50/2						
IS204-3		70 ² /100 ¹						
IS5		50-400			50	50	100	0.4($I_F=16\text{mA}$) ($I_C=2\text{mA}$)
IS74		12.5 ($I_F=16\text{mA}$)						
MCT2		20						
MCT2E		50			30	30	100	0.4($I_F=10\text{mA}$) ($I_C=0.5\text{mA}$)
MCT210		50 ($I_F=3.2-32\text{mA}$) ($V_{CE}=0.4\text{V}$)						
MCT2200		20 ($V_{CE}=5\text{V}$)						
MCT2201		100 ($V_{CE}=5\text{V}$)			50	50	100	0.4($I_F=10\text{mA}$) ($I_C=2.5\text{mA}$)

Note 1 Test Condition: $I_F=1\text{mA}$, $V_{CE}=0.4\text{V}$

Note 2 Test Condition: $I_F=0.5\text{mA}$, $V_{CE}=0.4\text{V}$



6 Pin DIL & SMD Optocouplers

Transistor Output - Base Connected

Part Number	Features	Current Transfer Ratio $I_F = 10\text{mA}$ $V_{CE} = 10\text{V}$ Min (%)	Isolation Voltage Min (kV)	Continuous Forward Current Max (mA)	V_F $I_F=10\text{mA}$	BV_{CEO} $I_c=1\text{mA}$	$I_{CEO(\text{Dark})}$ $V_{CE}=10\text{V}$	$V_{CE(\text{SAT})}$ Max (V)
MCT2202	Single channel Optocoupler with a Phototransistor Output	63-125 ($V_{CE}=5\text{V}$)	7.5(pk) 5.3(rms)	50mA	1.4	30	50	0.4($I_F=10\text{mA}$) ($I_c=2.5\text{mA}$)
MCT270		50						0.4($I_F=16\text{mA}$) ($I_c=2\text{mA}$)
MCT271		45-90						
MCT272		75-150						
SFH600-0		40-80 ($V_{CE}=5\text{V}$)						
SFH600-1		63-125 ($V_{CE}=5\text{V}$)						
SFH600-2		100-200 ($V_{CE}=5\text{V}$)						
SFH600-3		160-320 ($V_{CE}=5\text{V}$)						
SFH600-4		200-400 ($V_{CE}=5\text{V}$)						
SHF601-1		40-80 ($V_{CE}=5\text{V}$)						
SFH601-2		63-125 ($V_{CE}=5\text{V}$)						0.4($I_F=10\text{mA}$) ($I_c=2.5\text{mA}$)
SFH601-3		100-200 ($V_{CE}=5\text{V}$)						
SFH601-4		160-320 ($V_{CE}=5\text{V}$)						
SFH609-1		40-80 ($V_{CE}=5\text{V}$)						
SFH609-2		63-125 ($V_{CE}=5\text{V}$)						
SFH609-3		100-200 ($V_{CE}=5\text{V}$)						
SFH609-4		160-320 ($V_{CE}=5\text{V}$)						
TIL111		20 ($I_F=16\text{mA}$) ($V_{CE}=0.4\text{V}$)						0.4($I_F=16\text{mA}$) ($I_c=2\text{mA}$)
TIL114		20						0.4($I_F=15\text{mA}$) ($I_c=2.2\text{mA}$)
TIL116		50						0.4($I_F=10\text{mA}$) ($I_c=0.5\text{mA}$)
TIL117								

Transistor Output - Non Base

Part Number	Features	Current Transfer Ratio $I_F = 10\text{mA}$ $V_{CE} = 10\text{V}$ Min (%)	Isolation Voltage Min (kV)	Continuous Forward Current Max (mA)	V_F $I_F=10\text{mA}$	BV_{CEO} $I_c=1\text{mA}$	$I_{CEO(\text{Dark})}$ $V_{CE}=20\text{V}$	$V_{CE(\text{SAT})}$ Max (V)
CNX62A	Single channel Optocoupler with a Phototransistor Output with base lead not connected for improved noise immunity	40 ($V_{CE}=0.4\text{V}$)	7.5(pk) 5.3(rms)	50mA	1.4	50	100	0.4($I_F=10\text{mA}$) ($I_c=4\text{mA}$)
CNX82A		40-80 ($V_{CE}=5\text{V}$)						
CNY17F-1		63-125 ($V_{CE}=5\text{V}$)						
CNY17F-2		100-200 ($V_{CE}=5\text{V}$)						
CNY17F-3		160-320 ($V_{CE}=5\text{V}$)						
CNY17F-4		200-400 ($V_{CE}=5\text{V}$)						
CNY17F-5		100						0.4($I_F=10\text{mA}$) ($I_c=0.5\text{mA}$)
IS205		/50 ¹						0.4($I_F=1\text{mA}$) ($I_c=0.5\text{mA}$)
IS205-1		50/2						0.4($I_F=10\text{mA}$) ($I_c=0.5\text{mA}$)
IS205-2		70 ² /100 ¹						0.4($I_F=5\text{mA}$) ($I_c=0.5\text{mA}$)
IS205-3		50						
IS206		50-80						
MOC8101		73-117						
MOC8102								

Note 1 Test Condition: $I_F=1\text{mA}$, $V_{CE}=0.4\text{V}$

Note 2 Test Condition: $I_F=0.5\text{mA}$, $V_{CE}=0.4\text{V}$

DRAWINGS OVERLEAF

6 Pin DIL & SMD Optocouplers cont.

Transistor Output - Non Base

Part Number	Features	Current Transfer Ratio $I_F = 10\text{mA}$ $V_{CE} = 10\text{V}$ Min (%)	Isolation Voltage Min (kV)	Continuous Forward Current Max (mA)	V_F $I_F = 10\text{mA}$	BV_{CEO} $I_C = 1\text{mA}$	$I_{CEO(\text{Dark})}$ $V_{CE} = 20\text{V}$	$V_{CE(\text{SAT})}$ Max (V)
MOC8103	Single channel Optocoupler with a Phototransistor Output with base lead not connected for improved noise immunity	103-173	7.5(pk) 5.3(rms)	50mA	1.4	50	100	$0.4(I_F = 5\text{mA}) (I_C = 0.5\text{mA})$ $0.4(I_F = 5\text{mA}) (I_C = 1\text{mA})$
MOC8104		160-256						
MOC8105		65-133						
MOC8106		50-150						
MOC8107		100-300						
MOC8108		250-600						
MOC8111		20						
MOC8112		50						
MOC8113		100						

AC Input

Part Number	Features	Current Transfer Ratio $I_F = \pm 10\text{mA}$ $V_{CE} = 10\text{V}$ Min (%)	Isolation Voltage Min (kV)	Continuous Forward Current Max (mA)	V_F $I_F = \pm 20\text{mA}$	BV_{CEO} $I_C = 0.1\text{mA}$	$I_{CEO(\text{Dark})}$ $V_{CE} = 10\text{V}$	$V_{CE(\text{SAT})}$ $I_F = \pm 10\text{mA}$ $I_C = 0.5\text{mA}$
CNY35	Single channel Optocoupler with two infrared LED's wired in inverse parallel allowing operation with AC input voltage	10	7.5(pk) 5.3(rms)	\pm 50mA	1.4	30	50	0.4
H11AA1		20						
H11AA2		10						
H11AA3		50						
H11AA4		100						
IS604		50						
IS733		20-300 ($I_F = 1\text{mA}$) ($V_{CE} = 5\text{V}$)						

Darlington Output - Base Connected

Part Number	Features	Current Transfer Ratio $I_F = 10\text{mA}$ $V_{CE} = 10\text{V}$ Min (%)	Isolation Voltage Min (kV)	Continuous Forward Current Max (mA)	V_F $I_F = 50\text{mA}$	BV_{CEO} $I_C = 1\text{mA}$	$I_{CEO(\text{Dark})}$ $V_{CE} = 10\text{V}$	$V_{CE(\text{SAT})}$ $I_F = 8\text{mA}$ $I_C = 2\text{mA}$
4N29	Single channel Optocoupler with a Photo-Darlington Transistor	100	7.5(pk) 5.3(rms)	60mA	1.5	30	100	1
4N30		50						
4N31		500						
4N32		500 ($I_F = 1\text{mA}$) ($V_{CE} = 5\text{V}$)						
4N33		200 ($I_F = 1\text{mA}$) ($V_{CE} = 5\text{V}$)						
H11B1		100 ($I_F = 1\text{mA}$) ($V_{CE} = 5\text{V}$)						
H11B2		100 ($V_{CE} = 5\text{V}$)						
H11B3		500 ($V_{CE} = 5\text{V}$)				55	100	1.2
MCA2230		100 ($V_{CE} = 5\text{V}$)						
MCA2231		100 ($V_{CE} = 5\text{V}$)						
MCA2255		100 ($V_{CE} = 5\text{V}$)						
MCA255		100 ($V_{CE} = 5\text{V}$)						
MCA230		100 ($V_{CE} = 5\text{V}$)						
MCA231		100 ($V_{CE} = 5\text{V}$)						
MOC8080		100 ($V_{CE} = 5\text{V}$)						
TIL113		100 ($V_{CE} = 1\text{V}$)						

6 Pin DIL & SMD Optocouplers

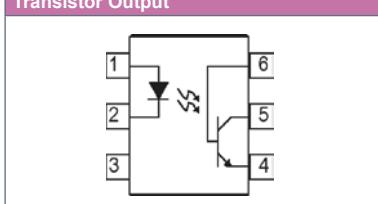
Darlington Output - Non Base

Part Number	Features	Current Transfer Ratio $I_F = 1\text{mA}$ $V_{CE} = 2\text{V}$ Min (%)	Isolation Voltage Min (kV)	Continuous Forward Current Max (mA)	V_F $I_F = 10\text{mA}$	BV_{CEO} $I_C = 1\text{mA}$	$I_{CEO(\text{Dark})}$ $V_{CE} = 10\text{V}$	$V_{CE(\text{SAT})}$ Max (V)
ISPD60	Single channel Optocoupler with a Photo-Darlington Transistor with base lead not connected for improved noise immunity	100	7.5(pk) 5.3(rms)	50mA	1.4	35 ($I_C = 0.1\text{mA}$)	100	1.0 ($I_F = 10\text{mA}$) ($I_C = 10\text{mA}$)
ISPD61		500						
ISPD62		1000						
ISPD63		100						
ISPD64		500						
ISPD65		1000						
MOC8020		500 ($I_F = 10\text{mA}$) ($V_{CE} = 5\text{V}$)						
MOC8021		1000 ($I_F = 10\text{mA}$) ($V_{CE} = 5\text{V}$)						
MOC8030		300 ($I_F = 10\text{mA}$) ($V_{CE} = 5\text{V}$)						
MOC8050		500 ($I_F = 10\text{mA}$) ($V_{CE} = 5\text{V}$)						
TIL119		300 ($I_F = 10\text{mA}$) ($V_{CE} = 1\text{V}$)						1.0 ($I_F = 10\text{mA}$) ($I_C = 30\text{mA}$)

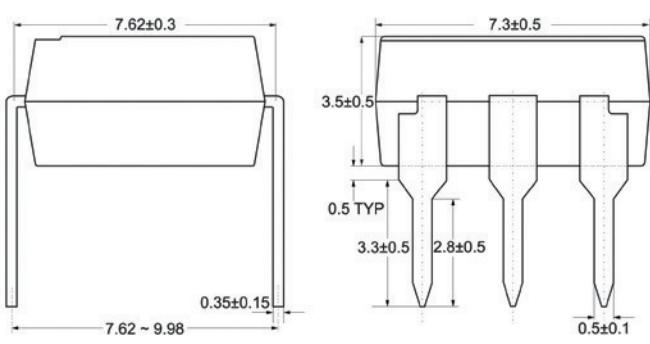
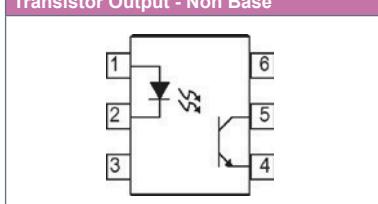
Darlington Output - Base Connected High Voltage

Part Number	Features	Current Transfer Ratio $I_F = 10\text{mA}$ $V_{CE} = 10\text{V}$ Min (%)	Isolation Voltage Min (kV)	Continuous Forward Current Max (mA)	V_F $I_F = 10\text{mA}$	BV_{CEO} $I_C = 1\text{mA}$	$I_{CEO(\text{Dark})}$ Max (nA)	$V_{CE(\text{SAT})}$ Max (V)
H11G1	Single channel Optocoupler with a Photo-Darlington Transistor with a high operating voltage	1000 ($I_F = 1\text{mA}$) ($V_{CE} = 5\text{V}$)	7.5(pk) 5.3(rms)	50	1.4	100	100 ($V_{CE} = 80\text{V}$)	1.0 ($I_F = 1\text{mA}$) ($I_C = 1\text{mA}$)
H11G2							80	
H11G3							100 ($V_{CE} = 30\text{V}$)	1.2 ($I_F = 20\text{mA}$) ($I_C = 50\text{mA}$)
IS4N45						55	100 ($V_{CE} = 55\text{V}$)	1.0 ($I_F = 1\text{mA}$) ($I_{OL} = 2.5\text{mA}$)
IS4N46							1000 ($V_{CE} = 200\text{V}$)	1.0 ($I_F = 0.5\text{mA}$) ($I_{OL} = 1.75\text{mA}$)
IS660						200	1000 ($V_{CE} = 200\text{V}$)	1.2 ($I_F = 20\text{mA}$) ($I_C = 100\text{mA}$)
IS661								
IS725								

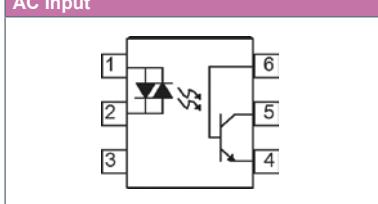
Transistor Output



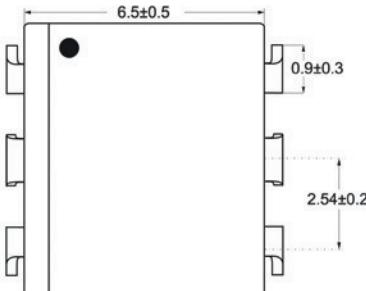
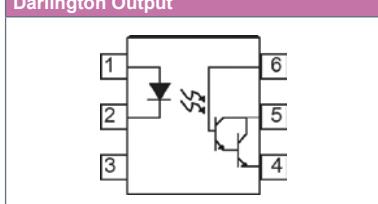
Transistor Output - Non Base



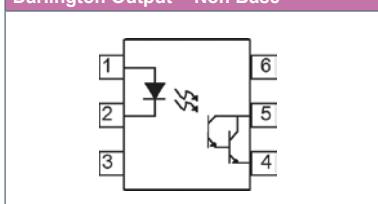
AC Input



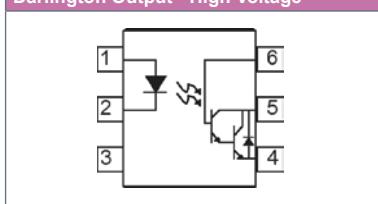
Darlington Output



Darlington Output - Non Base



Darlington Output - High Voltage



8 Pin DIL & SMD Optocouplers

Transistor Output

Part Number	Features	Current Transfer Ratio $I_F = 5\text{mA}$ $V_{CE} = 5\text{V}$ Min (%)	Isolation Voltage	Continuous Forward Current $I_R = 10\mu\text{A}$	V_{BR} $I_R = 10\mu\text{A}$	BV_{CEO} $I_C = 0.5\text{mA}$	$I_{CEO(\text{Dark})}$ $V_{CE} = 20\text{V}$	$V_{CE(\text{SAT})}$ $I_F = 8\text{mA}$ $I_C = 2.4\text{mA}$
ISP321-2	Two channel Optocoupler with a Phototransistor Output	50-600	7.5(pk) 5.3(rms)	50	6	80	100	$0.2(I_F = 20\text{mA}) (I_C = 1\text{mA})$ $0.4(I_F = 1\text{mA}) (I_C = 0.5\text{mA})$ $0.3(I_F = 10\text{mA}) (I_C = 2\text{mA})$ $0.4(I_F = 5\text{mA}) (I_C = 1\text{mA})$ $0.4(I_F = 1\text{mA}) (I_C = 0.5\text{mA})$
ISP521-2		50-600				55		
ISP621-2		50-600				35		
ISP827		50-600				55		
ISP624-2		100-1200 ¹				80		
PS2501-2		80-600				35		
TIL192		20				80		
TIL192A		50				35		
TIL192B		100				80		
TLP321-2		50-600				35		
TLP521-2		50-600				80		
TLP621-2		50-600				55		
TLP624-2		50-600				80		

Note 1 Test condition : $I_F = 1\text{mA}, V_{CE} = 0.5\text{V}$

AC Input

Part Number	Features	Current Transfer Ratio $I_F = \pm 10\text{mA}$ $V_{CE} = 5\text{V}$ Min (%)	Isolation Voltage	Continuous Forward Current $I_F = \pm 20\text{mA}$	V_F $I_F = \pm 20\text{mA}$	BV_{CEO} $I_C = 1\text{mA}$	$I_{CEO(\text{Dark})}$ $V_{CE} = 20\text{V}$	$V_{CE(\text{SAT})}$
ISP620-2	Two channel Optocoupler with two infrared LED's wired in inverse parallel allowing operation with AC input voltage	40-125 ¹	7.5(pk) 5.3(rms)	50mA	1.4	55 ($I_C = 0.5\text{mA}$)	100 ($V_{CE} = 24\text{V}$)	$0.4(I_F = \pm 8\text{mA}) (I_C = 2.4\text{mA})$
ISP626-2		100-1200 ² 50 ³				35		$0.4(I_F = \pm 1\text{mA}) (I_C = 0.5\text{mA})$
ISP824		20-300 ⁴				80		$0.2(I_F = \pm 20\text{mA}) (I_C = 1\text{mA})$
PS2505-2		80-600				35		$0.3(I_F = \pm 10\text{mA}) (I_C = 2\text{mA})$
TIL195		20				35		$0.4(I_F = \pm 5\text{mA}) (I_C = 1\text{mA})$
TIL195A		50				100		$0.4(I_F = \pm 8\text{mA}) (I_C = 2.4\text{mA})$
TIL195B		100				55		$0.4(I_F = \pm 1\text{mA}) (I_C = 0.5\text{mA})$
TLP620-2		40-125 ¹				35		$0.4(I_F = \pm 20\text{mA}) (I_C = 1\text{mA})$
TLP626-2		100-1200 ² 50 ³				100 ($V_{CE} = 24\text{V}$)		$0.4(I_F = \pm 10\text{mA}) (I_C = 2\text{mA})$

Note 1 Test condition: $I_F = \pm 5\text{mA}$

Note 2 Test condition: $I_F = \pm 1\text{mA}, V_{CE} = 0.5\text{V}$

Note 3 Test condition: $I_F = \pm 0.5\text{mA}, V_{CE} = 1.5\text{V}$

Note 4 Test conditions: $I_F = \pm 1\text{mA}$

Darlington Output

Part Number	Features	Current Transfer Ratio $I_F = 1\text{mA}$ $V_{CE} = 1\text{V}$ Min (%)	Isolation Voltage	Continuous Forward Current $I_F = 20\text{mA}$	V_F $I_F = 20\text{mA}$	V_{BR} $I_R = 10\mu\text{A}$	BV_{CEO} $I_C = 1\text{mA}$	$I_{CEO(\text{Dark})}$ $V_{CE} = 10\text{V}$	$V_{CE(\text{SAT})}$
ISP825	Two channel Optocoupler with a Photo-Darlington Transistor	600-7500 ($V_{CE} = 2\text{V}$)	7.5(pk) 5.3(rms)	50mA	1.4	35 ($I_C = 0.1\text{mA}$)	100	$1(I_F = 20\text{mA}) (I_C = 5\text{mA})$	
ISP825-1		/800 ¹				70		$1(I_F = 1\text{mA}) (I_C = 8\text{mA})$	
ISP825-2		/400 ² /800 ¹				80		$1(I_F = 0.5\text{mA}) (I_C = 2\text{mA})$	
ISP825-3		200 ³ /400 ² /800 ¹				35		$1(I_F = 0.25\text{mA}) (I_C = 0.5\text{mA})$	
PS2502-2		200-2000				35		$1(I_F = 1\text{mA}) (I_C = 2\text{mA})$	
TIL198		500-7500 ($I_F = 2\text{mA}$)				35		$1(I_F = 2\text{mA}) (I_C = 10\text{mA})$	
TIL198A		1000-7500 ($I_F = 2\text{mA}$)				35		$1(I_F = 2\text{mA}) (I_C = 10\text{mA})$	
TIL198B		1500-7500 ($I_F = 2\text{mA}$)				35		$1(I_F = 2\text{mA}) (I_C = 10\text{mA})$	

Note 1 Test condition: $I_F = 1\text{mA}, V_{CE} = 1\text{V}$

Note 2 Test condition: $I_F = 0.5\text{mA}, V_{CE} = 1\text{V}$

Note 3 Test condition: $I_F = 0.25\text{mA}, V_{CE} = 1\text{V}$

8 Pin DIL & SMD Optocouplers

8 Pin Transistor Symmetrical Configuration DIL & SMD Optocouplers

Part Number	Features	Current Transfer Ratio $I_F = 10\text{mA}$ $V_{CE} = 10\text{V}$ Min (%)	Isolation Voltage	Continuous Forward Current $I_R = 10\mu\text{A}$	V_{BR} $I_R = 10\mu\text{A}$	BV_{CEO} $I_C = 1\text{mA}$	$I_{CEO(\text{Dark})}$ $V_{CE} = 10\text{V}$	$V_{CE(\text{SAT})}$ $I_F = 16\text{mA}$ $I_C = 2\text{mA}$
			Min (kV)	Max (mA)	Min (V)	Min (V)	Max (nA)	Max (V)
ILD1	Two channel Optocoupler with a Phototransistor Output	20-300	7.5(pk) 5.3(rms)	50	50	6	50	0.4
ILD2		100-500			70			
ILD5		50-400			50			
ILD74		12.5 ($I_F = 16\text{mA}$ $V_{CE} = 5\text{V}$)			35	100 ($V_{CE} = 24\text{V}$)	0.2($I_F = 20\text{mA}$) ($I_C = 1\text{mA}$)	0.4
IS829		50 ($I_F = 5\text{mA}$ $V_{CE} = 5\text{V}$)			50			
ISD1		20			70			
ISD2		100-500			50		50	0.3($I_F = 10\text{mA}$) ($I_C = 2\text{mA}$)
ISD5		50			50			
ISD74		12.5 ($I_F = 16\text{mA}$ $V_{CE} = 5\text{V}$)			50			
MCT6		20			30	100	0.4	0.4
MCT61		50 ($I_F = 5\text{mA}$ $V_{CE} = 5\text{V}$)			30			
MCT62		100 ($I_F = 5\text{mA}$ $V_{CE} = 5\text{V}$)			30			
MCT66		6			30			

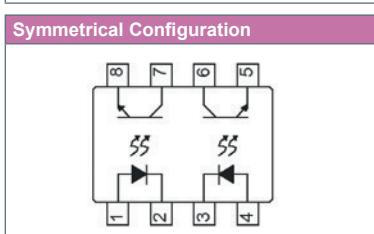
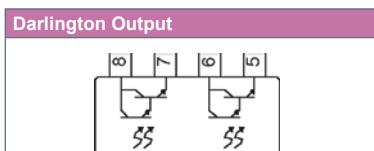
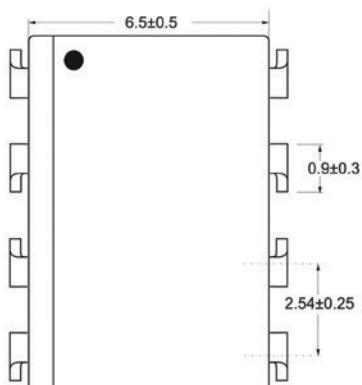
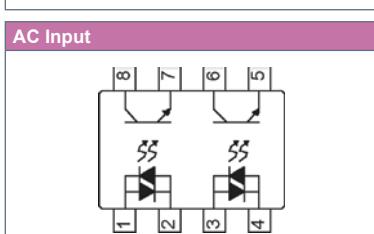
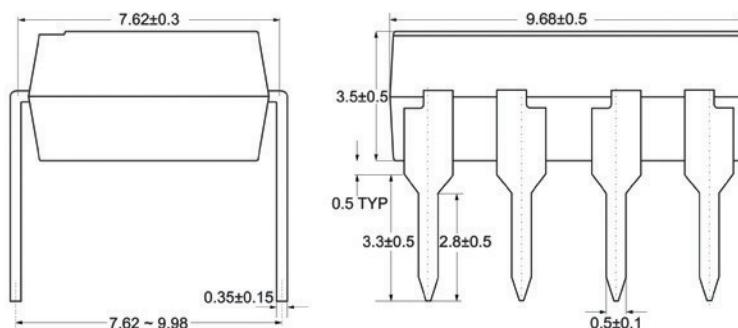
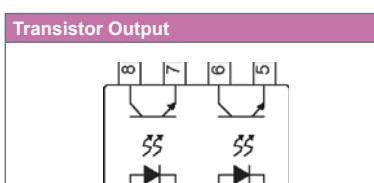
High CTR, High Sensitivity / Low Input Current

ISD201	Two channel Optocoupler with a Phototransistor Output	75 (10) ¹	7.5(pk) 5.3(rms)	50	6	70	50	0.4($I_F = 10\text{mA}$) ($I_C = 2\text{mA}$)
ISD202		125-250 (30) ¹						
ISD203		225-450 (50) ¹						
ISD204		200-400 (100) ¹						
ISD204-1		/50 ²						
ISD204-2		50 ³						
ISD204-3		70 ³ /100 ²						

Note 1 Test condition : $I_F = 1\text{mA}$

Note 2 Test condition : $I_F = 1\text{mA}$, $V_{CE} = 0.4\text{V}$

Note 3 Test condition : $I_F = 0.5\text{mA}$, $V_{CE} = 0.4\text{V}$



16 Pin DIL & SMD Optocouplers

Transistor Output

Part Number	Features	Current Transfer Ratio $I_F = 5\text{mA}$ $V_{CE} = 5\text{V}$ Min (%)	Isolation Voltage Min (KV)	Continuous Forward Current Max (mA)	V_{BR} $I_R = 10\mu\text{A}$	BV_{CEO} $I_C = 0.5\text{mA}$	$I_{CEO(\text{Dark})}$ $V_{CE} = 20\text{V}$	$V_{CE(\text{SAT})}$ $I_F = 8\text{mA}$ $I_C = 2.4\text{mA}$
ISP321-4	Four channel Optocoupler with a Phototransistor Output	50-600	7.5(pk) 5.3(rms)	50	6	80	100	0.4 0.2($I_F = 20\text{mA}$) ($I_C = 1\text{mA}$) 0.4($I_F = 1\text{mA}$) ($I_C = 0.5\text{mA}$) 0.3($I_F = 10\text{mA}$) ($I_C = 2\text{mA}$) 0.4($I_F = 5\text{mA}$) ($I_C = 1\text{mA}$) 0.4($I_F = 1\text{mA}$) ($I_C = 0.5\text{mA}$)
ISP521-4		50-600				55		
ISP621-4		50-600				35		
ISP847		50-600				55		
ISP624-4		100-1200 ¹				80		
PS2501-4		80-600				35		
TIL193		20				80		
TIL193A		50				55		
TIL193B		100				80		
TLP321-4		50-600				55		
TLP521-4		50-600				80		
TLP621-4		50-600				55		
TLP624-4		50-600				80		

Note 1 Test Condition: $I_F = 1\text{mA}$ $V_{CE} = 0.5\text{V}$

Part Number	Features	Current Transfer Ratio $I_F = \pm 10\text{mA}$ $V_{CE} = 5\text{V}$ Min (%)	Isolation Voltage Min (KV)	Continuous Forward Current Max (mA)	V_F $I_F = \pm 20\text{mA}$	BV_{CEO} $I_C = 1\text{mA}$	$I_{CEO(\text{Dark})}$ $V_{CE} = 20\text{V}$	$V_{CE(\text{SAT})}$
ISP620-4	Four channel Optocoupler with two infrared LED's wired in inverse parallel allowing operation with AC input voltage	40-125 ¹	7.5(pk) 5.3(rms)	50mA	1.4	55 ($I_C = 0.5\text{mA}$)	100 ($V_{CE} = 24\text{V}$)	0.4($I_F = \pm 8\text{mA}$) ($I_C = 2.4\text{mA}$)
ISP626-4		100-1200 ² 50 ³						0.4($I_F = \pm 1\text{mA}$) ($I_C = 0.5\text{mA}$)
ISP844		20-300 ⁴						0.2($I_F = \pm 20\text{mA}$) ($I_C = 1\text{mA}$)
PS2505-4		80-600				80	100 ($V_{CE} = 40\text{V}$)	0.3($I_F = \pm 10\text{mA}$) ($I_C = 2\text{mA}$)
TIL196		20				35	100 ($V_{CE} = 24\text{V}$)	0.4($I_F = \pm 5\text{mA}$) ($I_C = 1\text{mA}$)
TIL196A		50				35		0.4($I_F = \pm 8\text{mA}$) ($I_C = 2.4\text{mA}$)
TIL196B		100				55		0.4($I_F = \pm 1\text{mA}$) ($I_C = 0.5\text{mA}$)
TLP620-4		40-125 ¹						
TLP626-4		100-1200 ² 50 ³						

Note 1 Test condition : $I_F = \pm 5\text{mA}$

Note 2 Test condition : $I_F = \pm 1\text{mA}$, $V_{CE} = 0.5\text{V}$

Note 3 Test condition : $I_F = \pm 0.5\text{mA}$, $V_{CE} = 1.5\text{V}$

Note 4 Test condition : $I_F = \pm 1\text{mA}$

Darlington Output

Part Number	Features	Current Transfer Ratio $I_F = 1\text{mA}$ $V_{CE} = 1\text{V}$	Isolation Voltage	Continuous Forward Current	V_F $I_F = 20\text{mA}$	V_{BR} $I_R = 10\mu\text{A}$	BV_{CEO} $I_C = 1\text{mA}$	$I_{CEO(\text{Dark})}$ $V_{CE} = 10\text{V}$	$V_{CE(\text{SAT})}$
Part Number	Features	Current Transfer Ratio $I_F = 1\text{mA}$ $V_{CE} = 1\text{V}$	Isolation Voltage	Continuous Forward Current	V_F $I_F = 20\text{mA}$	V_{BR} $I_R = 10\mu\text{A}$	BV_{CEO} $I_C = 1\text{mA}$	$I_{CEO(\text{Dark})}$ $V_{CE} = 10\text{V}$	$V_{CE(\text{SAT})}$
ISP845	Four channel Optocoupler with a Photo-Darlington Transistor	600-7500 ($V_{CE} = 2\text{V}$)	7.5(pk) 5.3(rms)	50mA	1.4	35 ($I_C = 0.1\text{mA}$)	100	1($I_F = 20\text{mA}$) ($I_C = 5\text{mA}$) 1($I_F = 1\text{mA}$) ($I_C = 8\text{mA}$) 1($I_F = 0.5\text{mA}$) ($I_C = 2\text{mA}$) 1($I_F = 0.25\text{mA}$) ($I_C = 0.5\text{mA}$) 1($I_F = 1\text{mA}$) ($I_C = 2\text{mA}$) 1($I_F = 2\text{mA}$) ($I_C = 10\text{mA}$)	1($I_F = 20\text{mA}$) ($I_C = 5\text{mA}$)
ISP845-1		/800 ¹							1($I_F = 1\text{mA}$) ($I_C = 8\text{mA}$)
ISP845-2		/400 ² /800 ¹							1($I_F = 0.5\text{mA}$) ($I_C = 2\text{mA}$)
ISP845-3		200 ³ /400 ² /800 ¹							1($I_F = 0.25\text{mA}$) ($I_C = 0.5\text{mA}$)
PS2502-4		200-2000				80			1($I_F = 1\text{mA}$) ($I_C = 2\text{mA}$)
TIL199		500-7500 ($I_F = 2\text{mA}$)				35			1($I_F = 2\text{mA}$) ($I_C = 10\text{mA}$)
TIL199A		1000-7500 ($I_F = 2\text{mA}$)							
TIL199B		1500-7500 ($I_F = 2\text{mA}$)							

Note 1 Test condition: $I_F = 1\text{mA}$, $V_{CE} = 1\text{V}$

Note 2 Test condition: $I_F = 0.5\text{mA}$, $V_{CE} = 1\text{V}$

Note 3 Test condition: $I_F = 0.25\text{mA}$, $V_{CE} = 1\text{V}$

16 Pin DIL & SMD Optocouplers

16 Pin Transistor Symmetrical Configuration DIL & SMD Optocouplers

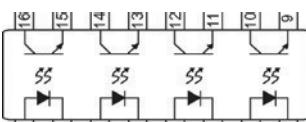
Part Number	Features	Current Transfer Ratio $I_F = 10\text{mA}$ $V_{CE} = 10\text{V}$	Min (KV) Isolation Voltage	Forward Current	V_{BR}	BV_{CEO} $I_c = 1\text{mA}$	$I_{CEO(\text{Dark})}$ $V_{CE} = 10\text{V}$	$V_{CE(\text{SAT})}$ $I_F = 16\text{mA}$ $I_c = 2\text{mA}$
		Min (%)	Min (KV)	Max (mA)	Min (V)	Min (V)	Max (nA)	Max (V)
ILQ1	Four channel Optocoupler with a Phototransistor Output	20-300	7.5(pk) 5.3(rms)	50	6	50	50	0.4
ILQ2		100-500				70		
ILQ5		50-400				50		
ILQ74		12.5($I_F = 16\text{mA}$ $V_{CE} = 5\text{V}$)				35	100 ($V_{CE} = 24\text{V}$)	0.2($I_F = 20\text{mA}$ ($I_c = 1\text{mA}$))
IS849		50($I_F = 5\text{mA}$ $V_{CE} = 5\text{V}$)				50	50	0.3($I_F = 10\text{mA}$ ($I_c = 2\text{mA}$))
ISQ1		20				70		0.4($I_F = 5\text{mA}$ ($I_c = 1\text{mA}$))
ISQ2		100-500				50		0.4
ISQ5		50				50		
ISQ74		12.5($I_F = 16\text{mA}$ $V_{CE} = 5\text{V}$)						
High CTR, High Sensitivity / Low Input Current								
ISQ201	Four channel Optocoupler with a Phototransistor Output	75 (10) ¹	7.5(pk) 5.3(rms)	50	6	70	50	0.4($I_F = 10\text{mA}$ ($I_c = 2\text{mA}$))
ISQ202		125-250 (30) ¹						
ISQ203		225-450 (50) ¹						
ISQ204		200-400 (100) ¹						
ISQ204-1		/50 ²						
ISQ204-2		50 ³						
ISQ204-3		70 ³ /100 ²						

Note 1 Test Condition: $I_F = 1\text{mA}$

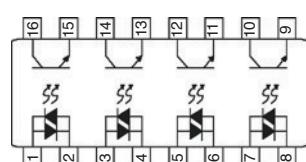
Note 2 Test Condition: $I_F = 1\text{mA}$, $V_{CE} = 0.4\text{V}$

Note 3 Test Condition: $I_F = 0.5\text{mA}$, $V_{CE} = 0.4\text{V}$

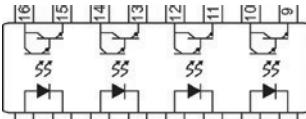
Transistor Output



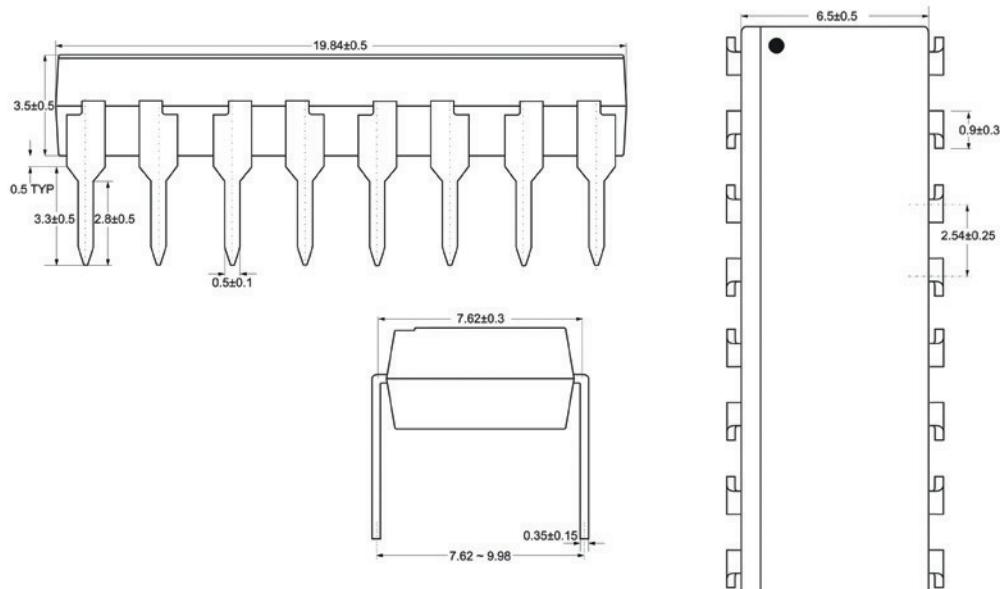
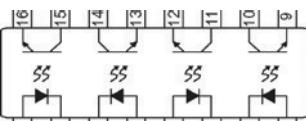
AC Input



Darlington Output



Symmetrical Configuration



6 Pin DIL & SMD Triac Optocouplers

Random Phase Triac

Part Number	Features	Input Trigger Current $V_D = 3V$ Max (mA)	Isolation Voltage Min (kV)	Continuous Forward Current Input Diode Max (mA)	V_{BR} $I_R = 10\mu A$	I_{DRM} Peak Off-State Current $V_{DRM} = \text{Rated}$ Max (nA)	V_{DRM} Peak Blocking Voltage $I_{DRM} = 0.1mA$ Min (V)
H11J1	Infrared Emitting Diode And Light Activated Silicon Bilateral Switch	10	7.5(pk) 5.3(rms)	50	6	100	250
H11J2		15					
H11J3		10					
H11J4		15					
H11J5		25					
IS3009		30					
IS3010		15					
IS3011		10					400
IS3012		5					
IS3020		30					
IS3021		15					
IS3022		10					
IS3023		5					
IS3051		15					600
IS3052		10					
IS6003		3					
IS6005		5					
IS6010		10					450
IS6015		15					
IS6030		30					
IS607		10					250
IS608		7					
MOC3009		30					400
MOC3010		15					
MOC3011		10					
MOC3012		5					
MOC3020		30					600
MOC3021		15					
MOC3022		10					
MOC3023		5					
MOC3051		15					
MOC3052		10					

Zero Crossing Triac

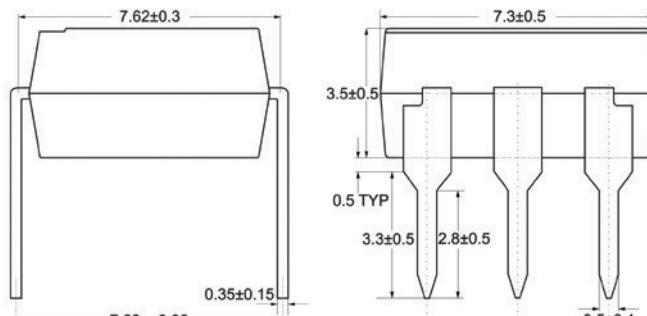
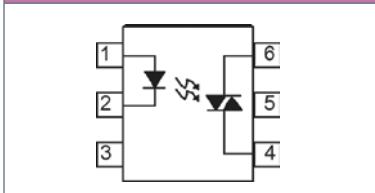
Part Number	Features	Input Trigger Current $V_D = 3V$ Max (mA)	Isolation Voltage Min (kV)	Continuous Forward Current Input Diode Max (mA)	V_{BR} $I_R = 10\mu A$	I_{DRM} Peak Off-State Current $V_{DRM} = \text{Rated}$ Max (nA)	V_{DRM} Peak Blocking Voltage $I_{DRM} = 0.1mA$ Min (V)
IS3030	Infrared Emitting Diode And Light Activated Zero Crossing Bilateral Switch	30	7.5(pk) 5.3(rms)	50	6	300	250
IS3031		15					
IS3032		10					
IS3033		5					
IS3040		30					400
IS3041		15					
IS3042		10					
IS3043		5					
IS3060		30					600
IS3061		15					

6 Pin DIL & SMD Triac Optocouplers

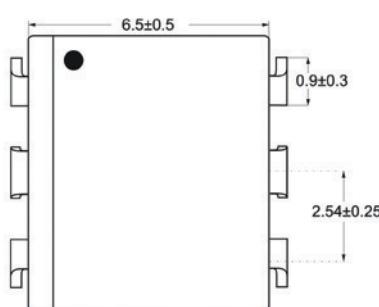
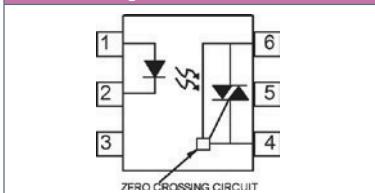
Zero Crossing Triac

Part Number	Features	Input Trigger Current $V_D = 3V$	Isolation Voltage	Continuous Forward Current Input Diode	V_{BR} $I_R = 10\mu A$	I_{DRM} Peak Off-State Current $V_{DRM} = \text{Rated}$	V_{DRM} Peak Blocking Voltage $I_{DRM} = 0.1mA$
		Max (mA)	Min (kV)	Max (mA)	Min (V)	Max (nA)	Min (V)
IS3062	Infrared Emitting Diode And Light Activated Zero Crossing Bilateral Switch	10	7.5(pk) 5.3(rms)	50	6	300	600
IS3063		5					800
IS3080		30					400
IS3081		15					250
IS3082		10					400
IS3083		5					600
IS620		30					800
IS621		15					400
IS622		10					250
IS623		5					400
MOC3030		30					600
MOC3031		15					800
MOC3032		10					400
MOC3033		5					250
MOC3040		30					400
MOC3041		15					600
MOC3042		10					800
MOC3043		5					400
MOC3060		30					600
MOC3061		15					800
MOC3062		10					400
MOC3063		5					250
MOC3080		30					400
MOC3081		15					600
MOC3082		10					800
MOC3083		5					400

Random Phase Triac



Zero Crossing Triac



Mini Flat Triac Series

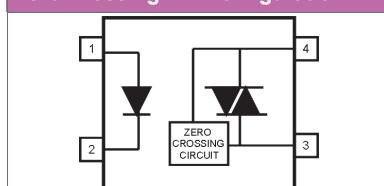
Zero Crossing Series

Part Number	Features	Input Trigger Current $V_O = 3V$	Isolation Voltage	Continuous Forward Current	V_{BR} $I_R = 10\mu A$	I_{DRM}	V_{DRM} Peak Blocking Voltage
						Max (nA)	
Max (mA)	Min (KV _{RMS})	Max (mA)	Min (V)	Max (nA)	Max (V)		
MF3030	Infrared Emitting Diode and Light Activated Zero Crossing Bilateral Switch in a space saving Mini Flat Package	30	3.75	60	5	100	250
MF3031		15					
MF3032		10					
MF3033		5					
MF3040		30				100	400
MF3041		15					
MF3042		10					
MF3043		5					
MF3060		30				100	600
MF3061		15					
MF3062		10					
MF3063		5					
MF3080		30				100	800
MF3081		15					
MF3082		10					
MF3083		5					

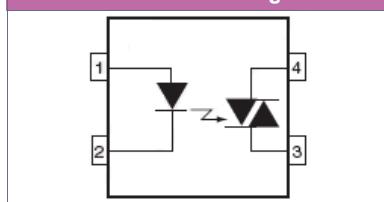
Random Phase Series

Part Number	Features	Input Trigger Current $V_O = 3V$	Isolation Voltage	Continuous Forward Current	V_{BR} $I_R = 10\mu A$	I_{DRM}	V_{DRM} Peak Blocking Voltage
						Max (nA)	
Max (mA)	Min (KV _{RMS})	Max (mA)	Min (V)	Max (nA)	Max (V)		
MF3009	Infrared Emitting Diode and Light Activated Random Phase Bilateral Switch in a space saving Mini Flat Package	30	3.75	60	5	100	250
MF3010		15					
MF3011		10					
MF3012		5					
MF3020		30			5	100	400
MF3021		15					
MF3022		10					
MF3023		5					
MF3051		30			5	100	600
MF3052		15					

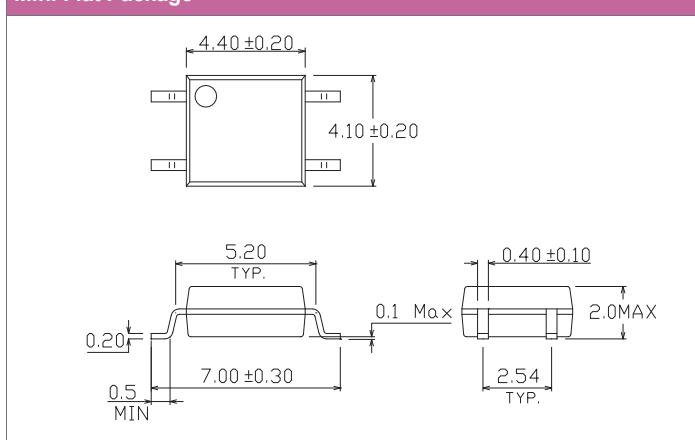
Zero Crossing Pin Configuration



Random Phase Pin Configuration



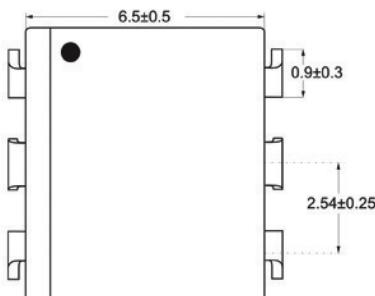
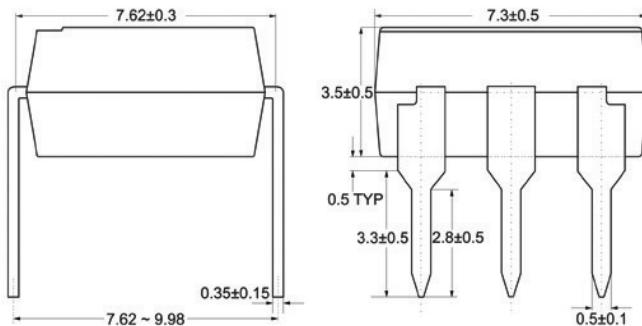
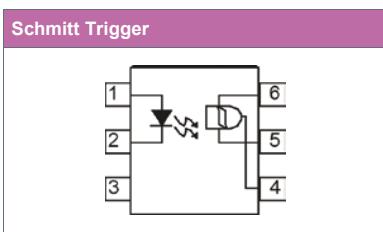
Mini Flat Package



6 Pin DIL & SMD Schmitt Trigger

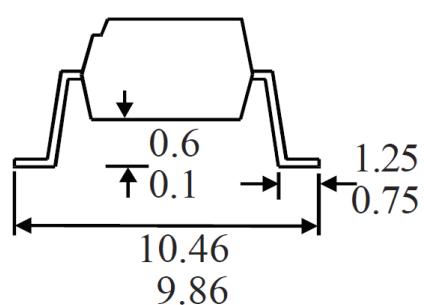
Schmitt Trigger

Part Number	Features	Turn-On Threshold Current $R_L = 270\Omega$ $V_{CE} = 5V$ Max (mA)	Turn-Off Threshold Current $R_L = 270\Omega$ $V_{CE} = 5V$ Min (mA)	Isolation Voltage Min (KV_{RMS})	Continuous Forward Current Max (mA)	V_F $I_F = 50mA$	$V_{BR(LED)}$ $I_R = 10\mu A$	V_{OL} Output Voltage (Low) $R_L = 270\Omega$ $V_{CE} = 5V$
H11L1	Microprocessor Compatible	1.5	0.3	5	50	1.5	100	0.4
H11L2		10						
H11L3		5						
H11L4		2.0						
IS609		1.6						
MOC5007		4						
MOC5008		10						
MOC5009								

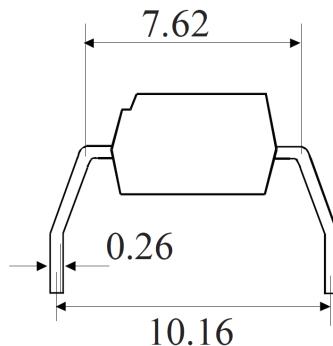


Lead Form Diagrams

**OPTION SM
SURFACE MOUNT**



OPTION G



4 Pin Mini Flat Packages

Transistor Output

Part Number	Features	Current Transfer Ratio $I_F = 5\text{mA}$ $V_{CE} = 5\text{V}$	Isolation Voltage	Continuous Forward Current	V_F $I_F = 20\text{mA}$	BV_{CEO} $I_C = 0.5\text{mA}$	I_{CEO} $V_{CE} = 20\text{V}$	$V_{CE(SAT)}$ $I_F = 20\text{mA}$ $I_C = 1\text{mA}$
		Min (%)	Min (KV _{RMS})	Max (mA)	Max (V)	Min (V)	Max (nA)	Max (V)
IS121	Single Channel Optocoupler with Phototransistor Output	50-600	3.75	50	1.4	80	100	0.2
IS181								
IS2701-1								
IS357								
IS357A								
IS357B								
IS357C								
IS357D								

AC Input

Part Number	Features	Current Transfer Ratio $I_F = \pm 1\text{mA}$ $V_{CE} = 5\text{V}$	Isolation Voltage	Continuous Forward Current	V_F $I_F = \pm 20\text{mA}$	BV_{CEO} $I_C = 0.1\text{mA}$	I_{CEO} $V_{CE} = 20\text{V}$	$V_{CE(SAT)}$ $I_F = \pm 20\text{mA}$ $I_C = 1\text{mA}$
		Min (%)	Min (KV _{RMS})	Max (mA)	Max (V)	Min (V)	Max (nA)	Max (V)
IS180	Single Channel Optocoupler with two Infrared LED's wired in Inverse Parallel allowing Operation with AC Input Voltage	20-400	3.75	± 50	1.4	35	100	0.2
IS126								
IS2705-1								
IS354								
IS354A								

Darlington Output

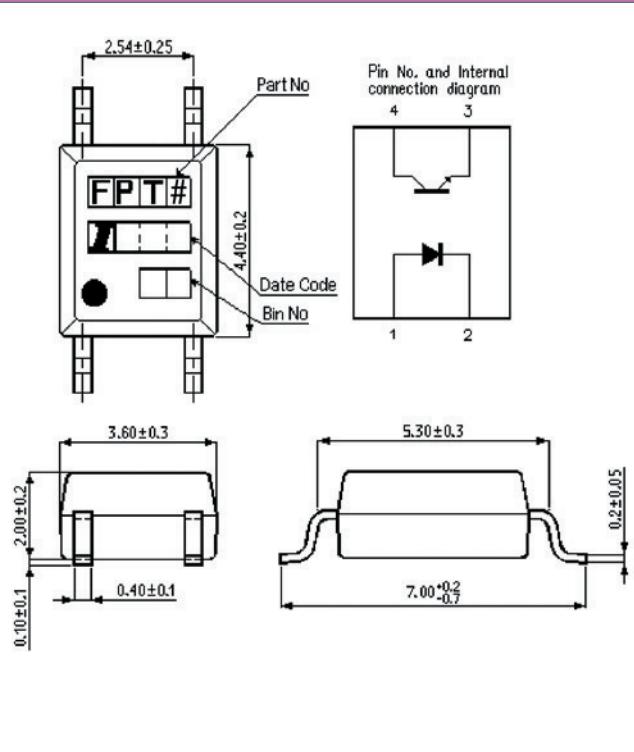
Part Number	Features	Current Transfer Ratio $I_F = 5\text{mA}$ $V_{CE} = 5\text{V}$	Isolation Voltage	Continuous Forward Current	V_F $I_F = 20\text{mA}$	BV_{CEO} $I_C = 0.1\text{mA}$	I_{CEO} $V_{CE} = 20\text{V}$	$V_{CE(SAT)}$ $I_F = 20\text{mA}$ $I_C = 1\text{mA}$
		Min (%)	Min (KV _{RMS})	Max (mA)	Max (V)	Min (V)	Max (nA)	Max (V)
IS355	Single Channel Optocoupler with Photo-Darlington Transistor Output	600-7500	3.75	50	1.4	35	1000	1
IS2702-1								

Darlington Output - High Voltage

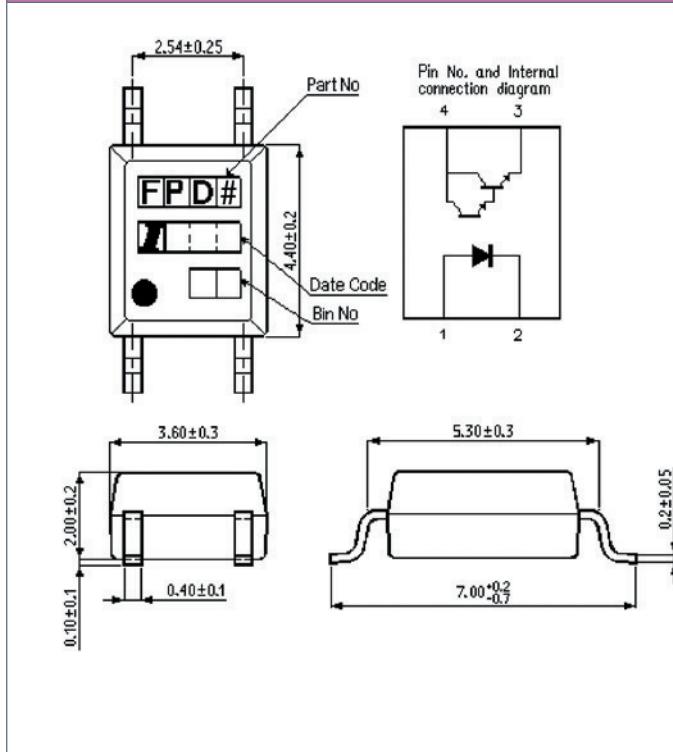
Part Number	Features	Current Transfer Ratio $I_F = 5\text{mA}$ $V_{CE} = 5\text{V}$	Isolation Voltage	Continuous Forward Current	V_F $I_F = 20\text{mA}$	BV_{CEO} $I_C = 0.1\text{mA}$	I_{CEO} $V_{CE} = 200\text{V}$	$V_{CE(SAT)}$ $I_F = 20\text{mA}$ $I_C = 100\text{mA}$
		Min (%)	Min (KV _{RMS})	Max (mA)	Max (V)	Min (V)	Max (nA)	Max (V)
IS2732-1	Single Channel Optocoupler with Photo-Darlington Transistor with High Output Voltage	1000	3.75	50	1.4	300	200	1.2
IS452								
IS127								

4 Pin Mini Flat Package

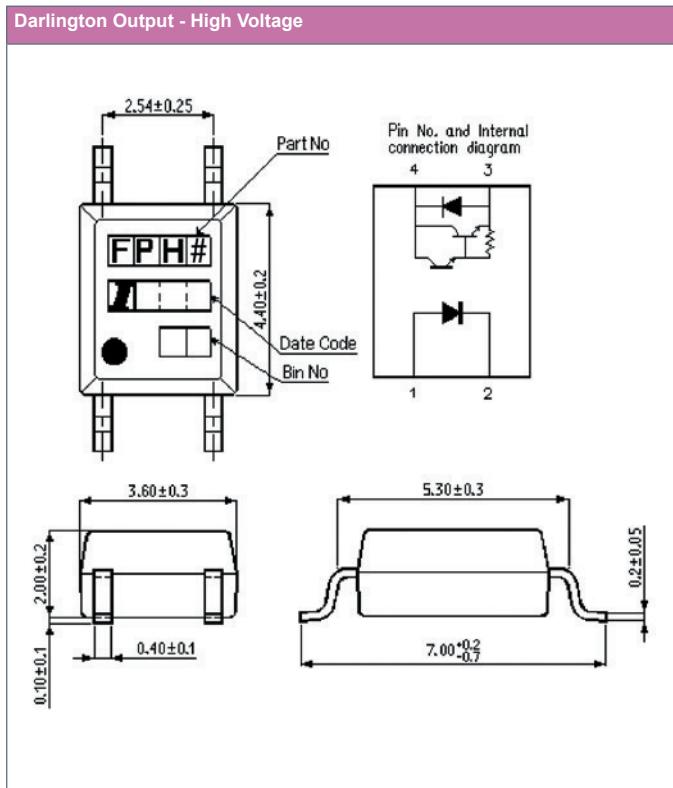
Transistor Output



Darlington Output



AC Input



Darlington Output - High Voltage

= Internal binning

Half Pitch Optocouplers

4 Pin Transistor Output

Part Number	Features	Current Transfer Ratio $I_F = 5\text{mA}$ $V_{CE} = 5\text{V}$	Isolation Voltage	Continuous Forward Current	V_F $I_F = 20\text{mA}$	BV_{CEO} $I_C = 0.1\text{mA}$	I_{CEO} $V_{CE} = 20\text{V}$	$V_{CE(SAT)}$ $I_F = 10\text{mA}$ $I_C = 1\text{mA}$
		Min (%)	Min (KV _{RMS})	Max (mA)	Max (V)	Min (V)	Max (nA)	Max (V)
IS281	Single channel Optocoupler with Phototransistor Output	50-600	3.75	50	1.4	80	100	0.2
		40-600 $I_F = 10\text{mA}$ $V_{CE} = 5\text{V}$						
		50-600						
		40-600 $I_F = 10\text{mA}$ $V_{CE} = 5\text{V}$						
		50-600						

8 Pin Transistor Output

Part Number	Features	Current Transfer Ratio $I_F = 1\text{mA}$ $V_{CE} = 5\text{V}$	Isolation Voltage	Continuous Forward Current	V_F $I_F = 10\text{mA}$	BV_{CEO} $I_C = 0.1\text{mA}$	I_{CEO} $V_{CE} = 10\text{V}$	$V_{CE(SAT)}$ $I_F = 10\text{mA}$ $I_C = 2.4\text{mA}$
		Min (%)	Min (KV _{RMS})	Max (mA)	Max (V)	Min (V)	Max (nA)	Max (V)
MOCD207	Dual channel Optocoupler with Phototransistor Output	34 100-200 $I_F = 10\text{mA}$ $V_{CE} = 5\text{V}$	3.75	60	1.5	80	50	0.4
		100						

16 Pin Transistor Output

Part Number	Features	Current Transfer Ratio $I_F = 5\text{mA}$ $V_{CE} = 5\text{V}$	Isolation Voltage	Continuous Forward Current	V_F $I_F = 20\text{mA}$	BV_{CEO} $I_C = 0.1\text{mA}$	I_{CEO} $V_{CE} = 50\text{V}$	$V_{CE(SAT)}$ $I_F = 8\text{mA}$ $I_C = 2.4\text{mA}$
		Min (%)	Min (KV _{RMS})	Max (mA)	Max (V)	Min (V)	Max (nA)	Max (V)
IS281-4	Quad channel Optocoupler with Phototransistor Output	50-600	3.75	50	1.4	80	100	0.4

Half Pitch Optocouplers

4 Pin AC Input

Part Number	Features	Current Transfer Ratio $I_F = \pm 1\text{mA}$ $V_{CE} = 5\text{V}$	Isolation Voltage	Continuous Forward Current	V_F $I_F = \pm 50\text{mA}$	BV_{CEO} $I_C = 0.1\text{mA}$	I_{CEO} $V_{CE} = 20\text{V}$	$V_{CE(SAT)}$ $I_F = \pm 20\text{mA}$ $I_C = 1\text{mA}$
		Min (%)	Min (KV_{RMS})	Max (mA)	Max (V)	Min (V)	Max (nA)	Max (V)
IS280	Single channel Optocoupler with Phototransistor Output	20-300	3.75	± 50	1.6	80	100	0.2
IS2805								
IS3H4								

16 Pin AC Input

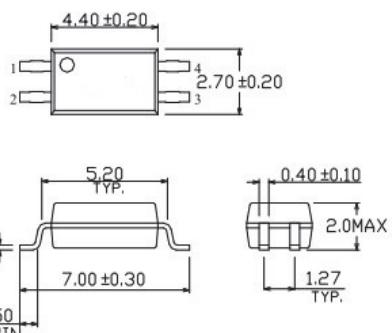
Part Number	Features	Current Transfer Ratio $I_F = \pm 1\text{mA}$ $V_{CE} = 5\text{V}$	Isolation Voltage	Continuous Forward Current	V_F $I_F = \pm 20\text{mA}$	BV_{CEO} $I_C = 0.1\text{mA}$	I_{CEO} $V_{CE} = 50\text{V}$	$V_{CE(SAT)}$ $I_F = \pm 8\text{mA}$ $I_C = 2.4\text{mA}$
		Min (%)	Min (KV_{RMS})	Max (mA)	Max (V)	Min (V)	Max (nA)	Max (V)
IS2805-4	Quad channel Optocoupler with Phototransistor Output	20-400	3.75	± 50	1.4	80	100	0.4



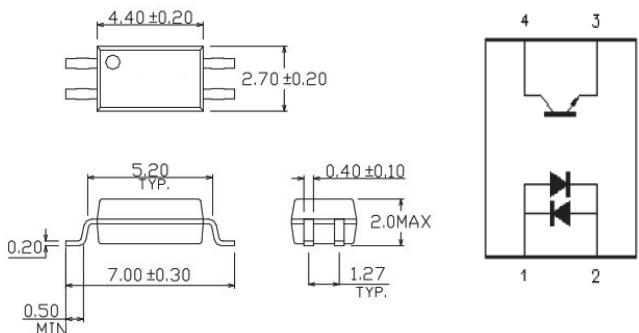
DRAWINGS OVERLEAF

Half Pitch Optocouplers

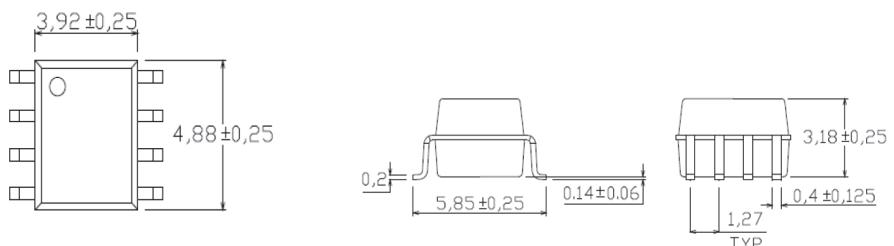
4 Pin Transistor Output



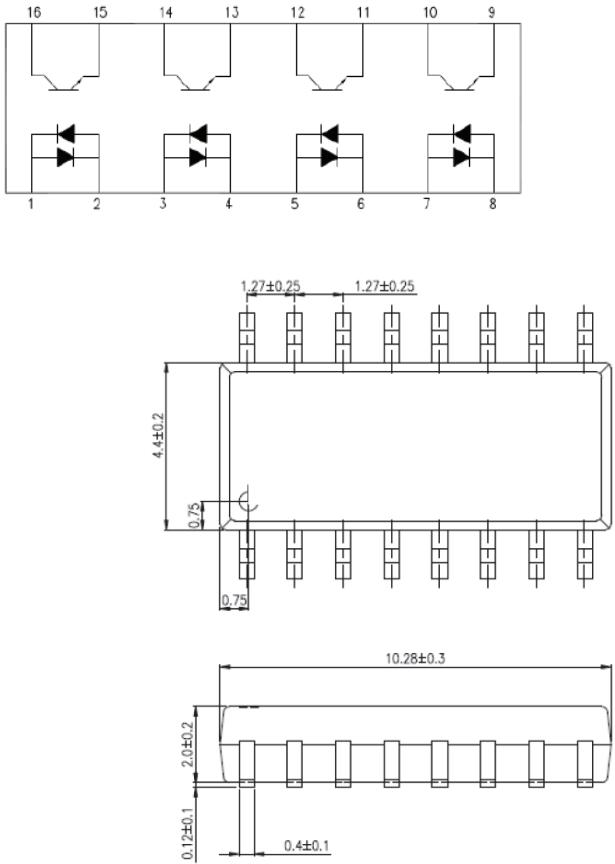
4 Pin AC Input Transistor Output



8 Pin Transistor Output



16 Pin Transistor Output / 16 Pin AC Input

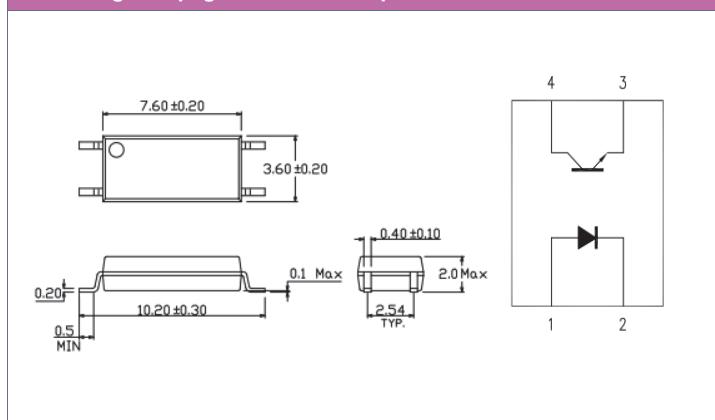


Long Creepage Optocouplers

4 Pin Long Creepage Transistor Output

Part Number	Features	Current Transfer Ratio $I_F = 5\text{mA}$ $V_{CE} = 5\text{V}$	Isolation Voltage	Continuous Forward Current	V_F $I_F = 50\text{mA}$	BV_{CEO} $I_C = 0.1\text{mA}$	I_{CEO} $V_{CE} = 20\text{V}$	$V_{CE(SAT)}$ $I_F = 10\text{mA}$ $I_C = 1\text{mA}$
		Min (%)	Min (KV _{RMS})	Max (mA)	Max (V)	Min (V)	Max (nA)	Max (V)
ISLT1001	Single channel Optocoupler with Phototransistor Output	50-600	5	60	1.5	80	100	0.3
ISLT1002		63-125 $I_F = 10\text{mA}, V_{CE} = 5\text{V}$						
ISLT1003		22 $I_F = 1\text{mA}, V_{CE} = 5\text{V}$						
ISLT1004		100-200 $I_F = 10\text{mA}, V_{CE} = 5\text{V}$						
ISLT1007		34 $I_F = 1\text{mA}, V_{CE} = 5\text{V}$						
ISLT1008		160-320 $I_F = 10\text{mA}, V_{CE} = 5\text{V}$						
ISLT1009		56 $I_F = 1\text{mA}, V_{CE} = 5\text{V}$						

4 Pin Long Creepage Transistor Output



IGBT/MOSFET/IPM Gate Drive Optocoupler

Single Channel Gate Drive

Part Number	Features	Peak Output Current	Isolation Voltage	V _{CC}	T _{OP}	UVLO+	UVLO-	I _{FHL} Input Threshold Current (Low to High)	V _{FHL} Input Threshold Voltage (High to Low)	t _{PLH} , t _{PHL}	CM _H	CM _L
		Max (A)	Min (KV _{RMS})	Max (V)	(°C)	(V)	(V)	Max (mA)	Min (V)	Max (ns)	Min (KV/μs)	Min (KV/μs)
						V _O > 5V, I _F = 10mA	V _O < 5V, I _O = 0A	V _O > 5V, I _O = 0A	V _{CC} = 15-30V I _F = 7-16 mA R _G = 10 Ω C _G = 10 nF f = 10 kHz D.C. = 50%	V _{CC} = 30V I _F = 10-16mA V _{CM} = 1500 Vp-p	V _{CC} = 30V V _F = 0V V _{CM} = 1500 Vp-p	V _{CC} = 30V V _F = 0V V _{CM} = 1500 Vp-p
ICPL3120	2.5A Output High Common Mode Noise Immunity with UVLO Gate Drive Optocoupler	±2.5	5	35 Note 1	-40 - 110	11.5 - 13.5	10 - 12	5	0.8	500	25	25
ICPL3150	1.0A Output High Common Mode Noise Immunity Gate Drive Optocoupler	±1.0	5	35 Note 1	-40 - 105	Not Applicable	Not Applicable	5	0.8	200 R _G = 47 Ω C _G = 3 nF	20	20

Note 1 : V_{CC} must be bypassed by a minimum 0.1μF capacitor

Single Channel Stretched SO6 (Wide Lead Separation) Gate Drive

Part Number	Features	Peak Output Current	Isolation Voltage	V _{CC}	T _{OP}	UVLO+	UVLO-	I _{FHL} Input Threshold Current (Low to High)	V _{FHL} Input Threshold Voltage (High to Low)	t _{PLH} , t _{PHL}	CM _H	CM _L
		Max (A)	Min (KV _{RMS})	Max (V)	(°C)	(V)	(V)	Max (mA)	Min (V)	Max (ns)	Min (KV/μs)	Min (KV/μs)
						V _O > 5V, I _F = 10mA	V _O < 5V, I _O = 0A	V _O > 5V, I _O = 0A	V _{CC} = 15-30V I _F = 7-16 mA R _G = 47 Ω C _G = 3 nF f = 10 kHz D.C. = 50%	V _{CC} = 30V I _F = 10-16mA V _{CM} = 1500 Vp-p	V _{CC} = 30V V _F = 0V V _{CM} = 1500 Vp-p	V _{CC} = 30V V _F = 0V V _{CM} = 1500 Vp-p
IS314W	1.0A Output High Common Mode Noise Immunity with UVLO Gate Drive Optocoupler	±1.0	5	35 Note 1	-40 - 105	11.0 - 13.5	9.5 - 12.0	5	0.8	500	20	20

Note 1 : V_{CC} must be bypassed by a minimum 1μF capacitor

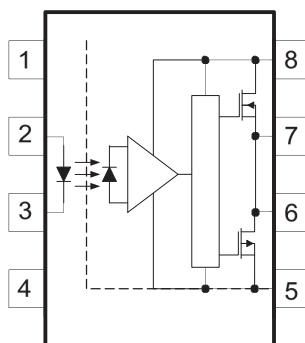
Single Channel Stretched SO6 IPM / Gate Drive

Part Number	Features	Max Output Current	Isolation Voltage	V _{CC}	T _{OP}	UVLO+	UVLO-	I _{FHL} Input Threshold Current (Low to High)	V _{FHL} Input Threshold Voltage (High to Low)	t _{PLH} , t _{PHL}	CM _H	CM _L
		Max (mA)	Min (KV _{RMS})	Max (V)	(°C)	(V)	(V)	Max (mA)	Min (V)	Max (ns)	Min (KV/μs)	Min (KV/μs)
						V _O > 5V, I _F = 10mA	V _O < 5V, I _O = 0A	V _O > 5V, I _O = 0A	V _{CC} = 4.5-30V I _F = 0-1.6 mA C _L = 100 pF f = 100 kHz D.C. = 10%	V _{CC} = 5V I _F = 4mA V _{CM} = 1500 Vp-p	V _{CC} = 5V V _F = 0V V _{CM} = 1500 Vp-p	V _{CC} = 5V V _F = 0V V _{CM} = 1500 Vp-p
IS480P	High Common Mode Noise Immunity with built-in Schmitt Trigger IPM / Gate Drive Optocoupler	±50	5	35 Note 1	-40 - 105	Not Applicable	Not Applicable	1.5	0.8	t _{PLH} 220 t _{PHL} 200	20	20

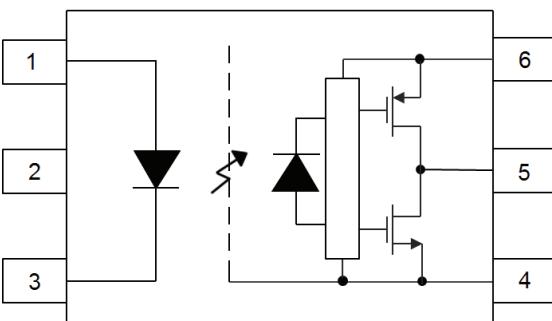
Note 1 : V_{CC} must be bypassed by a minimum 0.1μF capacitor

IGBT/MOSFET/IPM Gate Drive Optocoupler

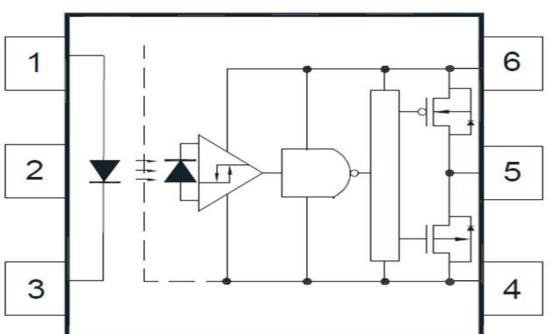
ICPL3120 / ICPL3150



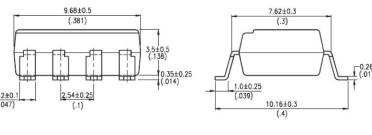
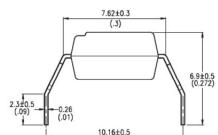
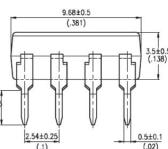
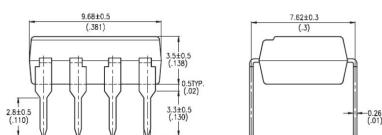
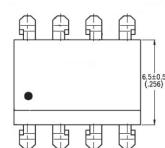
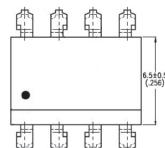
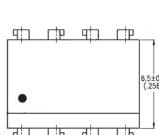
IS314W



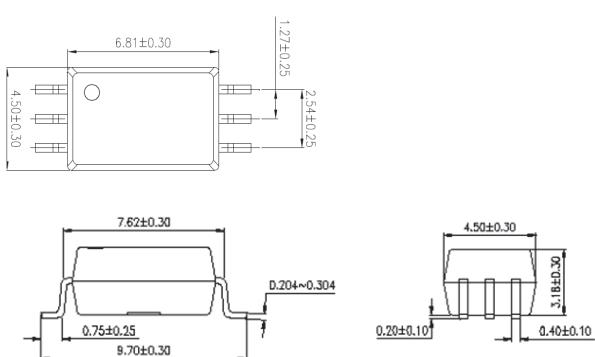
IS480P



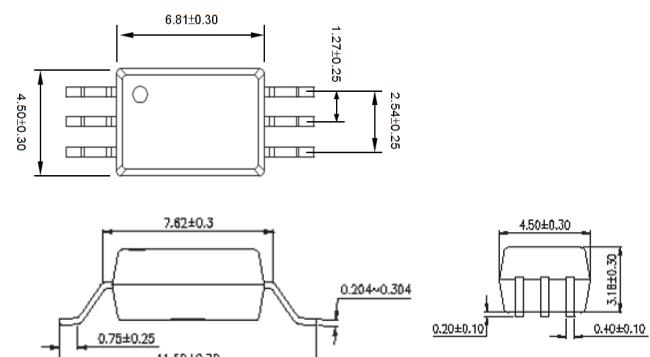
Standard Packages



Stretched SO6 Package



Stretched SO6 (Wide Lead Separation) Package



1Mbits/s High Speed Optocouplers

Single Channel

Part Number	Features	Isolation Voltage	T _{OP}	V _{CC}	V _O	I _B	Current Transfer Ratio	V _{OL}	t _{PLH} , t _{PHL}	CM _H	CM _L
		Min (KV _{RMS})	(°C)	Max (V)	Max (V)	Max (mA)	(%)	Max (V)	Max (μs)	Min (V/μs)	Min (V/μs)
6N135	Single Channel Optocoupler with a High Speed Photo Detector Transistor Output	5	-55 - 100	30 Note 1	20	5	7-50	0.4	1.5	1000	1000
6N136							19-50	0.4 I _O = 3mA	0.8 R _L = 1.9kΩ	1000 R _L = 1.9kΩ	1000 R _L = 1.9kΩ
ICPL4502						No Connection				15000 R _L = 1.9kΩ	15000 R _L = 1.9kΩ
ICPL4503										V _{CM} = 10Vp-p	V _{CM} = 1500Vp-p

Note 1 : V_{CC} is recommended to be bypassed by a 0.1μF capacitor

Wide Body Single Channel

Part Number	Features	Isolation Voltage	T _{OP}	V _{CC}	V _O	I _B	Current Transfer Ratio	V _{OL}	t _{PLH} , t _{PHL}	CM _H	CM _L
		Min (KV _{RMS})	(°C)	Max (V)	Max (V)	Max (mA)	(%)	Max (V)	Max (μs)	Min (V/μs)	Min (V/μs)
ICPLW135	Single Channel Optocoupler with a High Speed Photo Detector Transistor Output	5	-55 - 100	30 Note 1	20	5	7-50	0.4	1.5	1000	1000
ICPLW136							19-50	0.4 I _O = 3mA	0.8 R _L = 1.9kΩ	1000 R _L = 1.9kΩ	1000 R _L = 1.9kΩ
ICPLW4503						No Connection				15000 R _L = 1.9kΩ	15000 R _L = 1.9kΩ
										V _{CM} = 10Vp-p	V _{CM} = 1500Vp-p

Note 1 : V_{CC} is recommended to be bypassed by a 0.1μF capacitor

Half Pitch Single Channel

Part Number	Features	Isolation Voltage	T _{OP}	V _{CC}	V _O	I _B	Current Transfer Ratio	V _{OL}	t _{PLH} , t _{PHL}	CM _H	CM _L
		Min (KV _{RMS})	(°C)	Max (V)	Max (V)	Max (mA)	(%)	Max (V)	Max (μs)	Min (V/μs)	Min (V/μs)
ICPL0500	Single Channel Optocoupler with a High Speed Photo Detector Transistor Output	3.75	-55 - 100	30 Note 1	20	5	7-50	0.4	1.5	1000 Typical	1000 Typical
ICPL0501							19-50	0.4 I _O = 3mA	0.8 R _L = 1.9kΩ	1000 Typical R _L = 1.9kΩ	1000 Typical R _L = 1.9kΩ
ICPL0452						No Connection				15000 R _L = 1.9kΩ	15000 R _L = 1.9kΩ
ICPL0453										V _{CM} = 1500Vp-p	V _{CM} = 1500Vp-p

Note 1 : V_{CC} is recommended to be bypassed by a 0.1μF capacitor

5 Pin Half Pitch Single Channel

Part Number	Features	Isolation Voltage	T _{OP}	V _{CC}	V _O	I _B	Current Transfer Ratio	V _{OL}	t _{PLH} , t _{PHL}	CM _H	CM _L
		Min (KV _{RMS})	(°C)	Max (V)	Max (V)	Max (mA)	(%)	Max (V)	Max (μs)	Min (V/μs)	Min (V/μs)
ICPLM452	Single Channel Optocoupler with a High Speed Photo Detector Transistor Output	3.75	-40 - 85	30 Note 1	20	No Connection	20 - 50	0.4	0.8	5000	5000
ICPLM453										15000 V _{CM} = 1500Vp-p	15000 V _{CM} = 1500Vp-p

Note 1 : V_{CC} is recommended to be bypassed by a 0.1μF capacitor

1Mbits/s High Speed Optocouplers

Stretched Body SO6 (Wide Lead Separation) Single Channel

Part Number	Features	Isolation Voltage	T _{OP}	V _{CC}	V _O	I _B	Current Transfer Ratio V _{CC} = 3.3V or 5.5V I _F = 3mA V _O = 0.4V	V _{OL} V _{CC} = 3.3V or 5V I _F = 3mA I _O = 3mA	t _{PLH} , t _{PHL} I _F = 3mA C _L = 15pF f = 10kHz Duty Cycle = 50%	CM _H V _{CC} = 3.3V or 5V I _F = 0mA V _{OH} = 2V R _L = 1.8kΩ or 2.9kΩ V _{CM} = 1500Vp-p	CM _L V _{CC} = 3.3V or 5V I _F = 3mA V _{OL} = 0.8V R _L = 1.8kΩ or 2.9kΩ V _{CM} = 1500Vp-p
ICPLW50L	Single Channel Optocoupler with a High Speed Photo Detector Transistor Output	5	-40– 105	30 Note 1	20	No Connection	90-200	0.4	1 t _{PLH} 1.4 (V _{CC} = 3.3V)	15000	15000

Note 1 : V_{CC} is recommended to be bypassed by a 0.1μF capacitor

Dual Channel

Part Number	Features	Isolation Voltage	T _{OP}	V _{CC}	V _O	I _B	Current Transfer Ratio V _{CC} = 4.5V I _F = 16mA V _O = 0.4V	V _{OL} V _{CC} = 5V I _F = 16mA I _O = 1.1mA	t _{PLH} , t _{PHL} V _{CC} = 5V I _F = 0mA R _L = 4.1kΩ	CM _H V _{CC} = 5V I _F = 0mA V _{OH} = 2V R _L = 4.1kΩ V _{CM} = 10Vp-p	CM _L V _{CC} = 5V I _F = 16mA V _{OL} = 0.8V R _L = 4.1kΩ V _{CM} = 10Vp-p
ICPL2530	Dual Channel Optocoupler with a High Speed Photo Detector Transistor Output	5	-40– 100	30 Note 1	20	No Connection	7-50	0.5	1.5	1000	1000
ICPL2531							19-50	0.5 I _O = 3mA	0.8 R _L = 1.9kΩ	1000 R _L = 1.9kΩ V _{CM} = 1000Vp-p	1000 R _L = 1.9kΩ V _{CM} = 1000Vp-p

Note 1 : V_{CC} is recommended to be bypassed by a 0.1μF capacitor

Half Pitch Dual Channel

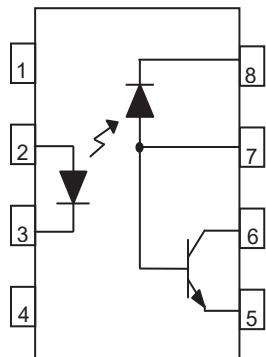
Part Number	Features	Isolation Voltage	T _{OP}	V _{CC}	V _O	I _B	Current Transfer Ratio V _{CC} = 4.5V I _F = 16mA V _O = 0.4V	V _{OL} V _{CC} = 4.5V I _F = 16mA I _O = 1.1mA	t _{PLH} , t _{PHL} V _{CC} = 5V I _F = 16mA R _L = 4.1kΩ	CM _H V _{CC} = 5V I _F = 0mA V _{OH} = 2V R _L = 4.1kΩ V _{CM} = 10Vp-p	CM _L V _{CC} = 5V I _F = 16mA V _{OL} = 0.8V R _L = 4.1kΩ V _{CM} = 10Vp-p
ICPL0530	Dual Channel Optocoupler with a High Speed Photo Detector Transistor Output	3.75	-55 - 100	30 Note 1	20	No Connection	7-50	0.4	1.5	1000	1000
ICPL0531							19-50	0.4 I _O = 3mA	0.8 R _L = 1.9kΩ	1000 R _L = 1.9kΩ V _{CM} = 1500Vp-p	1000 R _L = 1.9kΩ V _{CM} = 1500Vp-p

Note 1 : V_{CC} is recommended to be bypassed by a 0.1μF capacitor

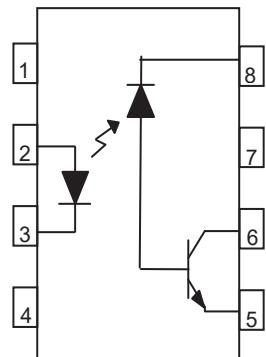
 DRAWINGS OVERLEAF

1Mbits/s High Speed Optocouplers

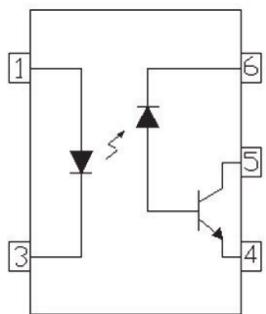
1Mbps Single Channel (Base Accessible)



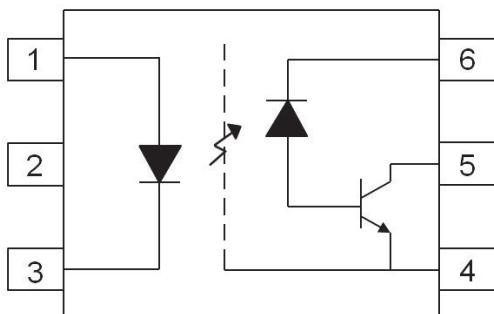
1Mbps Single Channel



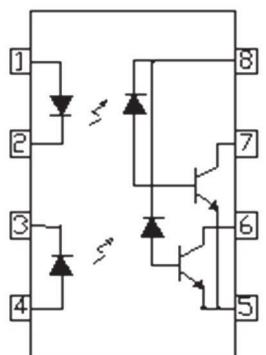
1Mbps 5 Pin Single Channel



1Mbps Stretched Body SO6 (Wide Lead Separation) Single Channel

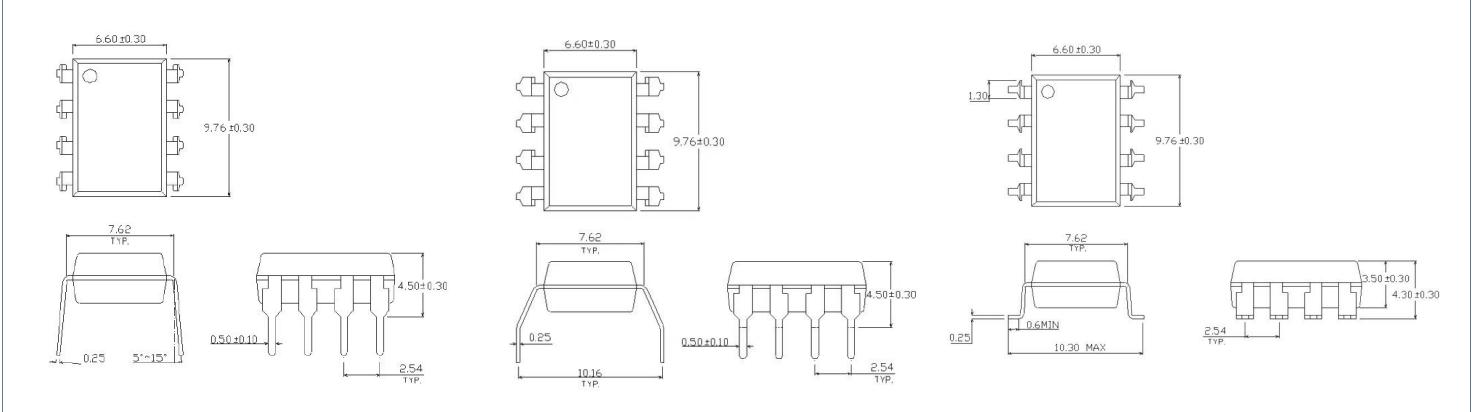


1Mbps Dual Channel

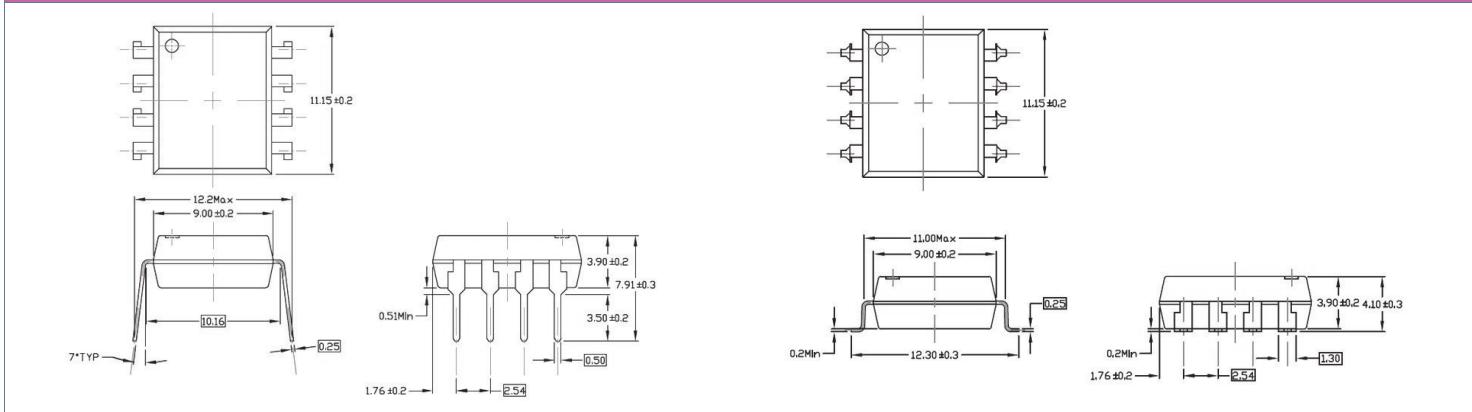


1Mbits/s High Speed Optocouplers

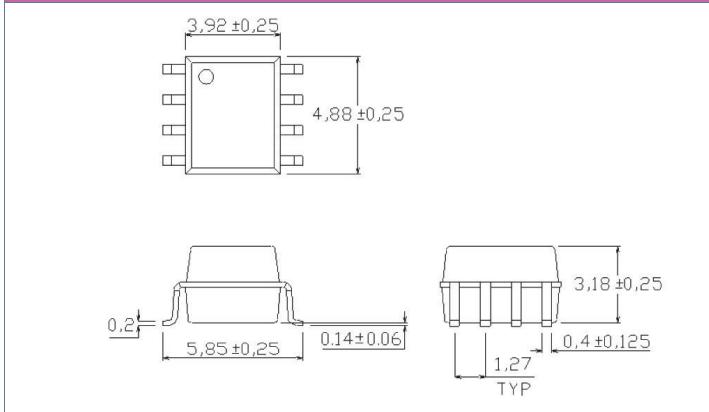
Standard Packages



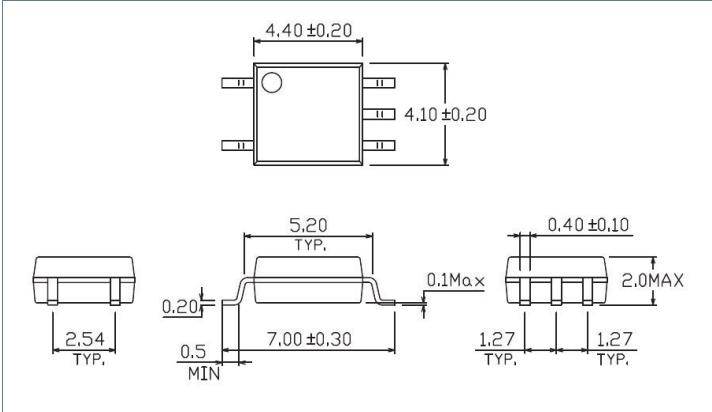
Wide Body Packages



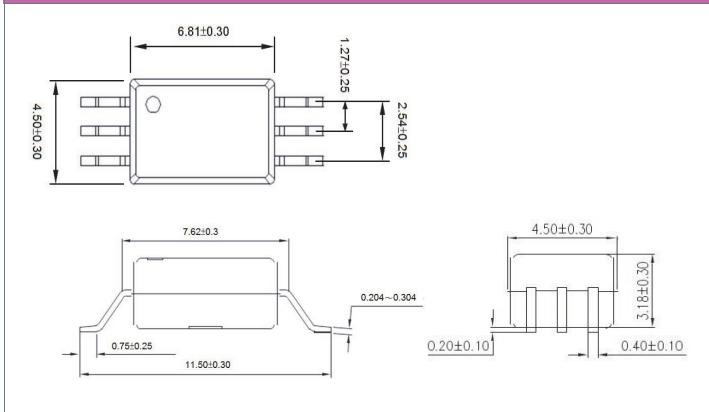
Half Pitch Package



5 Pin Half Pitch Package



Stretched Body SO6 (Wide Lead Separation) Package



10Mbits/s High Speed Optocouplers

Single Channel

Part Number	Features	Isolation Voltage	T _{OP}	V _{CC}	V _O	V _E	I _{FT}	V _{EH}	V _{EL}	V _{OL}	t _{PHL} , t _{PLH}	CM _H	CM _L
		Min (KV _{RMS})	(°C)	Max (V)	Max (V)	Max (V)	Max (mA)	Min (V)	Max (V)	Max (V)	Max (ns)	Min (V/μs)	Min (V/μs)
6N137	Single Channel Optocoupler with a High Speed Integrated Photo Detector	5	-40 - 85	7.0	7.0	5.5	5	2.0	0.8	0.6	75	5000 Ref	5000 Ref
ICPL2601	Storable Logic Gate Output	Note 1	Note 2	7.0	7.0	5.5	5	2.0	0.8	0.6	75	5000 V _{CM} = 50Vp-p	5000 V _{CM} = 50Vp-p
ICPL2611												10000 V _{CM} = 400Vp-p	10000 V _{CM} = 400Vp-p

Note 1 : V_{CC} must be bypassed by a minimum 0.1μF capacitor

Note 2 : V_E = Max 0.5V above V_{CC}

Wide Body Single Channel

Part Number	Features	Isolation Voltage	T _{OP}	V _{CC}	V _O	V _E	I _{FT}	V _{EH}	V _{EL}	V _{OL}	t _{PHL} , t _{PLH}	CM _H	CM _L
		Min (KV _{RMS})	(°C)	Max (V)	Max (V)	Max (V)	Max (mA)	Min (V)	Max (V)	Max (V)	Max (ns)	Min (V/μs)	Min (V/μs)
ICPLW137	Single Channel Optocoupler with a High Speed Integrated Photo Detector	5	-40 - 85	7.0	7.0	5.5	5	2.0	0.8	0.6	100	5000 Ref	5000 Ref
ICPLW2601	Storable Logic Gate Output	Note 1	Note 2	7.0	7.0	5.5	5	2.0	0.8	0.6	100	5000 V _{CM} = 50Vp-p	5000 V _{CM} = 50Vp-p
ICPLW2611												10000 V _{CM} = 400Vp-p	10000 V _{CM} = 400Vp-p

Note 1 : V_{CC} must be bypassed by a minimum 0.1μF capacitor

Note 2 : V_E = Max 0.5V above V_{CC}

Half Pitch Single Channel

Part Number	Features	Isolation Voltage	T _{OP}	V _{CC}	V _O	V _E	I _{FT}	V _{EH}	V _{EL}	V _{OL}	t _{PHL} , t _{PLH}	CM _H	CM _L
		Min (KV _{RMS})	(°C)	Max (V)	Max (V)	Max (V)	Max (mA)	Min (V)	Max (V)	Max (V)	Max (ns)	Min (V/μs)	Min (V/μs)
ICPL0600	Single Channel Optocoupler with a High Speed Integrated Photo Detector	3.75	-40 - 100	7.0	7.0	5.5	5	2.0	0.8	0.6	75	1000 Ref	1000 Ref
ICPL0601	Storable Logic Gate Output	Note 1	Note 2	7.0	7.0	5.5	5	2.0	0.8	0.6	100	5000 V _{CM} = 50Vp-p	5000 V _{CM} = 50Vp-p
ICPL0611												10000 V _{CM} = 400Vp-p	10000 V _{CM} = 400Vp-p

Note 1 : V_{CC} must be bypassed by a minimum 0.1μF capacitor

Note 2 : V_E = Max 0.5V above V_{CC}

5 Pin Half Pitch Single Channel

Part Number	Features	Isolation Voltage	T _{OP}	V _{CC}	V _O	V _E	I _{FT}	V _{OL}	t _{PHL} , t _{PLH}	CM _H	CM _L	
		Min (KV _{RMS})	(°C)	Max (V)	Max (V)	Max (V)	Max (mA)	Max (V)	Max (ns)	Min (V/μs)	Min (V/μs)	
ICPLM600	Single Channel Optocoupler with a High Speed Integrated Photo Detector	3.75	-40 - 85	7.0	7.0	No Connection	5	5	0.6	100	1000 Ref	1000 Ref
ICPLM601	Storable Logic Gate Output	Note 1	Note 2	7.0	7.0	No Connection	5	5	0.6	100	5000 V _{CM} = 50Vp-p	5000 V _{CM} = 50Vp-p
ICPLM611	Logic Gate Output										20000 V _{CM} = 1kVp-p	20000 V _{CM} = 1kVp-p

Note 1 : V_{CC} must be bypassed by a minimum 0.1μF capacitor

10Mbits/s High Speed Optocouplers

Dual Channel

Part Number	Features	Isolation Voltage	T _{OP}	V _{CC}	V _O	V _E	I _{FT}	V _{OL}	t _{PHL} , t _{PLH}	CM _H	CM _L
		Min (KV _{RMS})	(°C)	Max (V)	Max (V)	Max (V)	Max (mA)	Max (V)	Max (ns)	Min (V/μs)	Min (V/μs)
ICPL2630	Dual Channel Optocoupler with a High Speed Integrated Photo Detector Logic Gate Output	5	-40 - 100	7.0	7.0	No Connection	5	0.6	100	5000	5000
ICPL2631				Note 1						10000	10000

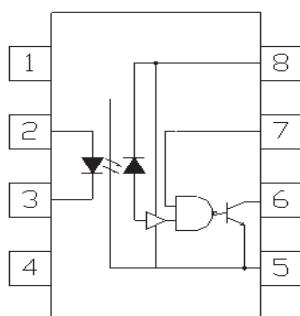
Note 1 : V_{CC} must be bypassed by a minimum 0.1μF capacitor

Half Pitch Dual Channel

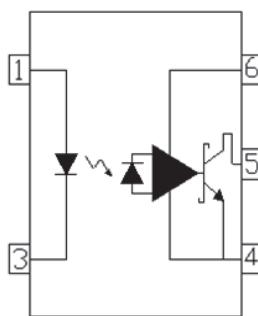
Part Number	Features	Isolation Voltage	T _{OP}	V _{CC}	V _O	V _E	I _{FT}	V _{OL}	t _{PHL} , t _{PLH}	CM _H	CM _L
		Min (KV _{RMS})	(°C)	Max (V)	Max (V)	Max (V)	Max (mA)	Max (V)	Max (ns)	Min (V/μs)	Min (V/μs)
ICPL0630	Dual Channel Optocoupler with a High Speed Integrated Photo Detector Logic Gate Output	3.75	-40 - 100	7.0	7.0	No Connection	5	0.6	100	5000	5000
ICPL0631				Note 1						10000	10000

Note 1 : V_{CC} must be bypassed by a minimum 0.1μF capacitor

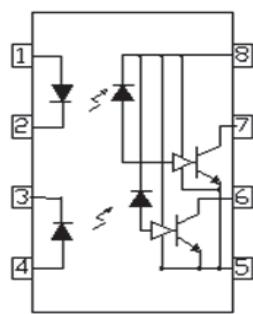
Single Channel



5 Pin Half Pitch Single Channel



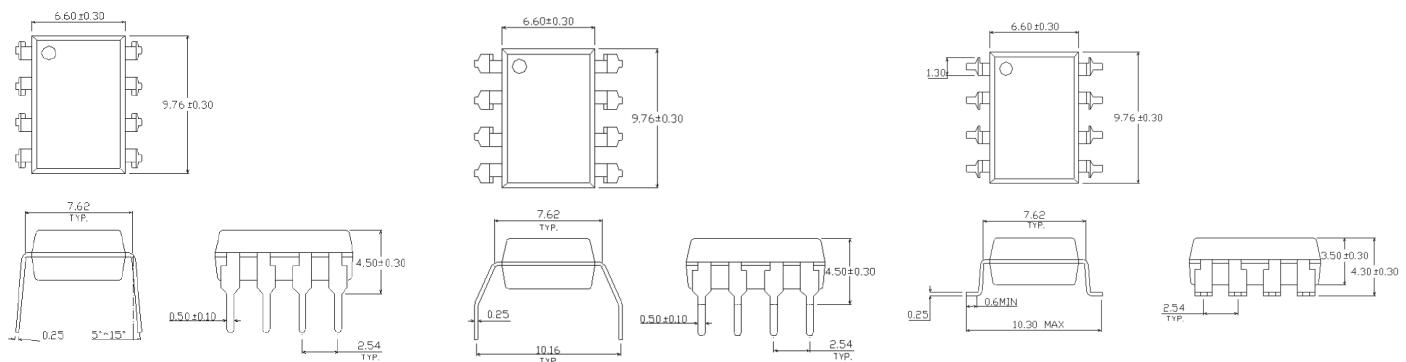
Dual Channel



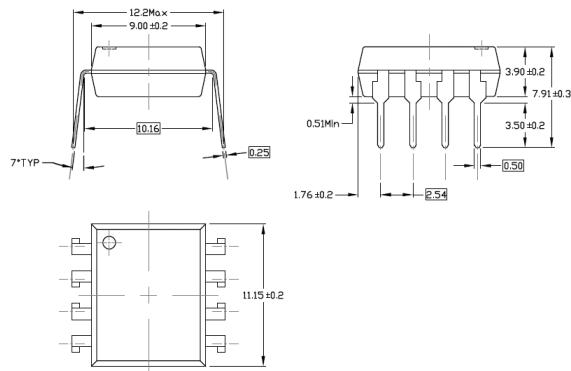
DRAWINGS OVERLEAF

10Mbits/s High Speed Optocouplers

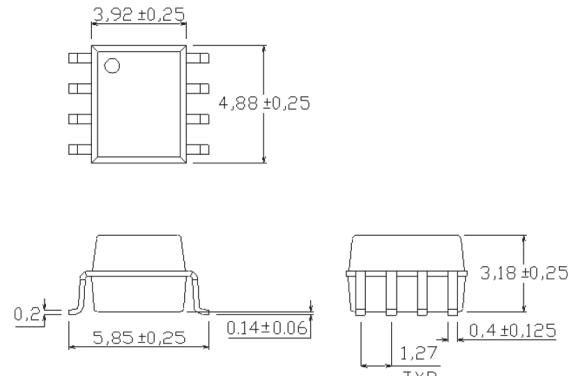
Standard Packages



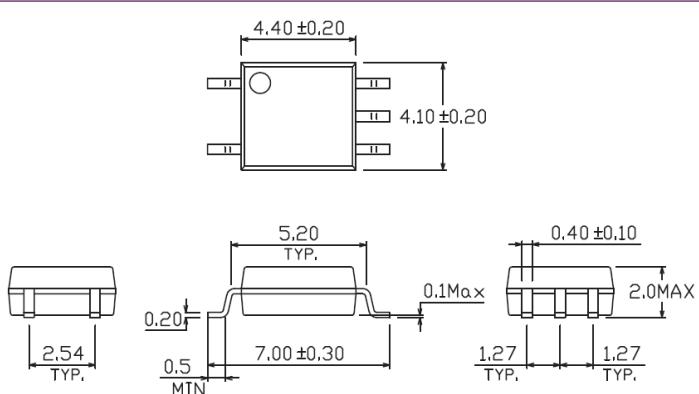
Wide Body Package



Half Pitch Package



5 Pin Half Pitch Package



High Speed Split Darlington Optocoupler

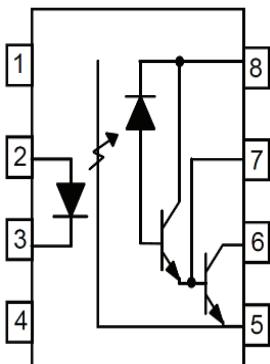
Single Channel

Part Number	Features	Isolation Voltage	T_{OP}	V_{CC}	V_O	V_{ER}	Current Transfer Ratio	V_{OL}	t_{PLH}	t_{PHL}	CM_H	CM_L
		Min (kV _{RMS})	(°C)	Max (V)	Max (V)	Max (V)	Min (%)	Max (V)	Max (μs)	Max (μs)	Min (V/μs)	Min (V/μs)
6N138	Single Channel Optocoupler with a High Speed High Gain Split Darlington Transistor Output	5	-55 - 85	7	7	0.5 Note 2	300	0.4	35	10	1000	1000
6N139				18	18		400 $I_F = 0.5\text{mA}$ $I_O = 2\text{mA}$	0.4 $I_F = 0.5\text{mA}$ $I_O = 2\text{mA}$	60 $I_F = 0.5\text{mA}$ $R_L = 4.7\text{k}\Omega$	25 $I_F = 0.5\text{mA}$ $R_L = 4.7\text{k}\Omega$	1000	1000

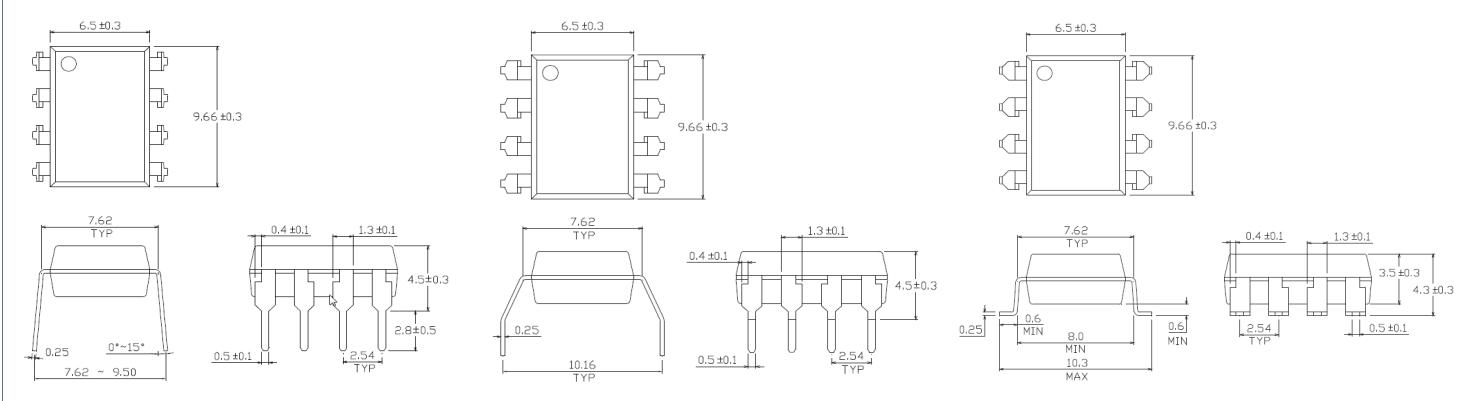
Note 1 : V_{cc} is recommended to be bypassed by a 0.1μF capacitor

Note 2 : V_{ER} = Emitter to Base Reverse Voltage

High Speed Split Darlington



Standard Packages

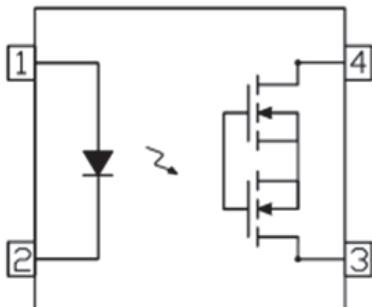


4 Pin Solid State Relay (PhotoMOS)

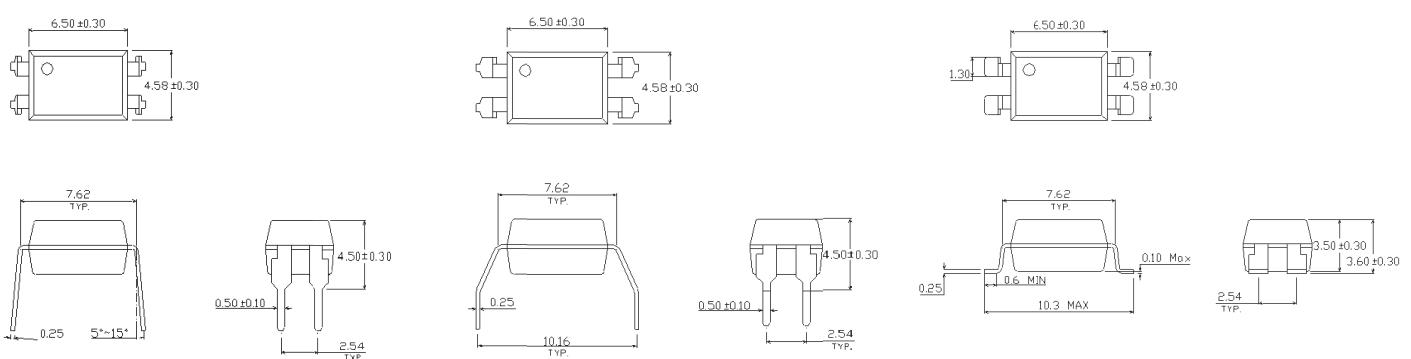
1 Form A

Part Number	Features	Isolation Voltage	T_{OP}	V_L	I_L	$I_{L(PEAK)}$	$I_{F(ON)}$	$I_{F(OFF)}$	$R_{D(ON)}$	T_{ON}	T_{OFF}
		Min (kV_{RMS})	(°C)	Max (V)	Max (mA)	Max (A)	Max (mA)	Min (mA)	Max (Ω)	Max (ms)	Max (ms)
ISP06	Single Channel Single Pole Single Throw Normally Open Optocoupler	5	-40 - 85	60	550	1.2	5	0.4	2.5	3	0.5
ISP25				250	180	0.5			15		
ISP40				400	120	0.3			30		
ISP60				600	50	0.15			70		

4 Pin Solid State Relay



Standard Packages



6 Pin Solid State Relay (PhotoMOS)

1 Form A

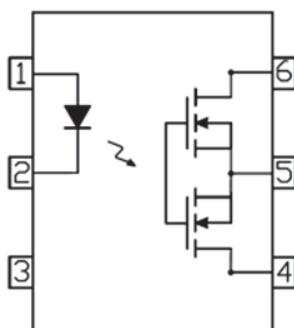
Part Number	Features	Isolation Voltage Min (kV _{RMS})	T _{OP} (°C)	Continuous Forward Current Max (mA)	V _L Max (V)	I _L Max (mA)	I _{L(Peak)} t = 100ms Max (A)	I _{F(On)} Max (mA)	I _{F(Off)} Min (mA)	T _{ON} Max (ms)	T _{OFF} I _F = 10mA I _L = Max R _L = 200Ω
IS06	Single Channel Single Pole Single Throw Normally Open Optocoupler	5	-40 - 85	50	60	550	1.2	3	0.4	3	0.5
IS25					250	180	0.5				
IS40					400	120	0.3				
IS60					600	50	0.15				

 DRAWINGS OVERLEAF

R_{D(On)}

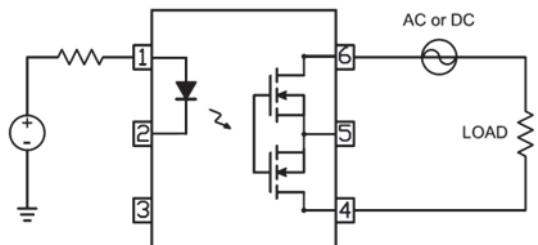
Part Number	R _{D(On)A} I _F = 5mA, I _L = Max t = 1s	R _{D(On)B} I _F = 5mA, I _L = Max t = 1s	R _{D(On)C} I _F = 5mA, I _L = Max t = 1s
	Output Configuration A Max (Ω)	Output Configuration B Max (Ω)	Output Configuration C Max (Ω)
IS06	2.5	1	0.5
IS25	15	5	3
IS40	30	20	15
IS60	70	50	30

6 Pin Solid State Relay

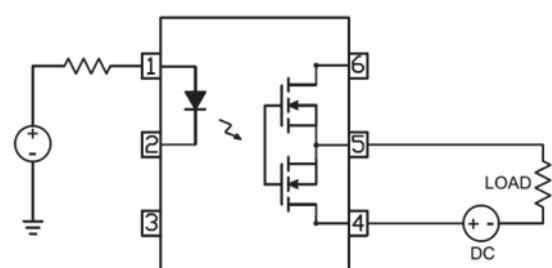
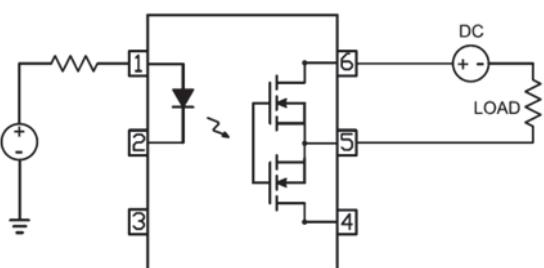


6 Pin Solid State Relay (PhotoMOS)

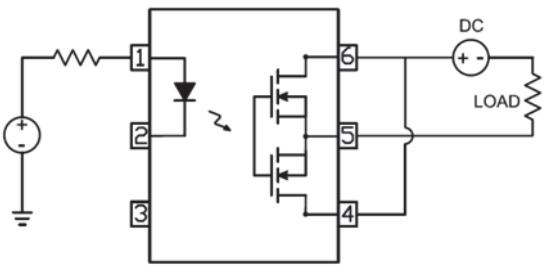
Output Configuration A



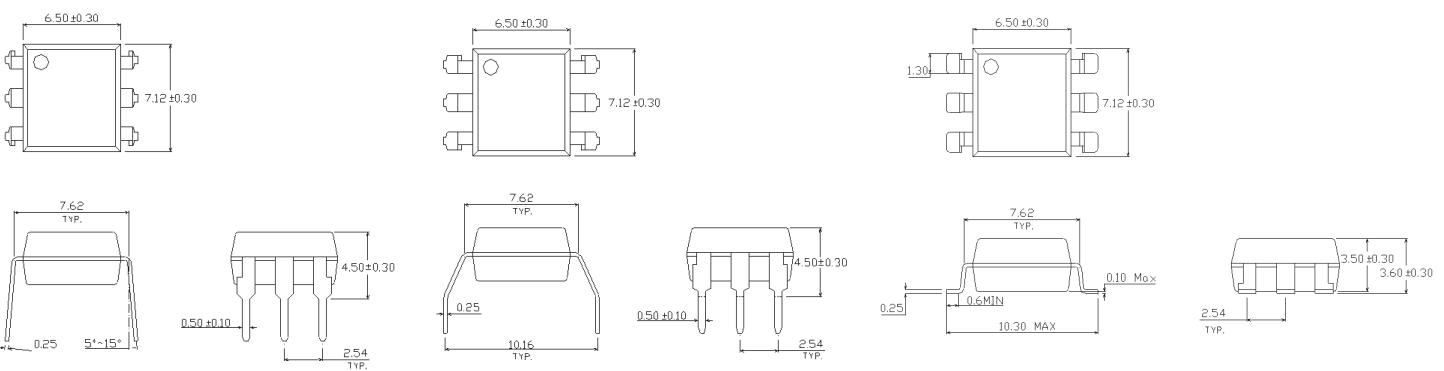
Output Configuration B



Output Configuration C



Standard Packages

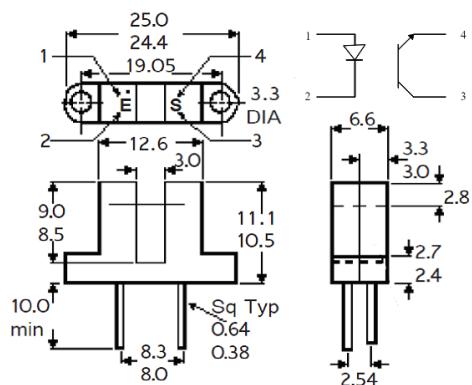


Optical Switch

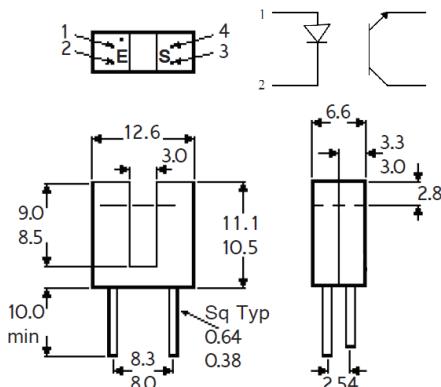
4 Pin Transistor Output

Part Number	Features	Current Transfer Ratio $I_F = 5\text{mA}$ $V_{CE} = 5\text{V}$	Slot Width (mm)	Continuous Forward Current	V_F $I_F = 50\text{mA}$	BV_{CEO} $I_C = 1\text{mA}$	I_{CEO} $V_{CE} = 10\text{V}$	$V_{CE(SAT)}$ $I_F = 20\text{mA}$ $I_C = 1.8\text{mA}$
		Min (%)		Max (mA)	Max (V)	Min (V)	Max (nA)	Max (V)
H21A1	Single channel Optical Switch with Phototransistor Output	3	3.0	50	1.7	30	100	0.4 $I_F = 30\text{mA}$ $I_C = 1.8\text{mA}$
H21A2		6						0.4
H21A3		12						0.4
H22A1		3						0.4 $I_F = 30\text{mA}$ $I_C = 1.8\text{mA}$
H22A2		6						0.4
H22A3		12						0.4
ISTS105A		2.5 $I_F = 20\text{mA}$ $V_{CE} = 5\text{V}$	5.2		1.6 $I_F = 20\text{mA}$			0.4 $I_F = 20\text{mA}$ $I_C = 0.25\text{mA}$

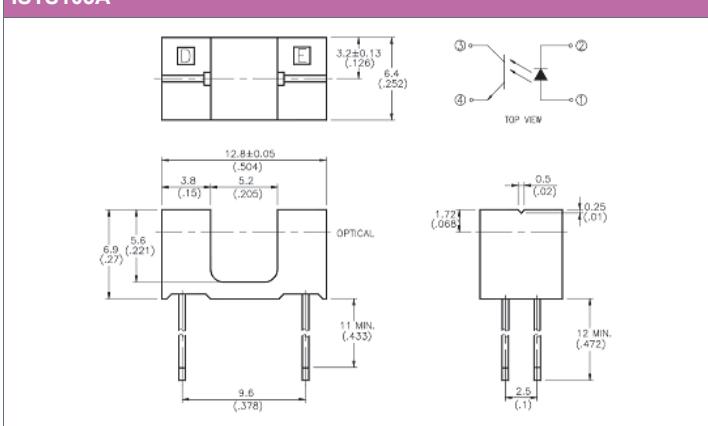
H21A1 / H21A2 / H21A3



H22A1 / H22A2 / H22A3



ISTS105A



Cross List

Isocom	Avago	Fairchild	SHARP	NEC	Toshiba
6N135	6N135	6N135			
6N136	6N136	6N136			
6N137	6N137	6N137			
6N138	6N138	6N138			
6N139	6N139	6N139			
ICPL3120	HCPL-3120				
ICPLW137	HCNW137				
ICPLW2601	HCNW2601				
ICPLW2611	HCNW2611				
ICPL2601	HCPL2601	HCPL2601			TLP554 TLP2601
ICPL2611	HCPL2611	HCPL2611		PS9587	
ICPLM600	HCPLM600				
ICPLM601	HCPLM601				TLP113 TLP115 TLP115A
ICPLM611	HCPLM611	FODM611	PC410L	PS9117A	
ICPL0630	HCPL0630	HCPL0637			
ICPL0631	HCPL0631	HCPL0638	PC4D10		
ICPL0661	HCPL0661	HCPL0639		PS9817A-2	
ICPL0600	HCPL0600	HCPL0600			
ICPL0601	HCPL0601	HCPL0601			
ICPL0611	HCPL0611	HCPL0611	PC410S	PS9817A-1	
ICPL2630	HCPL2630	HCPL2630			TLP2630
ICPL2631	HCPL2631	HCPL2631			TLP2631
ICPL2661	HCPL2661				
ICPLW135	HCNW135				
ICPLW136	HCNW136				
ICPL0500	HCPL0500	HCPL0500			
ICPL0501	HCPL0501	HCPL0501			
ICPL0530	HCPL0530	HCPL0530			
ICPL0531	HCPL0531	HCPL0531			
ICPL2530	HCPL2530	HCPL2530			TLP2530
ICPL2531	HCPL2531	HCPL2531			TLP2531
ICPL4502		HCPL4502			TLP559 TLP750 TLP759
ICPL4503		HCPL4503			
ICPLW4503	HCNW4503				
ICPLM452		FODM452			TLP112 TLP112A TLP114A
ICPLM453		FODM453	PC457	PS8101	
ICPL0452		HCPL0452			
ICPL0453		HCPL0453	PC457S		



Special Selections • Just-In-Time Delivery • Superior Service Short Lead Times • Unbeatable Quality • Technical Support

If your required part number is not shown please contact us to discuss your requirements.

All parts conform to the EU RoHS Directive 2011/65/EU

Lead Form & Packaging Options

- All devices are supplied in tubes in standard straight lead form unless specified
- All devices are available in 10.16mm lead spread to ensure a minimum creepage distance of 8.0mm
- All devices are available in surface mount lead form (SMD)
- All surface mount devices are available in Tape and Reel packaging

How to Order

- For VDE approval, add the suffix **X** to the required part number (e.g. ISP817X)
- For 10.16mm lead spread, add the suffix **G** to the required part number (e.g. ISP817XG)
- For surface mount option, add the suffix **SM** to the required part number (e.g. ISP817XSM)
- For tape and reel packaging, add the suffix **T&R** to the required part number (e.g. ISP817XSMT&R)

For Price and Delivery

- Call ISOCOM COMPONENTS direct on **+44 (0)1429 863609** or email your requirements to sales@isocom.co.uk, or
- Contact your local ISOCOM COMPONENTS distributor, visit www.isocom.com for further details



Isocom Components is a leading manufacturer of high performance infrared optoelectronic devices specialising in optocouplers and optoswitches. Since the business was established over 25 years ago, we have consistently delivered in excess of our customers expectations to become one of the most respected brands in the worldwide optoelectronic industry.

Our expert knowledge and flexible manufacturing processes result in the shortest production lead times in the world for many parts. Our product quality and superior customer service is unrivalled and is endorsed by our many long standing customers.

Isocom Components is your natural alternative to all popular commercial optocoupler industry standard types including many no longer supplied by other manufacturers. In addition, we carry out special parametric selections to meet customers' specific design requirements.

Our parts are available approved to the leading recognised industry standards and all devices are supplied in various lead forms and Tape and Reel packaging if required.

Isocom Components 2004 Ltd

Head Office:
Unit 25B Park View Road West
Park View Industrial Estate
Hartlepool
Cleveland
TS25 1PE
United Kingdom

Telephone: +44(0) 1429 863 609
Fax: + 44(0) 1429 863 581
Email: sales@isocom.co.uk
Website: www.isocom.com

Isocom Components Asia Ltd

Hong Kong Office:
Block A, 8/F
Wah Hing Industrial Mansion
36 Tai Yau Street
San Po Kong
Kowloon
Hong Kong

Telephone: +852 2995 9217
Fax: + 852 8161 6292
Email: sales@isocom.com.hk

