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Introduction

For the past decade Isocom Components has been a major supplier of opto-electronic components. Product families include all major commercial OPTOCOUPLER industry standard types including many no longer supplied by other manufacturers. A high priority for Isocom Components is the pursuit of excellent product quality and the maintenance of approvals to standards defined by VDE 0884, BS415, BS7002, UL and SETI (Nordic).
Registration for the BS5750 / ISO9000 / EN29000 is actively being sought.
A major strength of Isocom Components is its ability to carry out parametric selections to meet a customers specific circuit design requirement.
The company welcomes enquiries without imposing any quantity restrictions.

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Why use an Opto-Isolator?
Opto-Isolators provide a low-cost, space efficient, easy to use solution to high voltage isolation requirements. With careful PCB design the input circuit can be electrically isolated from the outpout stage for up to a 7,500 volts peak differential.

Which Opto-Isolator to choose?
For those new to opto-isolators the array of varieties may seem bewildering but by considering the specific application the right opto-isolator can usually be selected easily.

Transistor
Transistor opto-isolators 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 opto-isolators 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 1000% C.T.R.

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

Triac
Triac opto-isolators provide control of AC voltages on the output. For high current applications, Isocom Components' Solid State Relays offer a single package solution. For very high current applications, Isocom Components' Triac opto-isolators can be used to control an external power triac.

SCR
SCR opto-isolators provide control of half-wave AC voltages on the output. For high current applications Isocom Components' SCR opto-isolators can be used to control an external power SCR. Where the frequency of the AC voltage is too high for triac devices a pair of SCR devices can be used in parallel.

Safety approvals
A large number of Isocom Components' opto-isolators range have been approved under relevant VDE, BSI, SETI and UL standards. For ease of selection these parts have been placed in separate tables on the following pages. When ordering please do not forget to state the "X" suffix if testing to VDE 0884 and BS415 is required or the "XG" suffix if additional testing of BS7002 and SETI is required. Evidence of U.L. approval is shown as a single letter suffix to the batchcode denoting the relevant U.L. package type.

Type	Features	Current Transfer Ratio I_F = 10 mA Min (%)	Isolation Test Voltage (V) Peak	Contin. Forward Current Max (mA)	VBR I_R = 10µA Min (V)	BV_{CEO} I_C = 1mA Min (V)	I_{CEO} (Dark) V_{CE} = 10V Max (nA)	V_{CE} (Sat) I_F = 16mA I_C = 2mA Max (V)	Schematic No.	Dim. Fig. No.
H24A1	4 Pin Package	100	5300	60	3.0	30	100	0.4 (I_F = 10mA) (I_C = 0.5mA)	3	4
H24A2		20								
H24A3		75								
H24A4		50								
H11A1	6 Pin DIP Optically Coupled pair with Infrared Emitting Diode and Silicon Photo Transistor	50	3500				50		5	1
IL2		100 to 30 (I_F = 1mA)	7500			70		0.4		
IL1		20				30		0.5 (I_C = 1.5mA)		
IL5		50						0.5 (I_C = 0.5mA)		
IS74		12.5 (I_F = 16mA)	3500							
MCT2		20								
MCT2E		50								
TIL111		12.5 (I_F = 16mA) V_{CE} = 0.4V					100	0.4 (I_F = 10mA) (I_C = 2mA)		
TIL112		20				70				
TIL117		50								
SFH609-1		40 – 80	5300		6.0	90	50	0.4		
SFH609-2		63 – 125								
SFH609-3		100 – 200					100			

Type	Features	Current Transfer Ratio I_F = 10 mA Min (%)	Isolation Test Voltage (V) Peak	Contin. Forward Current Max (mA)	VBR I_R = 10µA Min (V)	BV_{CEO} I_C = 1mA Min (V)	I_{CEO} (Dark) Max (nA)	V_{CE} (Sat) I_F = 10mA I_C = 0.5mA Max (V)	Schematic No.	Dim. Fig. No.
H11D1	Optically Coupled pair with Infrared Emitting Diode and Silicon High Voltage Transistor	20	7500	60	1.5	300	100 (V_{CE} = 200V)	0.4	5	3
H11D2										
H11D3			5300			200	100 (V_{CE} = 100V)			
H11D4		10								

Type	Features	Current Transfer Ratio Min (%)	CTR Test Conditions	Isolation Test Voltage V	Contin. Forward Current Max (mA)	BV_{CEO} I_C = 1mA Min (V)	I_{CEO} (Dark) V_{CE} = 10V Max (nA)	V_{CE} (Sat) Max (V)	Schematic No.	Dim. Fig. No.
4N25	Optically Coupled pair with Infrared Emitter and Photo Transistor Detector. Base Lead Connected	20	I_F = 10mA V_{CE} = 10V	3.300 rms	80	30	50	0.5 (I_F = 50mA) (I_C = 2mA)	5	1
4N26										
4N27		10					100			
4N28										
4N35		100			60		50	0.3 (I_F = 10mA) (I_C = 0.5mA)		
4N36										
4N37										
4N38		20	I_F = 20mA V_{CE} = 1V		80	80		1.0 (I_F = 20mA) (I_C = 4mA)		
4N38A										
CNX35		40	I_F = 10mA V_{CE} = 0.4V	5.300 d.c.	100	30		0.4 (I_F = 10mA) (I_C = 4mA)		
CNX72 A										
CNX83-AG										
CNY17-1		40 – 80	I_F = 10mA V_{CE} = 5V	4.400 d.c.	60	70		0.4 (I_F = 10mA) (I_C = 2.5mA)		
CNY17-2		63 – 125								
CNY17-3		100 – 200								
CNY17-4		160 – 320								
CNY17-5		200 – 400								
CNY75A		63 – 125 15	Higher CTR figures I_F = 10mA V_{CE} = 5V	5.300 d.c.		90	150	0.3 (I_F = 10mA) (I_C = 1mA)		
CNY75B		100 – 200 30								
CNY75C		160 – 320 60	Lower CTR figures I_F = 1mA V_{CE} = 5V							
CQY80		50	I_F = 10mA V_{CE} = 5V			30	200			
H11AV1		100 – 300	I_F = 10mA V_{CE} = 10V	3.750 rms		70	50	0.4 (I_F = 20mA) (I_C = 2mA)		
H11AV2		50								
H11AV3		20								
IS201		75 10	Higher CTR figures I_F = 10mA V_{CE} = 10V Lower CTR figures I_F = 1mA V_{CE} = 10V	5.000 d.c.		30	50	0.4 (I_F = 10mA) (I_C = 2mA)		
IS202		125 – 250 30								
IS203		225 – 450 50								
IS204		200 – 400 100				70		0.4 (I_F = 10mA) (I_C = 2.5mA)		
MOC 8100		50 30 (0 – 70°C)	I_F = 1mA V_{CE} = 5V	7.500 pk		30		0.5 (I_F = 1mA) (I_C = 0.1mA)		

*Note 1: To obtain a product tested to the above four safety approvals add "X" after basic type number e.g. 4N35X.
To obtain 10mm lead spread add suffix "G" after full type number e.g. 4N35XG.

Type	Features	Current Transfer Ratio Min (%)	CTR Test Conditions	Isolation Test Voltage V	Contin. Forward Current Max (mA)	BVCEO IC = 1mA Min (V)	ICEO (Dark) VCE = 10V Max (nA)	VCE (Sat) Max (V)	Schematic No.	Dim. Fig. No.
SFH600-0	Optically Coupled pair with Infrared Emitter and Photo Transistor Detector. Base Lead Connected	40 – 80	IF = 10mA VCE = 5V	2.800 rms	60	70	35	0.4 (IF = 10mA) (IC = 2.5mA)	5	1
SFH600-1		63 – 125								
SFH600-2		100 – 200					70			
SFH600-3		160 – 320								
SFH600-4		200 – 400								
SFH601-1		40 – 80		5.300 d.c.			50			
SFH601-2		63 – 125								
SFH601-3		100 – 200					100			
SFH601-4		160 – 320								
SFH601-5		200 – 400								

Photo Transistor

Photo Transistor – Safety Approvals, VDE 0884, BSI, SETI und UL *Note 1

Type	Features	Current Transfer Ratio Min (%)	CTR Test Conditions	Isolation Test Voltage V	Contin. Forward Current Max (mA)	BVCEO IC = 1mA Min (V)	ICEO (Dark) VCE = 10V Max (nA)	VCE (Sat) Max (V)	Schematic No.	Dim. Fig. No.
CNX82A	Optically Coupled pair with Infrared Emitter and Photo Transistor Detector. Base Lead Connected	40	IF = 10mA VCE = 0.4V	5.300 d.c.	60	50	50	0.4 (IF = 10mA) (IC = 4mA)	8	1
CNY17F-1		40 – 80	IF = 10mA VCE = 5V	4.400 d.c.		70		0.4 (IF = 10mA) (IC = 2.5mA)		
CNY17F-2		63 – 125								
CNY17F-3		100 – 200								
CNY17F-4		160 – 320								
MOC8101		50 – 80	IF = 10mA VCE = 10V	7.500 d.c.		30				
MOC8102		73 – 117								
MOC8103		108 – 173								
MOC8104		160 – 256								
MOC8111		20								
MOC8112		50								
MOC8113		100								
IS205		100								
IS206		50		5.300 pk				0.4 (IF = 10mA) (IC = 0.5mA)		

*Note 1: To obtain a product tested to the above four safety approvals add "X" after basic type number e.g. 4N35X.
To obtain 10mm lead spread add suffix "G" after full type number e.g. 4N35XG.

Single Channel DIP,
FET Couplers

FET Couplers

Type	Features	Isolation Breakdown Voltage Min (RMS)	On State Resistance I_F = 16mA I_{46} = ±100µA Max (Ω)	Output Breakdown Voltage I_{46} = ±10µA Max (V)	Contin. Forward Current Max (mA)	Off State current I_{46} = ±15V Max (nA)	Schematic No.	Dim. Fig. No.
H11F1	Optically Coupled pair with Infrared LED Emitter and a Symmetrical Bilateral Silicon Photo Detector.	2.500	200	30	60	50	10	3
H11F2			330					
H11F3			470					
IS610			200					
IS611		5.000	170					

General Purpose 8 Pin DIP

Dual Channel

Type	Features	Current Transfer Ratio I_F = 10mA Min (%)	Isolation Breakdown Voltage V (pk)	Contin. Forward Current Max (mA)	VBR LED I_R = 10µA Min (V)	BV_{CEO} I_C = 1 mA Min (V)	I_{CEO} (Dark) V_{CE} = 10 V Max (nA)	V_{CE} (Sat) I_F = 16 mA I_C = 0.5mA Max (V)	Schematic No.	Dim. Fig. No.
ILD2	Two Isolators in one Package Independently Isolated from each other	100 30 (I_F = 1mA)	7.500	60	3.0	70	50	0.4 (I_C = 1.6mA)	24	9
ILD1		20				50				
ILD5		50				70				
ILD74		12.5 (I_F = 16mA)				30	500 (V_{CE} = 5V)	0.5		
MCT6		20					100	0.4		

HIgh Isolation Voltage, High CTR, High Sensitivity

Dual Channel

Type	Features	Current Transfer Ratio I_F = 10mA	Current Transfer Ratio I_F = 1.0mA Min (%)	Isolation Breakdown Voltage V (DC)	Contin. Forward Current Max (mA)	VBR LED I_R = 10µA Min (V)	BV_{CEO} I_C = 1mA Min (V)	I_{CEO} (Dark) V_{CE} = 10V Max (nA)	V_{CE} (Sat) I_F = 10mA I_C = 2mA Max (V)	Schematic No.	Dim. Fig. No.
ISD201	Two Isolators in one Package Independently Isolated from each other	75 min	10	5.000	60	3.0	30	50	0.4	24	9
ISD202		125 – 250	30								
ISD203		225 – 450	50								
ISD204		200 – 400	100								

Quad Channel

General Purpose 16 Pin DIP

Type	Features	Current Transfer Ratio I_F = 10mA V_{CE} = 10V Min (%)	Isolation Breakdown Voltage V (Peak)	Contin. Forward Current Max (mA)	VBR LED I_R = 10µA Min (V)	BV_{CEO} I_C = 1mA Min (V)	I_{CEO} (Dark) V_{CE} = 10V Max (nA)	V_{CE} (Sat) I_F = 16mA I_C = 2mA Max (V)	Schematic No.	Dim. Fig. No.
ILQ2	Four Isolators in one Package Independently Isolated from each other	100 30 (I_F = 1mA)	7.500	60	3.0	70	50	0.5	26	8
ILQ1		20				50				
ILQ5		50				70				
ILQ74		12.5 (I_F = 16mA)				30				

High Isolation Voltage, High CTR, High Sensitivity

Type	Features	Current Transfer Ratio I_F = 10mA V_{CE} = 10V Min (%)	Current Transfer Ratio I_F = 1.0mA V_{CE} = 10V Min (%)	Isolation Breakdown Voltage V (Peak)	Contin. Forward Current Max (mA)	VBR LED I_R = 10µA Min (V)	BV_{CEO} I_C = 1mA Min (V)	I_{CEO} (Dark) V_{CE} = 10 V Max (nA)	V_{CE} (Sat) I_F = 10mA I_C = 2mA Max (V)	Schematic No.	Dim. Fig. No.
ISQ201	Four Isolators in one Package Independently Isolated from each other	75 min	10	7.500	60	3.0	30	50	0.4	26	8
ISQ202		125 – 250	30								
ISQ203		225 – 450	50								
ISQ204		200 – 400	100								

In-Line Packages

Four pins per channel with in line LED's and Transistors

Type	Features	Current Transfer Ratio I_F = 5mA V_{CE} = 5V Min (%)	Isolation Test Voltage V RMS	Contin. Forward Current Max (mA)	VBR LED I_R = 10µA Min (V)	BV_{CEO} I_C = 1mA Min (V)	I_{CEO} (Dark) V_{CE} = 24V Max (nA)	V_{CE} (Sat) I_F = 8mA I_C = 2.4mA Max (V)	Schematic No.	Dim. Fig. No.
ISP321-1	Optically Coupled pair with infrared LED, Emitter and NPN Silicon Photo Transistor	50 – 600 CTR Selection Available "GB" 100% Min "BL" 200% Min	5.000	50	5	80	100	0.4	29	7
ISP621-1						55				
ISP521-1			2.500							
ISP817			5.000			35		0.2 (I_F = 20mA) (I_C = 1mA)		
ISP321-2	Two Isolators in one Package Independently Isolated from each other					80		0.4	28	9
ISP621-2						55				
ISP521-2			2.500							
ISP827			5.000			35		0.2 (I_F = 20mA) (I_C = 1mA)		
ISP321-4	Four Isolators in one Package Independently Isolated from each other					80		0.4	27	8
ISP621-4						55				
ISP521-4			2.500							
ISP847			5.000			35		0.2 (I_F = 20mA) (I_C = 1mA)		

Single Channel, 6 and 4 Pin DIP

AC Input

Type	Features	Current Transfer Ratio Min $I_F = \pm 10mA$ $V_{CE} = 10V$	Isolation Breakdown Voltage V (RMS)	Contin. Forward Current Max (mA)	V_F LED $I_R = \pm 10mA$ Max (V)	BV_{CEO} $I_C = 1mA$ Min (V)	I_{CEO} (Dark) $V_{CE} = 10V$ Max (nA)	V_{CE} (Sat) $I_F = \pm 10mA$ $I_C = 0.5mA$ Max (V)	Schematic No.	Dim. Fig. No.
H11AA1	Optically Coupled pair with two Infrared LED Emitter connected in Inverse Parallel and a NPN Transistor	20	2.500	60	1.5	30	100	0.4	30	3
H11AA2		10								
H11AA3		50								
H11AA4		100								
CNY35		10								
IS604		50	5.000							
ISP814		20 ($I_F = \pm 1mA$) $V_{CE} = 5V$		50	1.4 ($I_F = \pm 1mA$)	35	100 ($V_{CE} = 20V$)	0.2 ($I_F = \pm 20mA$) ($I_C = 1mA$)	32	7

Single Channel DIP, Microprocessor Compatible

Schmitt Trigger

Type	Features	Turn-on Threshold Current $R_L = 270\Omega$ $V_{CC} = 5V$ Max (mA)	Isolation Breakdown Voltage V (RMS)	Contin. Forward Current Max (mA)	VBR LED $I_R = 10\mu A$ Max (V)	Turn-off Threshold Current $R_L = 270\Omega$ $V_{CC} = 5V$ Min (V)	Output Voltage $R_L = 270\Omega$ $V_{CC} = 5V$ Max (V)	Schematic No.	Dim. Fig. No
H11L1	Optically Coupled pair with Infrared LED Emitter & Microprocessor Compatible Schmitt Trigger	1.6	5.000	60	3	0.3	0.4	9	3
H11L2		10.0							
H11L3		5.0							
H11L4		2.0							
IS609		1.6							

Single / Dual Channel 8 Pin DIP

High Speed Transistor Couplers

Type	Features	Current Transfer Ratio Min (%)	Specified Input Current (mA)	Typical Data Rate (NRZ)	Isolation Voltage Min (RMS)	Propagation Delay time $V_{CC} = 5V$ $I_F = 16mA$ t_{PHL} Max (µS)	Propagation Delay time $V_{CC} = 5V$ $I_F = 16mA$ t_{PHL} Max (µS)	Schematic No.	Dim. Fig. No.
6N135	Optically Coupled pair with LED & Photo Detector	7	16	1 Mbits/s	2.500	1.5 ($R_L = 4.1K\Omega$)	1.5 ($R_L = 4.1K\Omega$)	11	6
6N136		19				0.8 ($R_L = 1.9K\Omega$)	0.8 ($R_L = 1.9K\Omega$)	12*	
ICPL4502	High C.M.R. 1 kv/µs. min							13*	
ICPL2530	Dual Channel Transistor Output High Speed	7				1.5 ($R_L = 4.1K\Omega$)	1.5 ($R_L = 4.1K\Omega$)	14	
ICPL2531		19				0.8 ($R_L = 1.9K\Omega$)	0.8 ($R_L = 1.9K\Omega$)	15*	
ICPL2533		12		250 Kbits/s		1.5 ($R_L = 7.5K\Omega$) ($I_F = 8mA$)	2.5 ($R_L = 7.5K\Omega$) ($I_F = 8mA$)	14	

*Note 1: Improved noise shield gives superior common mode rejection.

High Speed, High Gain Couplers

Single / Dual Channel 8 Pin DIP

Type	Features	Current Transfer Ratio Min (%)	Typical Data Rate (NRZ)	Specified Input Current (mA)	Isolation Voltage Min (RMS)	Propagation Delay time		Schematic No.	Dim. Fig. No.
						t_{PHL} Max (µS)	t_{PHL} Max (µS)		
6N138	Optically Coupled pair with LED and Integrated High Gain Photo Detector IC	300	300 Kbits/s	1.6	2500	10 (I_F = 1.6mA) (R_L = 2.2KΩ)	35 (I_F = 1.6mA) (R_L = 2.2KΩ)	20	6
6N139		400		0.5		25 (I_F = 0.5mA) (R_L = 4.7KΩ)	60 (I_F = 0.5mA) (R_L = 4.7KΩ)	21*	
ICPL2730	Dual Channel Optically Coupled pair with LED and Integrated High Gain Photo Detector IC	300	200 Kbits/s	1.6		20 (I_F = 1.6mA) (R_L = 2.2KΩ)	35 (I_F = 1.6mA) (R_L = 2.2KΩ)	22	
ICPL2731		400		0.5		100 (I_F = 0.5mA) (R_L = 4.7KΩ)	60 (I_F = 0.5mA) (R_L = 4.7KΩ)	23*	
IS4N45	Optically Coupled pair with LED and Integrated High Gain Photo Detector IC	250	3 Kbits/s	1.0		50 (I_F = 10mA) (R_L = 220Ω)	500 (I_F = 10mA) (R_L = 220Ω)	6	3
IS4N46		350		0.5		50 (I_F = 10mA) (R_L = 220Ω)	500 (I_F = 10mA) (R_L = 220Ω)		

*Note: Improved noise shield gives superior common mode rejection.

Very High Speed Logic Couplers

Single / Dual Channel 8 Pin DIP

Type	Features	Current Transfer Ratio Min (%)	Specified Input Current (mA)	Typical Data Rate (NRZ)	Isolation Voltage Min (RMS)	Propagation Delay time		Schematic No.	Dim. Fig. No.
						R_L = 350Ω C_L = 15pf	I_F = 7.5mA		
						t_{PHL} Max (nS)	t_{PHL} Max (nS)		
6N137	Very High Speed – LSTTL/TTL Compatible	700	5	10 Mbits/s	2.500	75	75	16	6
ICPL2601	As 6N137 but with inceased C.M.R.							17*	
ICPL2630	Very High Speed Dual Channel							18	
ICPL2631	As ICPL 2630 but with inceased C.M.R.							19*	

*Note: Improved noise shield gives superior common mode rejection.

Type	Features	Current Transfer Ratio Min (%)	Isolation Voltage VDC	Contin. Forward Current Max (mA)	VBR LED I_R = 10µA Max (V)	BV_{CEO} I_C = 1mA Min (V)	I_{CEO} (Dark) V_{CE} = 10V Max (nA)	V_{CE} (Sat) Max (V)	Schematic No.	Dim. Fig. No.
H11B1	Optically Coupled pair with infrared Emitter and Photo Darlington Transistor	500 I_F = 1mA	3.550	60	3.0	30	100	1.0 (I_F = 1mA) (I_C = 1mA)	6	2
TIL113		300 I_F = 10mA				55		1.2 (I_F = 50mA) (I_C = 50mA)		
IS660	High Collector to Emitter Break Down Voltage with over 1000% CTR	1000 I_F = 1mA	7.500		6	200		1.2 (I_F = 10mA) (I_C = 100mA)	25	1
IS661						300				
IS662						400				
H11G1		1.000 I_F = 10mA	4.000			100		1.0 (I_F = 10mA) (I_C = 100mA)		3
H11G2						80				
H11G3						50				

Type	Features	Current Transfer Ratio I_F = 1mA Min (%)	Isolation Voltage D.C.	Contin. Forward Current (mA)	VBR LED I_R = 10µA Max (V)	BV_{CEO} I_C = 1mA Min (V)	I_{CEO} (Dark) V_{CE} = 10V Max (nA)	V_{CE} (Sat) I_F = 16mA I_C = 2mA	Schematic No.	Dim. Fig. No.
H24B1	Optically Coupled pair with Infrared Emitter and Photo Darlington Transistor. Base Lead not Connected.	1.000 (I_F = 5mA)	5.300 (pk)	60	3.0	30	1.000	1.0	4	4
H24B2		400 (I_F = 5mA)								
H24B3		750 (I_F = 5mA)								
ISPD60		100	2.500						7	3
ISPD61		500								
ISPD62		1000								
ISPD63		100	5.000							
ISPD64		500								
ISPD65		1.000								
MOC8050		500 (I_F = 10mA)	7.500 (pk)			80	1.000 (V_{CE} = 60V)			1
TIL119		300 (I_F = 10mA)	1.500			30	100	1.0 (I_F = 10mA) (I_C = 30mA)		3

Photo Darlington

With Base connection, Safety Approvals to VDE 0884, BSI, SETI, UL *Note 1

Type	Features	Current Transfer Ratio I_F = 10mA Min (%)	Isolation Breakdown Voltage V	Contin. Forward Current Max (mA)	VBR LED I_R = 10µA Min (V)	BV_{CEO} I_C = 1mA Min (V)	I_{CEO} (Dark) V_{CE} = 10V Max (nA)	V_{CE} (Sat) I_F = 8mA I_C = 2mA Max (V)	Schematic No.	Dim. Fig. No.
4N29	Optically Coupled pair with Infrared Emitter and Photo Darlington Transistor.	100	3.300 rms	60	3	30	50	1.0	6	2
4N30										
4N31		50								
4N32		500								
4N33										
MOC8080			7.500 pk			55		1.0 (I_F = 1mA) (I_C = 1mA)		

*Note 1: To obtain a product tested to the above four safety approvals add "X" after basic type number e.g. 4N29X.
To obtain 10mm lead spread add suffix "G" after full type number e.g. 4N29XG.
*Note 2: 600V Triacs will be available in future.

Triac Couplers

Single Channel, 6 Pin DIP

Type	Features	Input Trigger Current VTM = 3V Max (mA)	Isolation Test Voltage V (RMS)	Contin. Forward Current Max (mA)	VBR LED I_R = 10µA Min (V)	Peak Off-State Reverse Current V_{DRM} = Rated Max (nA)	Peak Blocking Voltage Min (V)	Schematic No.	Dim. Fig. No.
H11J1	Optically Coupled pair with infrared LED Emitter and Light Activated Silicon Bilateral Switch	10	3.600	60	3	100	250	2	2
H11J2		15							
H11J3		10	2.500						
H11J4		15							
H11J5		25							
IS3020		30					400		
IS3021		15							

Single Channel, 6 Pin DIP Approved to VDE 0884, BSI, SETI, UL *Note 1

MOC3009	Optically Coupled pair with infrared LED Emitter and Light Activated Silicon Bilateral Switch	30	7.500 pk	60	3	100	250	2	2
MOC3010		15							
MOC3011		10							
MOC3012		5					400		
MOC3020		30							
MOC3021		15							
MOC3022		10							
MOC3023		5							
IS607		10	4.000 rms				450		
IS608		7							

*Note 1: To obtain a product tested to the above four safety approvals add suffix "X" to the basic type number e.g. MOC3009X.
To obtain 10mm lead spread add suffix "G" to the basic number e.g. MOC3009XG.
*Note 2: 600V Triacs will be available in future.

Zero Crossing Triac Couplers

Type	Features	Input Trigger Current VTM = 3V Max (mA)	Isolation Test Voltage V (Peak)	Contin. Forward Current Max (mA)	Peak Blocking Voltage Min (V)	Peak Off-State Reverse Current V_{DRM} = Rated Max (nA)	Zero Crossing Inhibit Voltage I_{FT} = Rated Max (V)	Schematic No.	Dim. Fig. No.
MOC3030	Optically Coupled pair with infrared LED and Silicon Detector. Performing the function of a Zero Voltage Crossing Bilateral Triac Driver	30	7.500	60	250	300	30	1	1
MOC3031		15							
MOC3032		10							
MOC3033		5							
MOC3040		30			400		35		
MOC3041		15							
MOC3042		10							
MOC3043		5							
MOC3060		30			600				
MOC3061		15							
MOC3062		10							
MOC3063		5							
IS620		30							
IS621		15							
IS622		10							
IS623		7							

Photo SCR

Type	Features	Input Trigger Current V_{AK} = 100V R_{GK} = 27KΩ Max (mA)	Isolation Breakdown Voltage V (RMS)	Contin. Forward Current Max (mA)	VBR LED I_R = 10μA Min (V)	Peak Off-State Reverse Voltage R_{GK} = 10KΩ Ta = 100°C Min (V)	On-State Voltage I_{TM} = 0.3A Max (V)	Schematic No.	Dim. Fig. No.
H11C1	Optically Coupled pair with infrared LED Emitter and Light Activated Silicon Controlled Rectifier	11	5.000	60	3.0	200	1.3	31	1
H11C2									
H11C3		14							
H11C4		11				400			
H11C5									
H11C6		14							
CNY30		11				200			
CNY34						400	1.3 (I_{TM} = 100mA)		
MCS2400		14							
4N39		14				200	1.3		
4N40						400	1.3 (I_{TM} = 100mA)		
IS605		11							
IS606		14				625			

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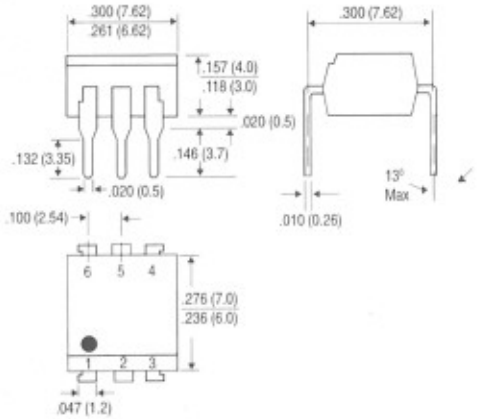
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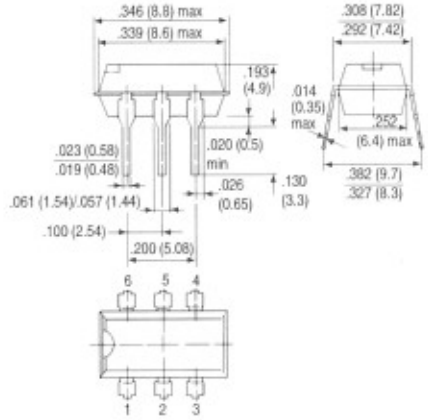
2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(6.4) max
.023 (0.58)
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.020 (0.5)
min
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(3.3)
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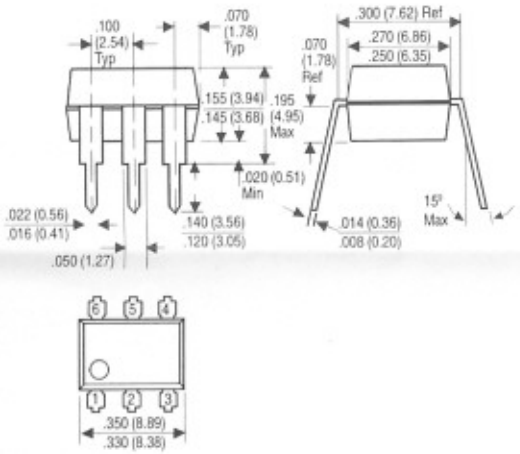
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Typ
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Typ
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.145 (3.68)
.195
(4.95)
Max
.020 (0.51)
Min
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.016 (0.41)
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Max
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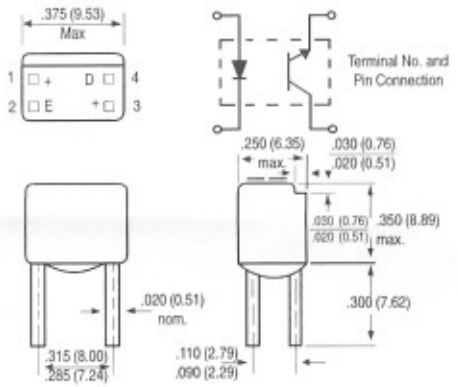
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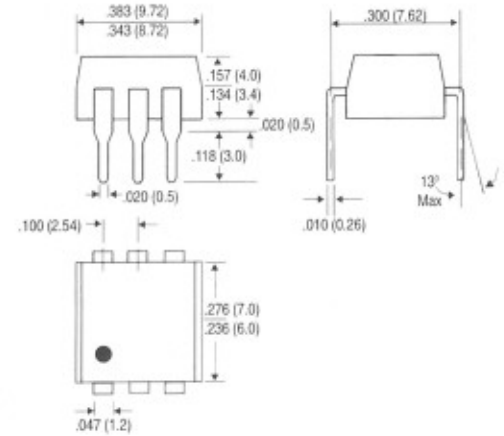
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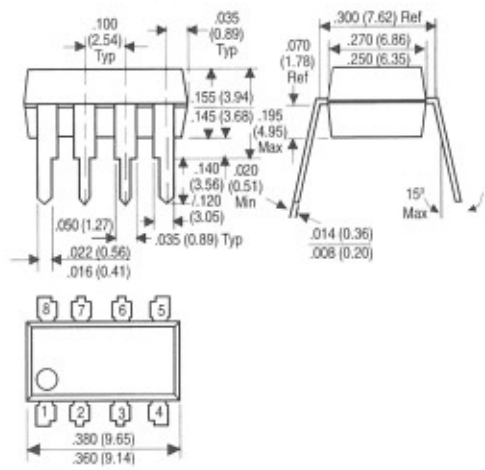
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(2.54)
Typ
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Typ
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(1.78)
Ref
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.145 (3.68)
.195
(4.95)
Max
.140
(3.56)
.120
(3.05)
.020
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Min
15°
Max
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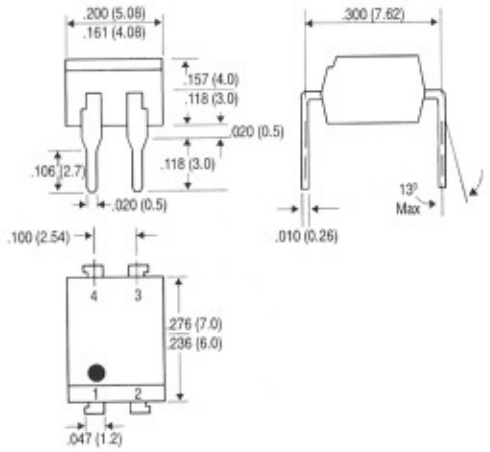

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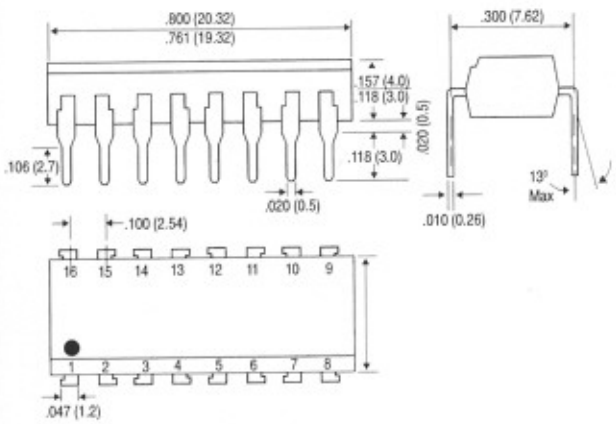

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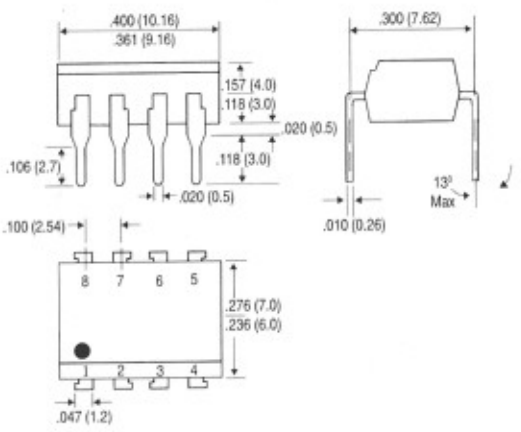

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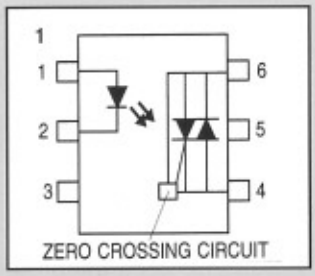

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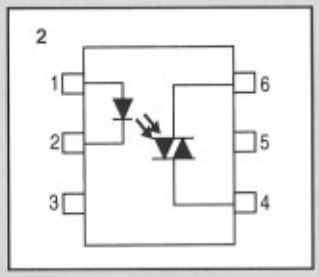

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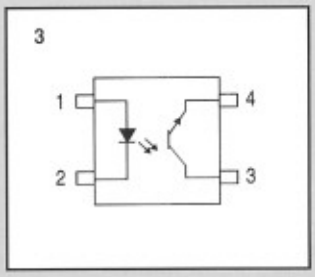

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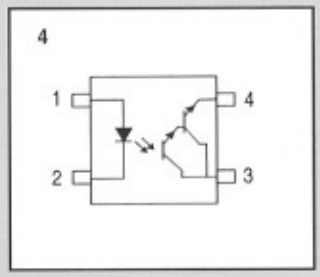

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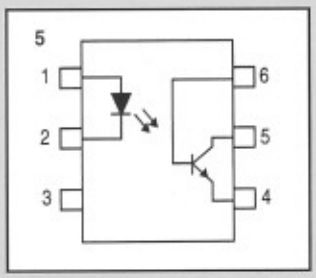

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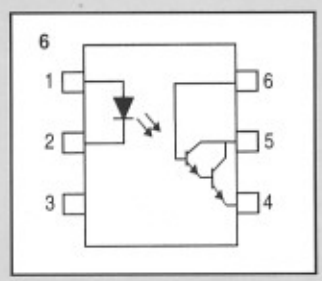

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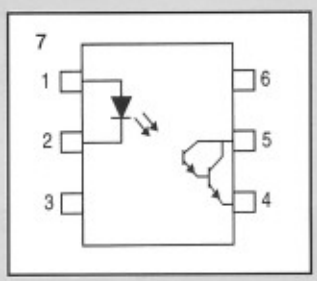

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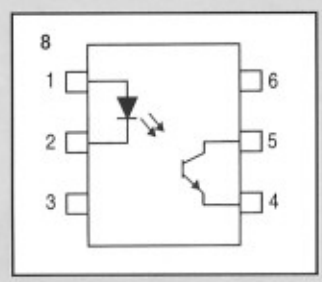

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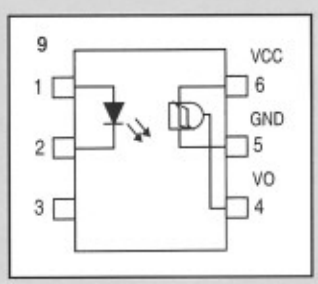

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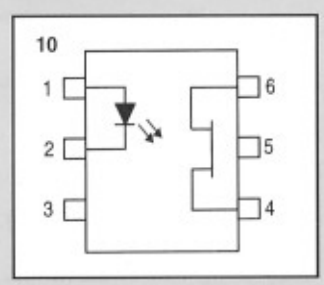

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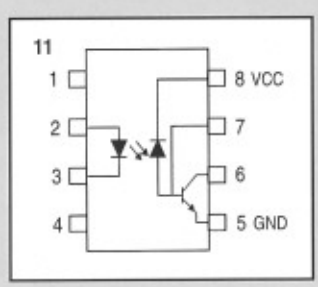

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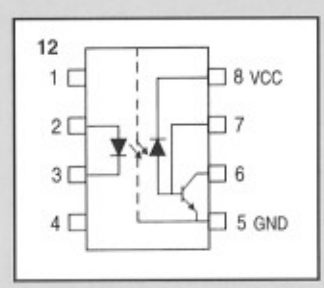

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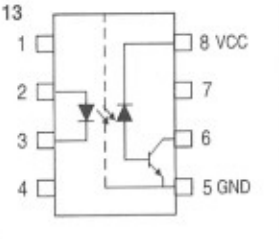

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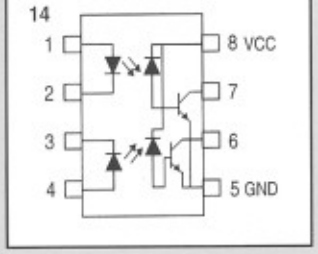

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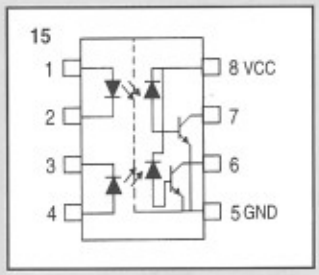

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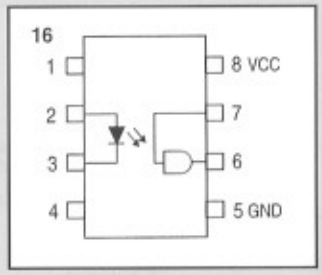

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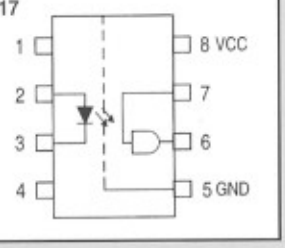

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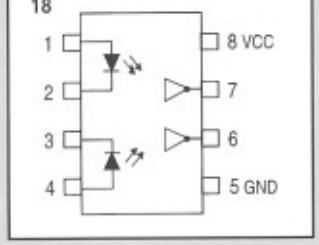

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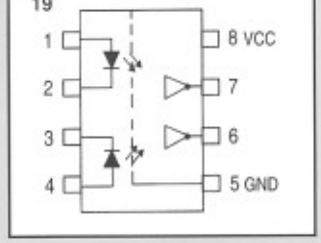

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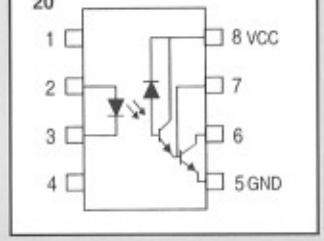

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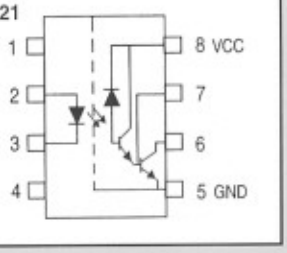

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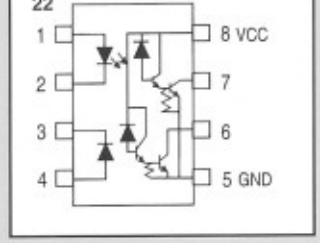

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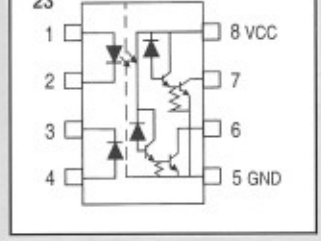

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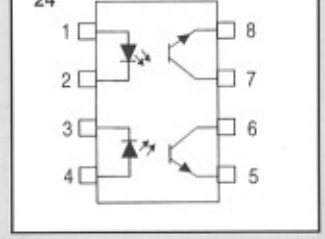

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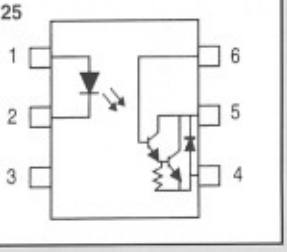

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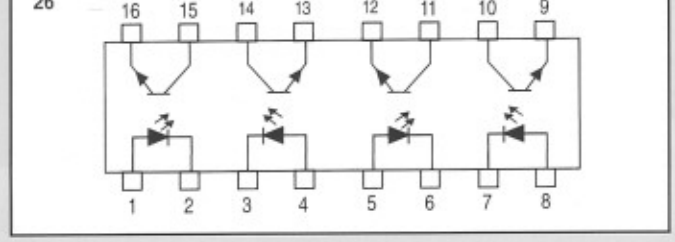

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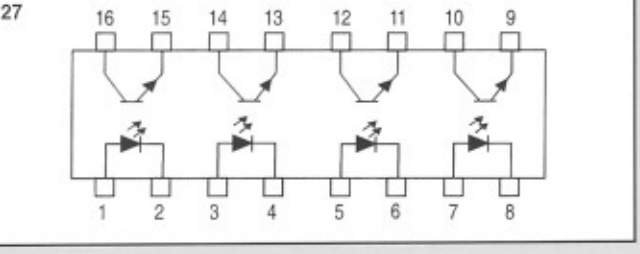

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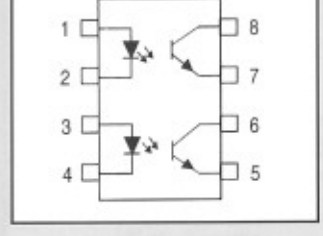

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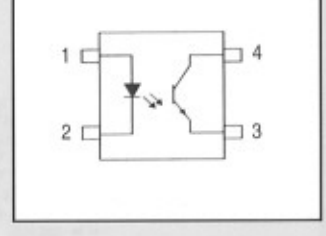

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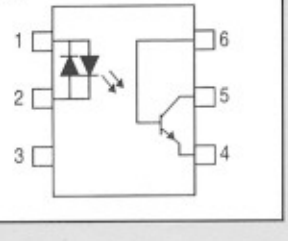

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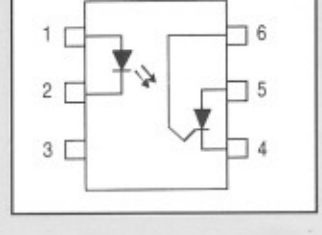
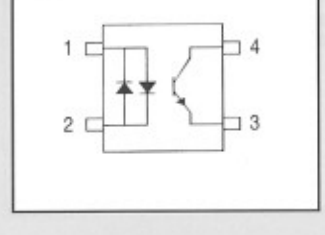
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