Emitter / Sensor Pairs

Infrared Emitters

Part Number	Features	Radient Flux Min (mW)	Forward Current Max mA	Reverse Voltage Max (V)	Forward Voltage Max (V)	Wave Length Typ. (nM)	Beam Angle Degrees	Package No.
IS654A	3mm Dia. TI Package	1.5 (I_F = 40mA)	60	3	1.5 (I_F = 40mA)	950	± 20	10
IS658A	Side Emitting	0.7 (I_F = 20mA)	50	6	1.4 (I_F = 20mA)	950	± 13	8
IS656A	Side Emitting Diode that can be used with Isocom Schmitt Trigger Detectors	0.75 (I_F = 20mA)	60	3	1.5 (I_F = 40mA)	950	± 20	9

Photo Transistor Detectors

Part Number	Features	Collector Current Min (mA)	Collector Current Max (mA)	BV_{CEO} Min (V)	$V_{CE(SAT)}$ Min (V)	Wave Length Typ. (nM)	Response Time tr (µs) Max	Response Time tr (µs) Max	Package No.
IS655A	3mm Dia. TI Package	0.075 V_{CE} = 5V E_e = 0.5mW/cm^2	20	35	0.4 I_C = 0.5mA E_e = 10mW/cm^2	860	40	35	10
							V_{CC}= 20V I_C = 1mA R_L = 1KΩ		
IS659B	Side Detector	0.25 V_{CE} = 5V E_e = 1mW/cm^2	20	35	0.4 I_C = 0.5mA E_e = 10mW/cm^2	860	3 Typ	3.5 Typ	8
							V_{CC}= 2V I_C = 2mA R_L = 100Ω		
IS659D	Side Detector Photo Darlington Transistor	0.9 E_e = 0.1mW/cm^2	50	35	1.0 I_C = 1.5mA E_e = 1mW/cm^2	860	80 Typ	70 Typ	8
							V_{CC}= 2V I_C = 10mA R_L = 100Ω		

Schmitt trigger Detectors

Part No.	Features	I_O Max (mA)	V_{CC} Max (V)	V_{OL} Max (V)	V_{OH} Min (V)	I_{CCL} Max (mA)	I_{CCH} mA	tPHL Max (µs)	tPLH Max (µs)	tr Max (µs)	tf Max (µs)	Sche -matic No.	Package No.
IS657A	Buffer, with R_L Connected between V_{CC} and Ouput	50	17	0.4 (I_{OL} = 16mA)	3.5 (E_V = 50lx)	5 (E_V = 0)	3 (E_V = 50lx)	15	9	0.5	0.5	30	11
								E_V = 50lx, R_L = 280Ω					
IS657B	Buffer with open collector Output		35		I_{OH} (Max) 100µA, (V_{CC} = 20V), (V_O = 30V), (E_V = 50lx)	4.5 (E_V = 0)	3 (E_V = 50lx)	15	9	0.5	0.5	31	
								E_V = 50lx, R_L = 280Ω					
IS657C NEW	Inverter, with R_L connected Between V_{CC} and Output		17		3.5 (E_V = 0)	5 (E_V = 50lx)	3 (E_V = 0)	9	15	0.5	0.5	30	
								E_V = 50lx, R_L = 280Ω					
IS657D NEW	Inverter with open collector Output		35		I_{OH} (Max) 100µA, (V_{CC} = 20V), (V_O = 30V), (E_V = 50lx)	4.5 (E_V = 50lx)	3 (E_V = 0)	9	15	0.5	0.5	31	
								E_V = 50lx, R_L = 280Ω					

Coupler Package Drawings

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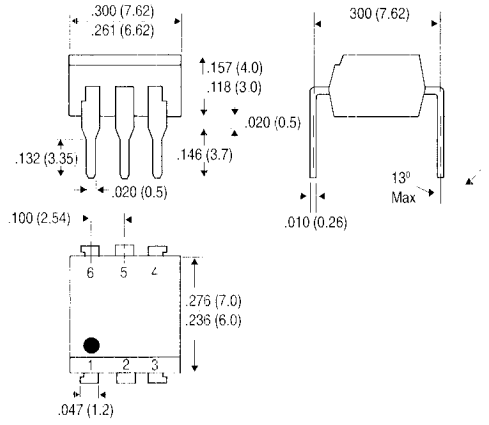

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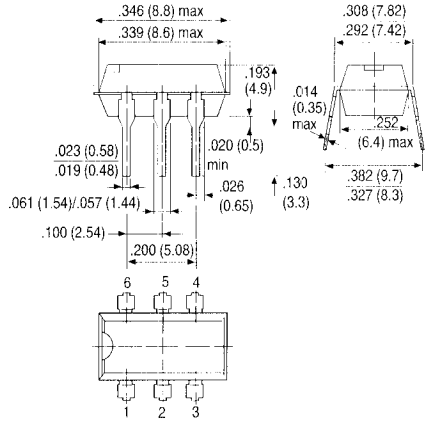

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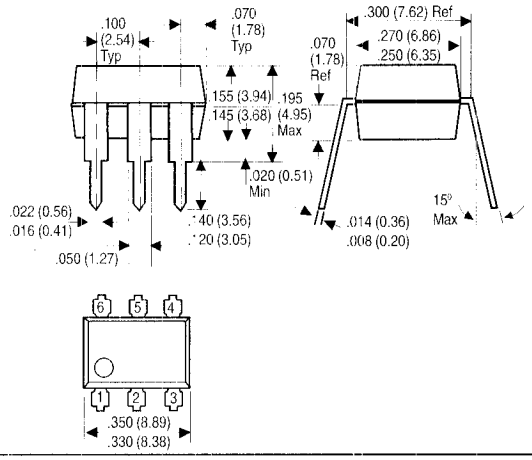

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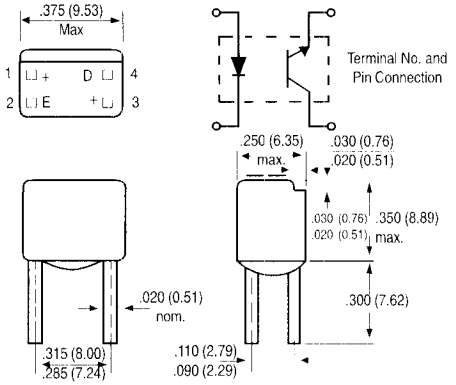

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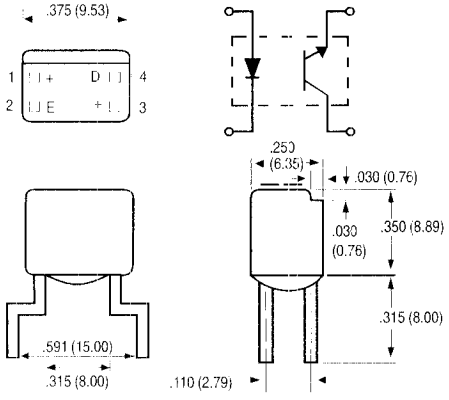

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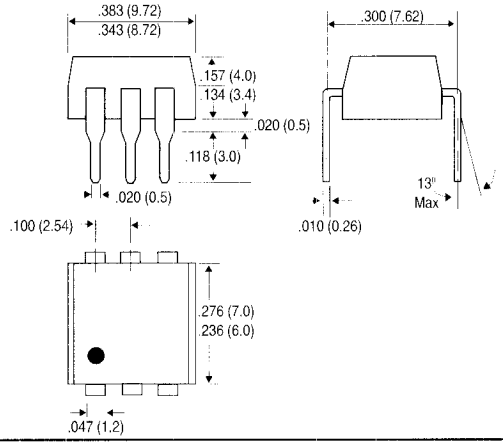

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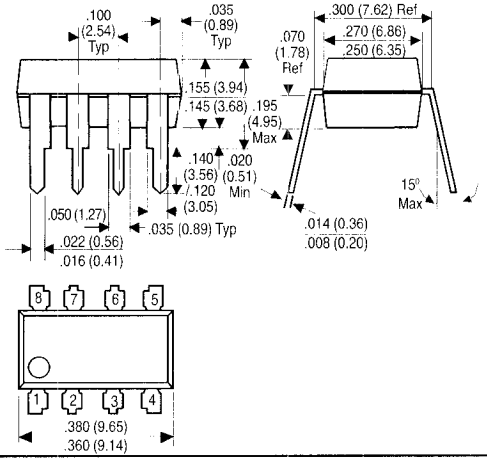
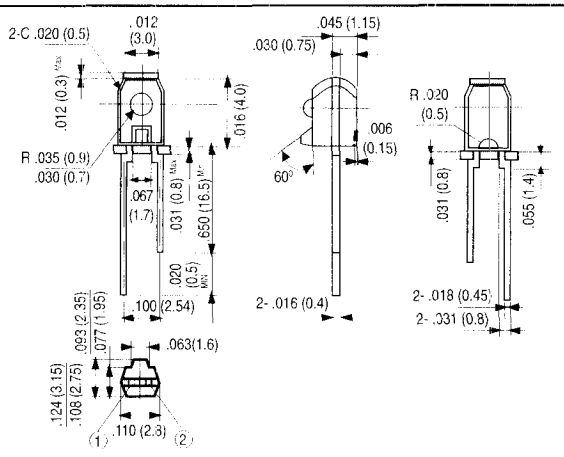


Coupler Package Drawings

8



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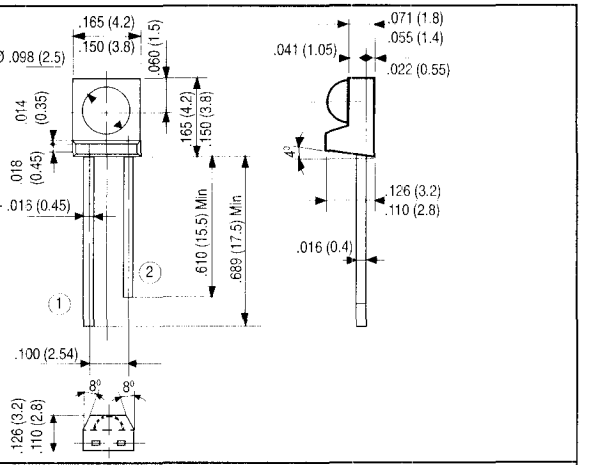

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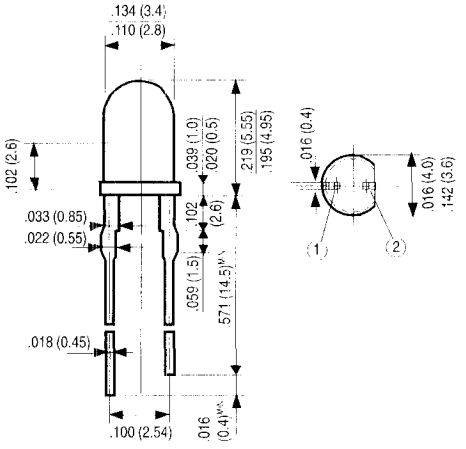

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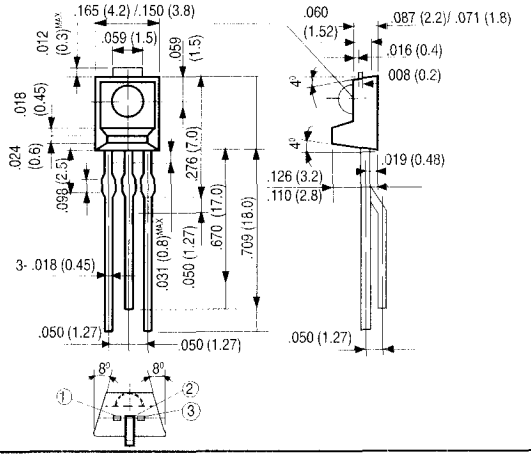

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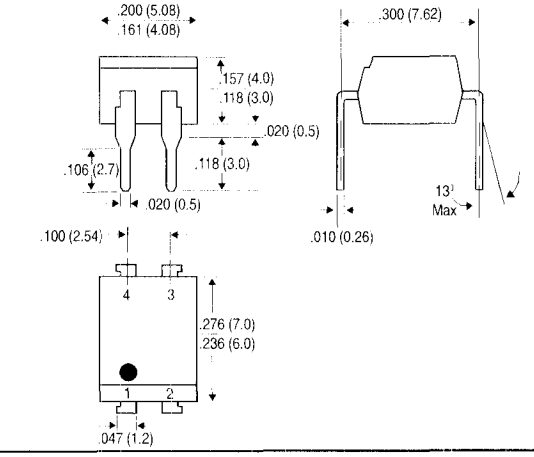

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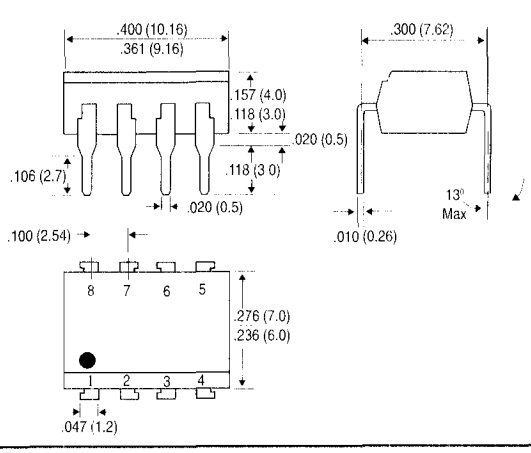

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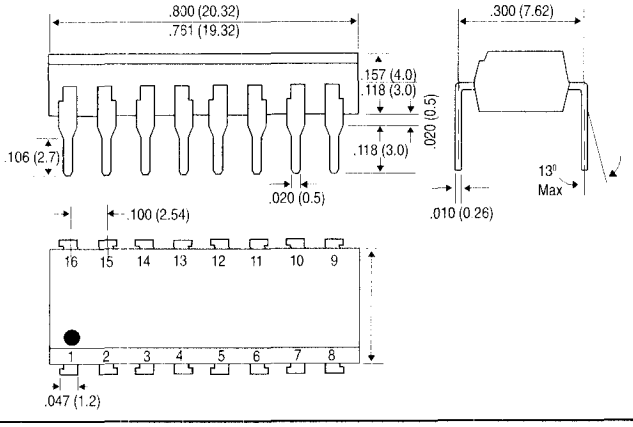

Coupler Schematics