

Emitter / Sensor Pairs

Infrared Emitters

Part Number	Features	Radiant Flux	Forward Current	Reverse Voltage	Forward Voltage	Wavelength	Beam Angle Degree	Package Number
		Min(mW)	Max(mA)	Max (V)	Max(V)	Typ(nM)		
IS654A	3mm Dia. TI Package	1.5 (If=40mA)	60	5	1.6(If=20mA)	940	20	10
IS658A	Side Emitting	0.7(If=20mA)	50				3	1.4(If=20mA)
IS656A	Side Emitting Compatible with Isocom Schmitt Trigger Detectors	0.75(If=20mA)						

Photo Transistor Detectors

Part Number	Features	Collector Current (Ic)	Collector Current	EVcso Ic = 1mA	VCE (Max)	Wavelength	Response Time		Package Number
		Min(mA)	Max(mA)	Min(V)	Max(mA)	Typ(nM)	tr (µs)	tr (µs)	
IS655A	3mm Dia. TI Package	1.0 VCE = 5V Ee = 1.0 mW/cm ²	20	30	0.4 Ic = 0.5mA Ee = 0.5 mW/cm ²	940	40	35	10
IS659B	Side Emitting	0.2 VCE = 5V Ee = 1.0 mW/cm ²			0.4 Ic = 0.1mA Ee = 0.5 mW/cm ²		Vcc=20V Ic=1mA RL=1KΩ		
IS659D	Side Emitting Photo Darlington Transistor	0.9 VCE = 5V Ee = 1.0 mW/cm ²	50	35	1.0 Ic = 1.5mA Ee = 1 mW/cm ²	860	80 typ	70 typ	8
							Vcc=2V Ic=10mA RL=100Ω		

Schmitt Trigger Detectors

Part Number	Features	I _O (Max)	V _{CC} (Max)	V _{OL}	V _{OH}	I _{CC} (Max)	I _{CC} (Max)	I _{PH} (Max)	I _{PL} (Max)	t _r (Max)	t _f (Max)	Schematic Number / Package Number
		(mA)	(mA)	Max(V)	Min(V)	(mA)	(mA)	(µs)	(µs)	(µs)	(µs)	
IS657A	Buffer, with RL connected between Vcc and output	50	17	0.4 (I _{OL} =16mA)	3.5 (E _v =50lx)	4.5 (E _v =0)	3 (E _v =50lx)	15	9	0.5	0.5	36 / 11
IS657B	Buffer with open collector output		35		I _{OH} (Max) 100µA (V _{CC} =20V) (V _O =30V) (E _v =50lx)			15	9	0.5	0.5	
IS657C	Inverter, with RL connected between Vcc and output		17		3.5 (E _v =0)	4.5 (E _v =50lx)	3 (E _v =0)	9	15	0.5	0.5	36 / 11
IS657D	Inverter with open collector output		35		I _{OH} (Max) 100µA (V _{CC} =20V) (V _O =30V) (E _v =50lx)			9	15	0.5	0.5	
							E _v =50lx, R _L =280Ω					

Note 1: For full ordering instructions, please see page 36