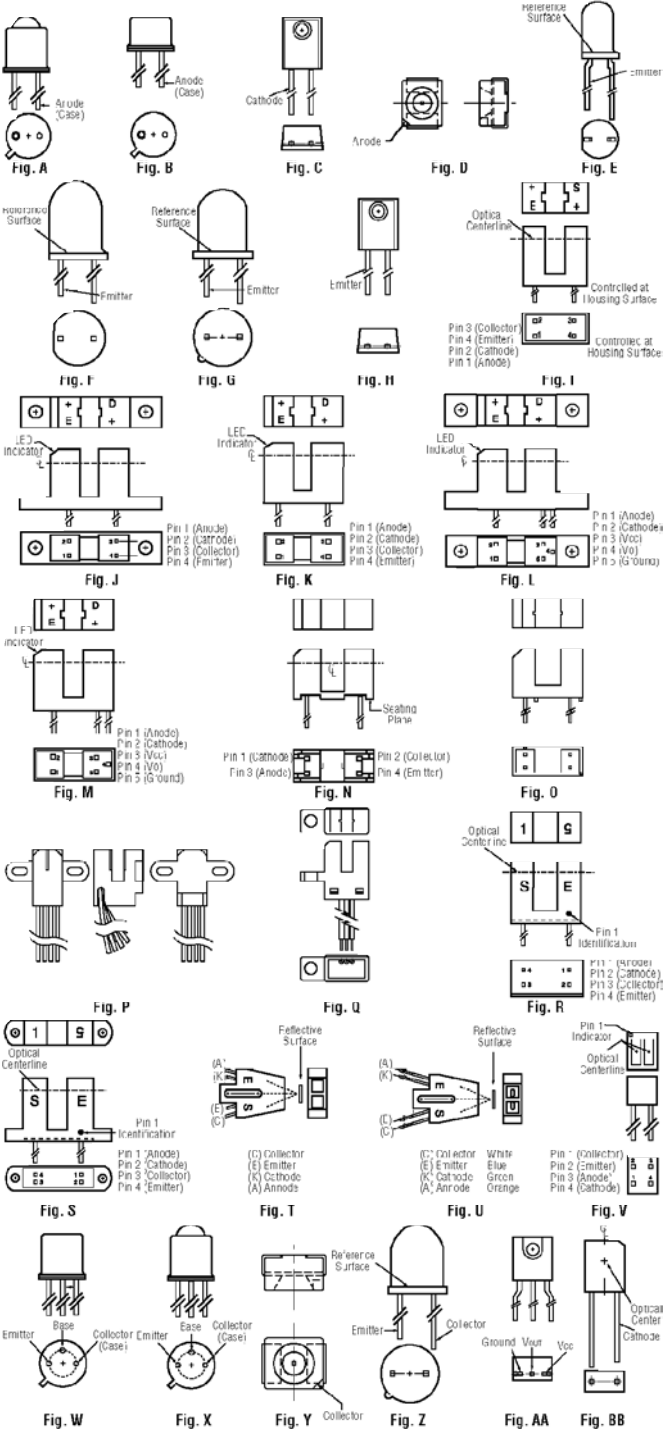


Infrared Emitting Diodes, Switches, and Sensors



Infrared Emitting Diodes

Mfr.'s Type	Fig.	Power Out Min.	V _f Max.	Peak Emission Wavelength (nm)	Beam Angle 1/2 Angle (°)
1N6264	A	6.000 mW	1.7	940	±10
1N6265	B	6.000 mW	1.7	940	±40
1N6266	A	25.000 mW/sr	1.7	940	±10
F5D1	A	12.000 mW	1.7	880	±10
F5D2	A	9.000 mW	1.7	880	±10
F5D3	A	10.500 mW	1.7	880	±10
F5E1	B	12.000 mW	1.7	880	±40
F5E2	B	9.000 mW	1.7	880	±40
F5E3	B	10.500 mW	1.7	880	±40

Infrared Emitting Diodes (continued)

Mfr.'s Type	Fig.	Power Out Min.	V _f Max.	Peak Emission Wavelength (nm)	Beam Angle 1/2 Angle (°)
F5F1	C	0.280 mW/sr	1.7	940	±35
F5G1	C	0.600 mW/sr	1.7	880	±35
LED558	A	5.400 mW	1.7	940	±10
LED55C	A	5.400 mW	1.7	940	±10
LED56	A	1.500 mW	1.7	940	±10
LED56F	B	1.500 mW	1.7	940	±40
QED421	D	4.000 mW/sr	1.8	880	±60
QEC113	E	14.000 mW/sr	1.5	940	±8
QEC122	E	27.000 mW/sr	1.7	880	±8
QED123	F	80.000 mW/sr	1.7	880	±9
QED222	F	50.000 mW/sr	1.7	880	±20
QED233	F	10.000 mW/sr	1.5	940	±20
QED234	F	27.000 mW/sr	1.5	940	±20
QED522	G	20.000 mW/sr	1.7	880	±15
QED523	G	40.000 mW/sr	1.7	880	±15
QEE113	H	3.000 mW/sr	1.5	940	±25
QEE122	H	4.000 mW/sr	1.7	880	±25
QEE123	H	8.000 mW/sr	1.5	880	±25

Slotted Optical Switches

Mfr.'s Type	Fig.	Output Type	Min. Output I _c @ I _f (mA)	Gap Width (In.)	Lead Spacing (In.)
OPB804	I	Transistor	0.5 @ 20 mA	0.150	0.300
H21A1	J	Transistor	1.0 @ 20 mA	0.124	0.284
H22A1	K	Transistor	1.0 @ 20 mA	0.124	0.284
H21B1	J	Darlington	7.5 @ 10 mA	0.124	0.284
H22B1	K	Darlington	7.5 @ 10 mA	0.124	0.284
H21LT1	L	Optologic Inverter — O/C	0.124	0.124	0.284
H22LT1	M	Optologic Inverter — O/C	0.124	0.124	0.284
MOG70P1	N	Transistor	1.0 @ 20 mA	0.200	0.380
QVE00118	O	Transistor	0.5 @ 20 mA	0.196	0.354
QVE00039	P	Transistor	0.5 @ 20 mA	0.094	Wires
QVE0112	Q	Optologic Inverter — O/C	0.118	0.118	Wires

Slotted Optical Switches with Internal Dust Covers

Mfr.'s Type	Fig.	Output Type	Min. Output I _c @ I _f (mA)	Optimum Response Dist. (In.)	Lead Spacing (In.)
OPB860N55	R	Transistor	0.5 @ 20 mA	0.125	0.32
OPB862N55	R	Transistor	1.8 @ 20 mA	0.125	0.32
OPB865N55	R	Transistor	0.5 @ 20 mA	0.125	0.22
OPB867N55	R	Transistor	1.8 @ 20 mA	0.125	0.22
OPB860T55	S	Transistor	0.5 @ 20 mA	0.125	0.32
OPB862T55	S	Transistor	1.8 @ 20 mA	0.125	0.32
OPB865T55	S	Transistor	0.5 @ 20 mA	0.125	0.22
OPB867T55	S	Transistor	1.8 @ 20 mA	0.125	0.22

Reflective Object Switches with Internal Dust Covers

Mfr.'s Type	Fig.	Output Type	Min. Output I _c @ I _f (mA)	Optimum Response Dist. (In.)	Lead Spacing (In.)
OPB703	T	Transistor	0.20 @ 40 mA	0.150	—
OPB703W	U	Transistor	0.20 @ 40 mA	0.150	Wires
OPB706A	V	Transistor	0.50 @ 20 mA	0.050	0.100/0.083

Infrared Photodetectors

Mfr.'s Type	Fig.	Output Type	I _c Min. (mA)	BV _{ceo} (Volts)	Reception Angle 1/2 Angle (°)
L14C1	W	Transistor	1.00	50	±40
L14C2	W	Transistor	0.50	50	±40
L14F1	X	Darlington	3.00	25	±10
L14G1	X	Transistor	6.00	45	±10
L14G2	X	Transistor	3.00	45	±10
L14M1	W	Transistor	3.00	30	±40
L14N2	W	Transistor	6.00	30	±40
L14P1	X	Transistor	4.00	30	±10
L14P2	X	Transistor	8.00	30	±10
L14Q1	C	Transistor	1.00	30	±35
L14R1	C	Darlington	5.00	30	±35
QSB320	Y	Transistor	4.00	30	±60
QSC112	E	Transistor	1.00	30	±8
QSC113	E	Transistor	2.40	30	±8
QSC114	E	Transistor	4.00	30	±8
QSC133	E	Darlington	8.00	30	±8
QSD122	F	Transistor	1.00	30	±12
QSD123	F	Transistor	4.00	30	±12
QSD124	F	Transistor	6.00	30	±12
QSD722	Z	Transistor	0.60	30	±20
QSD724	Z	Transistor	3.50	30	±20
QSD733	Z	Transistor	5.00	30	±20
QSE113	H	Darlington	0.25	30	±25
QSE122	H	Transistor	3.00	30	±25
QSE133	H	Darlington	9.00	30	±25
QSE156	AA	Optologic Buffer — T/P	—	V _{cc} — 4.5-16	±10
QSE157	AA	Optologic Inverter — T/P	—	V _{cc} — 4.5-16	±10
QSE158	AA	Optologic Buffer — O/C	—	V _{cc} — 4.5-16	±10
QSE159	AA	Optologic Inverter — O/C	—	V _{cc} — 4.5-16	±10
QSE773	BB	PI-N Photodiode	0.03	32	±60

Infrared Matched Emitter-Sensor Pairs

Mfr.'s Type	Fig.	I _c Min. (mA)	Tip-Tip Separation (In.)
H23A1	C	1.5	0.155
H23LTB	E/B	Optologic — Buffer T/P	0.155
H23LTI	E/B	Optologic — Inverter O/C	0.155
H23LOB	E/B	Optologic — Buffer O/C	0.155
QPC1213	E	5.0	0.250
QPD1223	F	10.0	0.250
QPD5223	G/U	7.5	0.250
QPE1113	H	0.3	0.250
QPE1259	H/V	Optologic — Inverter O/C	0.250