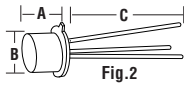
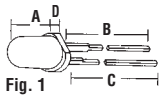


# Infrared Emitters, Detectors & Laser Products

## Infrared & Visible Light Emitters & Detectors

• Use for remote control and/or for fiber optics

\*Web Code: YAP



\* Order in multiples of 10

Part No.	Product No.	*Mfr.	Fig.	Description	Size	Diameter inch/mm	Dimensions (inches)				Forward Voltage @ Current	Wavelength nm	mWatts	Pricing		
							A	B	C	D				1	10	100
112150	LIR2043	LIG	1	Infrared emitter diode (GaAs)	T1	0.125/3	0.18	0.95	0.98	0.03	1.2 @ 20mA	940	5	*	\$ .19	\$ .15
1950825	L-34F3CS	JVP	1	Infrared emitter diode (GaAs)	T1	0.125/3	0.20	1.00	1.06	0.04	1.2 @ 20mA	940	80	.39	.35	.29
112176	LPT2023	LIG	1	Infrared phototransistor	T1	0.12/3	0.18	0.95	0.98	0.03	30 @ 0.1A	940	100	.39	.35	.29
2120410	RPT-38PB3F	RHM	1	Phototransistor	T1	0.125/3	0.18	0.95	0.98	0.03	5 @ 30mA	800	150	.49	.39	.29
106526	LVIR3333	LIG	1	Infrared emitter diode (GaAs)	T1 3/4	0.200/5	0.34	0.78	0.84	0.04	1.2 @ 20mA	940	8	*	.19	.15
1110914	TSAL6100	VSH	1	High power infrared emitting diode	T1 3/4	0.23/5.8	0.30	0.98	1.04	0.04	1.35 @ 100mA	940	210	.45	.35	.25
373001	UT1893-91-0125	JVP	1	Infrared phototransistor	T1 3/4	0.200/5	0.34	0.88	0.94	0.04	30 @ 0.1A	870	20	.35	.29	.25
2129385	UT1893-45-0125	JVP	1	Infrared phototransistor	T1 3/4	0.200/5	0.34	0.88	0.94	0.04	30 @ 0.1A	860/940	20	.35	.29	.25
1872441	OP999	OPT	1	PIN silicon photodiode	T1 3/4	0.205/5.3	0.31	0.69	0.75	0.04	1.2 @ 1mA	200	100	1.19	1.09	.99
1108144	TEPT5600	VSH	1	Silicon NPN phototransistor	T1 3/4	0.197/5	0.30	0.97	1.03	0.04	6 @ 20mA	570	100	.65	.49	.39
120221	BPW77NA	VSH	2	NPN phototransistor	TO-18	0.18/4.69	0.24	0.19	0.52	0.01	70VCEO @ 50mA	850	250	3.29	2.79	2.25
2227751	OPT301M	♦	3	Integrated photodiode	TO-99	0.90/2.2	0.16	0.32	0.55	—	2.25-18 @ 400µA	650	—	49.95	44.95	39.95
1872759	QPB704WZ	OPT	4	Infrared emitting diode/phototransistor	—	0.61/15.5	0.61	24	24	—	1.7 @ 40mA	890	68	4.95	4.49	3.95
874939	QRD1114	FSC	5	Reflective object sensor phototransistor	Rect.	0.24/6.1	0.18	0.17	0.50	—	1.7 @ 20mA	940	100	1.39	1.15	.89
1621132	BPW34	SYL	6	PIN silicon photodiode chip	Square	—	0.075	0.157	0.118	—	1.3 @ 80µA	850	150	.89	.79	.69
2035661	TSOP4840	VSH	5	Infrared remote receiver (40kHz)	Dome	0.24/6	0.27	0.92	0.88	—	5 @ 1.2mA	950	50	.99	.85	.69
2109691	350-00014	PLX	8	Infrared receiver (38kHz)	Dome	0.24/6	0.27	0.92	0.118	—	3.3 @ 0.35mA	940	10	1.95	1.75	1.49
2211047	GP1UD271XKOF	SHP	7	Infrared receiver (38kHz)	Dome	0.15/4	0.29	0.40	0.118	0.14	5 @ 140µA	1000	1	.69	.55	.45
2229351	TSOP4838	VSH	8	Infrared receiver (38kHz)	Dome	0.18/4.7	0.27	0.90	0.90	0.16	4.5-5.5 @ 5mA	950	10	1.09	.89	.69

## Monolithic Multi-Digit Array Display

PCB mounted, magnified, monolithic, 7 or 14 segment red digits, with digit heights of 100, 110 and 140 mil (2.54, 2.79, 3.56mm), and is intended for small, low cost numeric indication.



- Number of digits: 6
- Digit height: .100" (2.54mm)
- Lens/magnification: clear, bubble, 2x
- Viewing angle: 25°C horizontal/32°C vertical
- Luminous intensity: 0.40 mcd @ 5mA
- Package code: NH • PCB length: 2.0" (51.2mm)
- Forward voltage: 1.65V @ 5mA

Part No.	Mfr.	Part No.	1	10	50	100
2210976	NSA	1166	\$2.49	\$2.25	\$1.95	\$1.59

\*Soldering Irons — Enter Web Code QAS

\*Rocker Switches — Enter Web Code VBU

## 650nm Laser Diodes

Class IIIa Laser Product

2120428:

- Output power: 5mW min.
- Operating voltage & current: 2.6V max @ 70mA
- Wavelength: 650nm (typical)
- Beam divergence: 8° from center

2120428

2210204/2217692:

- Output power: < 5mW
- Input power: 150mW
- Operating voltage: 3VDC
- Wavelength: 650nm (typical)
- 2 wire connection: red and blue wires
- Cable length: 3"
- Perfect for DIY projects
- Dimensions: 0.24" Dia. x 0.52"L
- Weight: 0.18 oz. (5 grams)

2210204

2217692

Part No.	Mfr.	Mfr. Part No.	1	10	100
2120428	Lite-On	LTLTD505T	\$2.95	\$2.59	\$2.39
2210204	ValuePro	154145	3.49	2.95	2.59
2217692	Seeed	IRL104A2B	6.95	6.25	5.59

## 650nm Line and Dot Laser Diode Modules

ValuePro

2246717: Cross hair laser diode module

- Operating voltage: 4-6VDC
- Size: 1.22"L x 0.4"Dia.
- 5mW red • -20°C to +60°C
- Power supply required 3-6V

Class IIIa Laser Product

2246717

143845/173243:

- Focus adjustable with locking set screw
- Wattage: 5mW
- Operating voltage: 3-5V
- One-year warranty

143845: Line laser diode module

- Laser line width: 1mm
- Laser fan angle: 60°
- Size: 3.3"L x 0.9"Dia.

143845

173243: Cross hair laser diode module

- Laser fan angle: 60°
- Size: 3.0"L x 0.9"D
- Female 2.1mm power connector

173243

1940660: Module regulated power supply

- Output: 5VDC @ 1A
- Short-circuit protection
- Input voltage: 90-264VAC or 190-250VAC switchable
- Size: 2.6"H x 1.3"W x 1.9"D
- Weight: 0.6 lbs.



1940660

Part No.	Description	1	5
2246717	Cross hair laser diode module	\$12.95	\$11.95
143845	Line laser diode module	144.95	129.95
173243	Cross hair laser diode module	149.95	134.95
1940660	Power supply, 5VDC/1A	9.39	7.95

\*Laser Products — Enter Web Code LAZ

## alpec 5mW Red Laser Pointers

Class IIIa Laser Product

223731

Part No.	Mfr. P/N	Case Color	nm	Range	Size (L" x Dia.)"	1	5	25	100
223731	5608*	Black	532	>6000'	5.6 x 0.5	\$79.95	\$71.95	\$64.75	\$58.25
2215558	4070†	Silver	650	3000'	.75 x 3.5	3.95	3.59	3.29	2.95
153605	4012	Black	670	1500'	5.2 x 0.4	21.95	19.95	17.95	15.95
2215523	6290	Matte silver✓	650	1500'	1.75 x 3 x 0.6	1.95	1.79	1.59	1.49
2215540	6203	Black✓	650	1500'	3.6 x 0.9 x 0.25	1.95	1.75	1.49	1.25
2215531	6206	Silver✓	650	1500'	3.6 x 0.9 x 0.25	1.25	1.09	.99	.85
2215611	4824-W	White✓	650	1500'	0.8 x 0.5 x 3.5	1.49	1.25	.99	.85
2215620	4825-Y	Yellow✓	650	1500'	0.8 x 0.5 x 3.5	1.75	1.49	1.25	1.09
2228691	GB219	5 assorted red laser pointers above (✓)				6.95	6.25	5.95	5.49

\*Green laser †With "C" cell batteries

\*FSC = Fairchild Semi | JVP = Jameco ValuePro | LIG = Ligitec | OPT = Optek | PLX = Parallax | RHM = Rohm | SHP = Sharp | SYL = Sylvania | VSH = Vishay | ♦ Major Brands

\*For additional products, availability and specifications visit [Jameco.com](http://www.Jameco.com) and enter the Web Code in the product search box

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