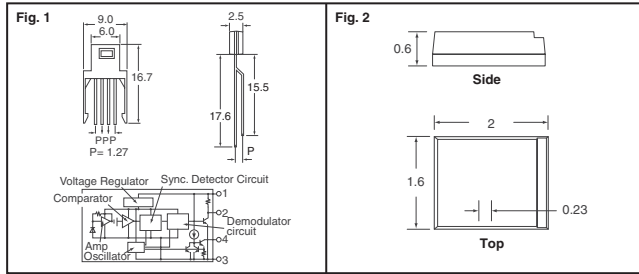


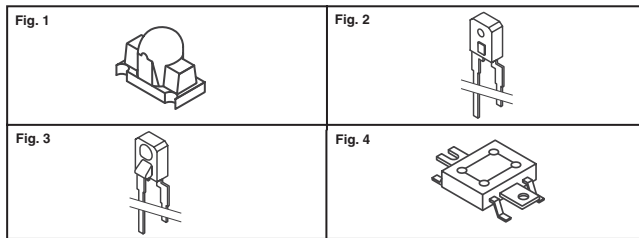
## OPIC™ Light Detectors



Vcc (V)	Output Current (mA)	Rise/Fall Typ. (µs)	Beam Angle (2x Theta)	Peak Wavelength (nm) Typ.	Digi-Key Part No.	Price Each 1 10 100	Sharp Part No.
<b>Fig. 1</b>							
0.5 - 16	50	400/400	110	940	425-2069-5-ND§	2.72 2.24 1.82	IS471FE
<b>Fig. 2</b>							
-0.3 - 7.0	1	150/150 max.	110	555	425-2650-1-ND† 425-2650-2-ND‡	1.05 .88 .70 980.00/2,000	GA1A1S201WP

† Cut Tape ‡ Tape and Reel § Visible light cut-off resin, black

## IR Emitters, Phototransistors and Photodiodes



### IR Emitters

Fig.	Forward Voltage Typ. (V)	Forward Current Max. (mA)	Optical Power Output (mW) Max.	Beam Angle (2x Theta)	Peak Wavelength (nm) Typ.	Digi-Key Part No.	Cut Tape Price Each 1 10 100	Sharp Part No.
1	1.2	50	3.0	20	940	425-1022-1-ND	.36 .30 .24	GL100MN0MP
						425-1022-2-ND‡	336.00/2,000	
				10	940	425-2706-1-ND	.48 .33 .24	GL100MN0MP1
						425-2706-2-ND‡	252.00/1,500	
				20	940	425-1023-1-ND	.54 .45 .36	GL100MN1MP
						425-1023-2-ND‡	504.00/2,000	
20	940	425-2666-1-ND	.81 .59 .36	GL100MN1MP1				
		425-2666-2-ND‡	378.00/1,500					

‡ Tape and Reel

### Phototransistors

Fig.	Vceo Max. (V)	Ic (mA)	Peak Sensitivity Wavelength (nm) Typ.	Rise/Fall Typ. (µs)	Beam Angle (2x Theta)	Digi-Key Part No.	Price Each 1 10 100	Sharp Part No.
1	35	20	860	400/300	30	425-2665-1-ND♦†‡	.42 .35 .28	PT100MF1MP1
						425-2665-2-ND♦‡§	294.00/1,500	
		20	900	5.0/6.0	15	425-2648-1-ND♦†	.36 .30 .24	PT100MCOMP1
						425-2648-2-ND♦‡	252.00/1,500	
		20	900	5.0/6.0	30	425-1005-1-ND♦†	.36 .30 .24	PT100MCOMP
						425-1005-2-ND♦‡	336.00/2,000	
		20	910	5.0/6.0	30	425-1006-1-ND♦†Δ	.36 .30 .24	PT100MFOMP
						425-1006-2-ND♦‡	336.00/2,000	
		20	910	5.0/6.0	30	425-1007-1-ND♦†Δ	.36 .30 .24	PT100MFOMP1
						425-1007-2-ND♦‡	252.00/1,500	
2	35	20	860	3.0/3.5	70	425-2378-5-ND♦Δ	.56 .39 .28	PT4800FE000F
		20	800	3.0/3.5	20	425-2379-5-ND♦	.36 .30 .24	PT4800E0000F
3	35	20	860	3.0/3.5	26	425-2380-5-ND♦Δ	.52 .36 .26	PT480FE0000F
		50	800	80/70	26	425-1013-5-ND§	.52 .36 .26	PT481

♦ RoHS Compliant † Cut Tape ‡ Tape and Reel § Transparent blue resin  
Δ Visible Light cut-off resin, black ♦ Darlington

## Photodiodes

Fig.	Vr Max. (V)	Short Circuit Current Is Typ. (µA)	Dark Current Id Max. (nA)	Peak Sensitivity Wavelength (nm) Typ.	Rise/Fall Typ. (ns)	Beam Angle (2x Theta)	Digi-Key Part No.	Cut Tape Price Each 1 10 100	Sharp Part No.
1	20	0.9	10	820	10	40	425-1027-1-ND♦	.36 .30 .24	PD100MCOMP
							425-1027-2-ND♦‡	336.00/2,000	
							425-1028-1-ND♦§	.36 .30 .24	
2	20	0.6	10	850	10	40	425-1028-2-ND♦‡§	336.00/2,000	PD100MFOMP
							425-2672-1-ND♦	.36 .30 .24	
4	30	9.2	2.0	940	5	—	425-2672-2-ND♦‡	252.00/1,500	PD100MFOMP1
							425-1030-5-ND†	1.11 .93 .74	

♦ RoHS Compliant ‡ Tape and Reel † Tube § Visible Light cut-off resin, black

## Blue Sensitive Photodiodes

**Features:**  
• Spectral sensitivity characteristics akin to that of human eye • Compact flat package • Low dark current • Infrared light cut-off type

**Applications:**  
• AE (automatic exposure) system and ES (electronic shutter) system for cameras • Stroboscopes • Precise optical instruments

Short Cir. Current Is Typ. (µA)	Dark Current Id Typ. (A)	Peak Sensitivity Wavelength Typ. (nm)	Reverse Voltage Vr (V) Max.	Active Area (mm sq.)	Digi-Key Part No.	Price Each 1 10 100	Sharp Part No.
0.16	3x10 <sup>-12</sup>	560	10	1.55	425-2429-5-ND	1.95 1.56 1.29	BS120E0F

## JST Mating Connector, Contact and Crimp Tool

Description	Digi-Key Part No.	10	100	500	Tape & Reel Pricing ‡ 13,000	JST Part No.
6-Pos., 1.5mm, Disconnectable Crimp Style ZH Connector	455-1129-ND♦	.84	6.98	27.91	—	ZHR-6
Tin-Plated Phosphor Bronze Crimp Contact, 26-28AWG	455-1130-1-ND♦†	—	1.42	5.68	98.21/M	SZH-002T-P0.5
Crimp Tool with Die for 26-28AWG Contacts	455-1131-ND	440.15/1			—	WC-491

♦ RoHS Compliant † Cut Tape ‡ For Tape and Reel part number, change 1-ND to 2-ND.

## Distance Measuring Sensors

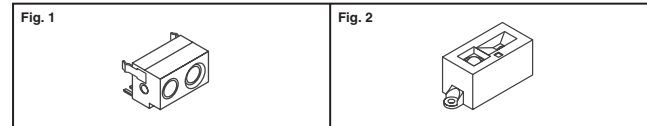


Fig.	Vcc (V)	Distance Measuring Range (cm) Typ.	Diff. of Output Voltage (V) Typ.	Output Current ICC (mA) Typ.	Output Type	Digi-Key Part No.	Price Each 1 25 50	Sharp Part No.
1	5	40	—	28	Digital	425-1810-ND	8.03 6.42 5.33	GP2Y0D340K
		5	—	10.5	Digital	425-2615-5-ND	3.25 2.60 2.28	GP2Y0D805Z0F
		10	—	10.5	Digital	425-2616-5-ND	3.25 2.60 2.28	GP2Y0D810Z0F
		7	—	35	Digital	425-2657-ND	8.03 6.42 5.62	GP2Y0D310K
2	5	4 - 30	1.6	30	Analog	425-2498-ND	52.50 42.00 36.75	GP2Y3A001K0F
		20 - 150	1.6	30	Analog	425-2499-ND	52.50 42.00 36.75	GP2Y3A002K0F
		40 - 300	1.2	30	Analog	425-2500-ND	52.50 42.00 36.75	GP2Y3A003K0F

See below for JST Mating Connector

## JST Mating Connector, Contact and Crimp Tool

Description	Digi-Key Part No.	10	100	500	Tape and Reel Pricing ‡ 8,000	JST Part No.
3-Pos., 2.0mm, Disconnectable Crimp Style PH Connector	455-1126-ND♦	.47	3.89	15.56	—	PHR-3
24-30AWG, Tin-Plated Phosphor Bronze Crimp Contact	455-1127-1-ND♦†	—	2.22	8.88	13.32/M	SPH-002T-P0.5S
Crimp Tool with Die for 24-30AWG Contacts	455-1128-ND	440.15/1			—	WC-240

♦ RoHS Compliant † Cut Tape ‡ For Tape and Reel part number, change 1-ND to 2-ND.

Digi-Reel® Most SMT cutdown parts are available on a Digi-Reel®. For Digi-Reel part number, change 1-ND to 6-ND or CT-ND to DKR-ND. See Digi-Key® Services on page 2 for additional information.

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