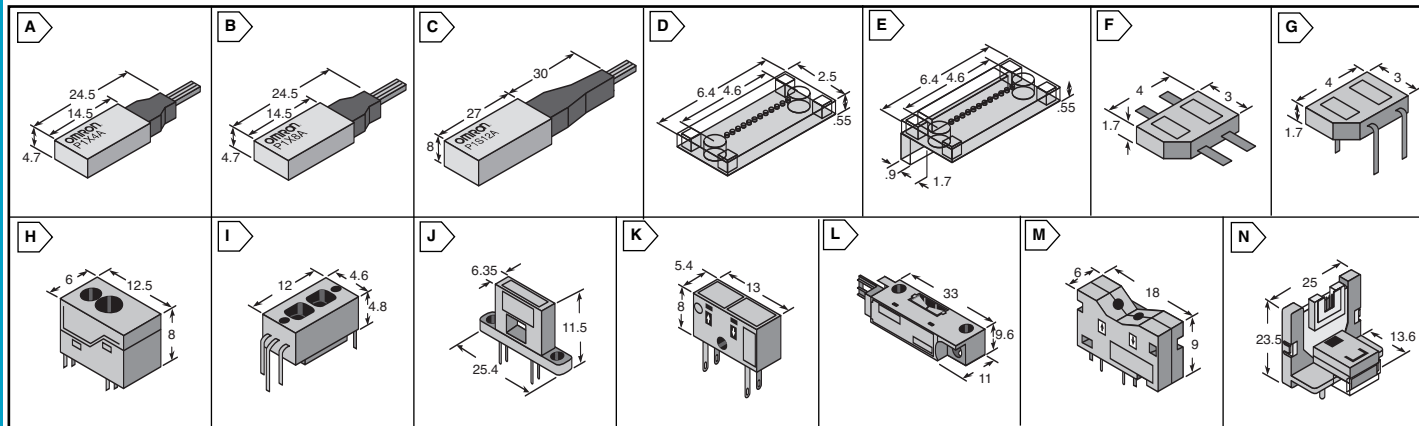


OMRON Optical Devices and Photomicrosensors

OMRON
ELECTRONIC COMPONENTS


OMRON CWDM MUX / DEMUX

Features:

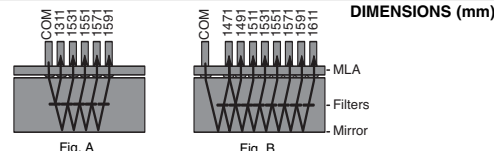
- World's smallest CWDM Mux/Demux with proprietary micro-lens array (MLA) design and integrated optical elements
- Other wavelengths available

Specifications:

- Isolation: ≥ 30 dB (35dB typ)
- Return loss: ≥ 35 dB (40dB typ)

Applications:

- CWDM (Coarse Wavelength Division Multiplexers)
- BPON (Broadband Passive Optical Network)
- WDM-PON (Wavelength Division Multiplexed Passive Optical Network)



For quantities of 5 and up, call for quote.

MOUSER STOCK NO.	Omron Part No.	Fig.	Insertion Loss	Pass Bandwidth	Center Wavelength	Number of Channels	Price Each	
							1	2
653-P1X4A-DX1511	P1X4A-DX1511S20-SC	A	≤ 2.5 dB (1.7dB typ)	13nm	1511	4	655.00	568.00
653-P1X4A-MX1511	P1X4A-MX1511S20-SC	A	≤ 2.5 dB (1.7dB typ)	13nm	1511	4	655.00	568.00
653-P1X8A-DX1471	P1X8A-DX1471S20-SC	B	≤ 3.0 dB (2.5dB typ)	13nm	1471	8	1250.00	1084.00
653-P1X8A-MX1471	P1X8A-MX1471S20-SC	B	≤ 3.0 dB (2.5dB typ)	13nm	1471	8	1250.00	1084.00

OMRON OPTICAL SWITCHES

Features:

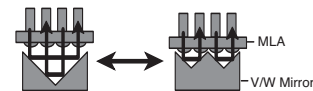
- Small size
- Latching function for low power consumption

Specifications:

- Cross talk: ≥ 55 dB
- Return loss: 40dB typ.
- Switching time: 1.5msec typ.
- Rated voltage: 5VDC, 100mW
- Insertion loss: 1.2dB typ.

Applications:

- Redundancy, monitoring, restoration
- OXC (Optical Cross Connect Circuit)
- OADM (Optical Add/Drop Multiplex Circuit)



For quantities of 5 and up, call for quote.

MOUSER STOCK NO.	Omron Part No.	Fig.	Switch Type	Type	Wavelength Range	Price Each	
						1	2
653-P1S12B-LDSC	P1S12B-LD-SC	C	Latching	1 x 2	1290-1360nm 1530-1565nm 1565-1625nm	394.00	342.00
653-P1S12B-DSC	P1S12B-D-SC	C	Non-latching	1 x 2	1290-1360nm 1530-1565nm 1565-1625nm	394.00	342.00
653-P1S22B-LDSC	P1S22B-LD-SC	C	Latching	2 x 2	1290-1360nm 1530-1565nm 1565-1625nm	495.00	430.00
653-P1S22B-DSC	P1S22B-D-SC	C	Non-latching	2 x 2	1290-1360nm 1530-1565nm 1565-1625nm	495.00	430.00

OMRON MULTIMODE MICRO-LENS ARRAY (MLA)

Features:

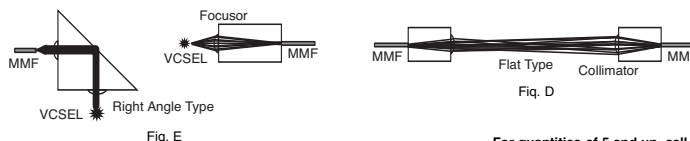
- Easy alignment with high precision positioning holes based on MT guide pins

Applications:

- Free-space optical connectivity
- Transceiver (for parallel optical link)

Specifications:

- Cross talk: ≥ 50 dB



For quantities of 5 and up, call for quote.

MOUSER STOCK NO.	Omron Part No.	Fig.	Description	Insertion Loss (Typ.)	Number of Lenses	Price Each	
						1	2
653-P1L12A-C1	P1L12A-C1	D	Flat, collimator, Air gap = 1.5mm	1.2dB	1 x 12	34.50	30.00
653-P1L12A-C2	P1L12A-C2	D	Flat, collimator, Air gap = 2.5mm	1.2dB	1 x 12	34.50	30.00
653-P1L12A-F1	P1L12A-F1	D	Flat, focuser, VtoL = 0.3mm LtoF = 0.3mm	1.5dB	1 x 12	34.50	30.00
653-P1L12A-F2	P1L12A-F2	D	Flat, focuser, VCSEL to Lens = 0.2mm	1.5dB	1 x 12	34.50	30.00
653-P1L12C-F2	P1L12C-F2	E	Right angle, focuser, FtoL = 0.4mm	1.5dB	2 x 12	51.00	44.20
653-P1L12C-F1	P1L12C-F1	E	Right angle, focuser, V to L = 0.3mm L to F = 0.5mm	1.5dB	2 x 12	51.00	44.20

OMRON REFLECTIVE NON-AMPLIFIED PHOTOMICROSENSORS

For quantities of 100 and up, call for quote.

MOUSER STOCK NO.	Omron Part No.	Fig.	Output Configuration	Sensing Distance	Termination	Comments	Price Each		
							1	25	50
653-EE-SY125	EE-SY125	F	Phototransistor	1mm	SMD		1.76	1.65	1.51
653-EE-SY124	EE-SY124	G	Phototransistor	1mm	PCB terminals		1.76	1.65	1.51
653-EE-SY169	EE-SY169	H	Phototransistor, convergent lens	4mm	PCB terminals	Red LED	9.78	9.24	8.45
653-EE-SY169A	EE-SY169A	H	Phototransistor, convergent lens	4mm	PCB terminals	Infra-red LED	8.75	8.27	7.50
653-EE-SY310	EE-SY310	I	Phototransistor Dark-On	5mm	PCB terminals	Schmitt trigger, pre-amp	3.21	3.03	2.76
653-EE-SY410	EE-SY410	I	Phototransistor Light-On	5mm	PCB terminals	Schmitt trigger, pre-amp	3.21	3.03	2.76
653-EE-SB5	EE-SB5	J	Phototransistor	5mm	Solder terminals	TTL compatible	4.45	4.20	3.84
653-EE-SB5-B	EE-SB5-B	J	Phototransistor	5mm	PCB terminals	TTL compatible	4.45	4.20	3.84
653-EE-SF5	EE-SF5	K	Phototransistor	5mm	Solder terminals	TTL compatible	4.37	4.13	3.77
653-EE-SF5-B	EE-SF5-B	K	Phototransistor	5mm	PCB terminals	TTL compatible	4.37	4.13	3.77
653-EE-SPY415	EE-SPY415	L	Photo IC	3-19mm	Connector		14.09	13.31	11.03

OMRON MICROPHOTONIC NON-AMPLIFIED PHOTOMICROSENSORS

For quantities of 100 and up, call for quote.

MOUSER STOCK NO.	Omron Part No.	Fig.	Output Configuration	Sensing Distance	Comments	Price Each		
						1	25	50
653-EE-SY190	EE-SY190	M	Phototransistor Dark-On	4.5mm	Top view model Regular or diffuse reflective	8.08	7.63	6.98
653-Z4D-A01	Z4D-A01	N	2 Analog Volt	6.5mm	Position sens. diode/LED Regular or diffuse reflective	47.74	45.95	42.01

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