

## P1L

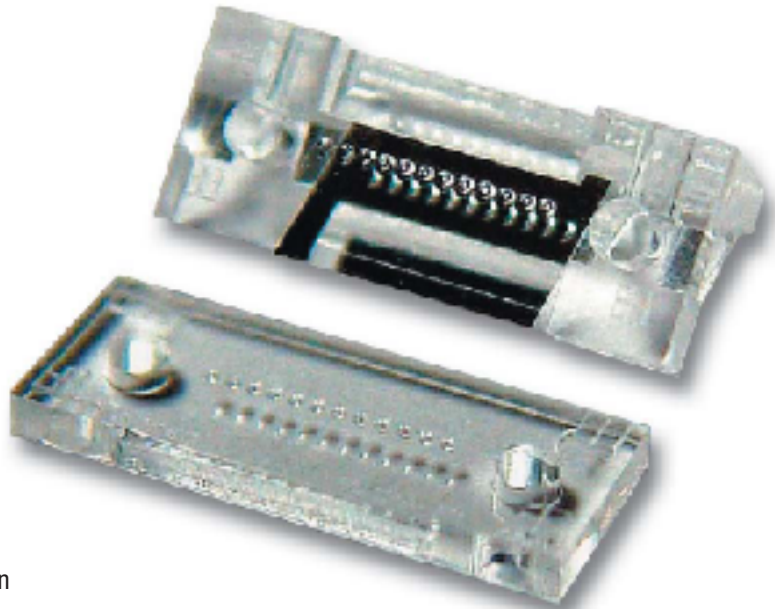
### 12ch Flat/P1L12A

### 12ch Right Angle/P1L12C

**Flat and Right Angle Type Micro Lens Arrays Provide Low Cost Optical Connections in Free Space Applications**

#### Features

- Easy alignment with high precision positioning holes based on MT guide pins
- Low cost achieved by high precision injection molding
- Anti-reflective (AR) coating available
- Insertion loss (IL) can be reduced through customization
- Custom lens and various channel configurations available (i.e. 1 x 4, 2 x 12, etc.)



#### Specifications

Type	Flat (Collimator Type)	Flat (Focuser Type)	Right Angle
Number of Lens	1 x 12	1 x 12	2 x 12
Insertion Loss	≤ 2.0dB (Typ. 1.2dB) *1	≤ 2.0dB (Typ. 1.5dB) *2	≤ 2.5dB (Typ. 1.5dB) *3
Cross Talk	≥ 50dB	≥ 50dB	≥ 50dB
Lens Position Tolerance	0.005mm *4	0.005mm *4	0.005mm *4
Dimensions	W2.5 x L6.4 x H0.55mm	W2.5 x L6.4 x H0.55mm	W2.6 x L6.4 x H2.6mm

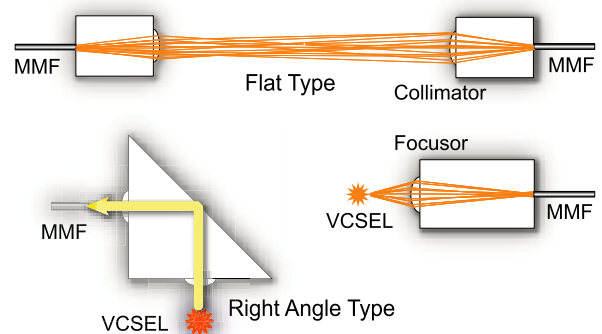
\*1 Light Source: 850nm (Steady State Mode by LED)/Air Gap: 1.5mm (Lens to Lens)  
Attached to the MT guide pin without any other alignment and matching glue

\*2 Light Source: 850nm\_VCSEL(\*12um, Divergence < 30°)/Air Gap: 0.3mm  
(VCSEL to Lens), 0.3mm (Lens to Fiber) active alignment for VCSEL side,  
non active alignment for fiber side without matching glue between fiber and lens

\*3 Light Source: 850nm (Steady State Mode by LED)/Air Gap: 0.4mm (Fibre to Lens)  
Attached to the MT guide pin without any other alignment and matching glue

\*4 Lens position tolerance is defined as an error to the true position referred to the center point of alignment holes

#### Structures



#### Applications

- Free-space Optical Connectivity
- Transceiver (For Parallel Optical Link)
- Optical Interconnection
- Board-to-board
- Chip-to-chip Interconnection

#### Dimensions (mm)

