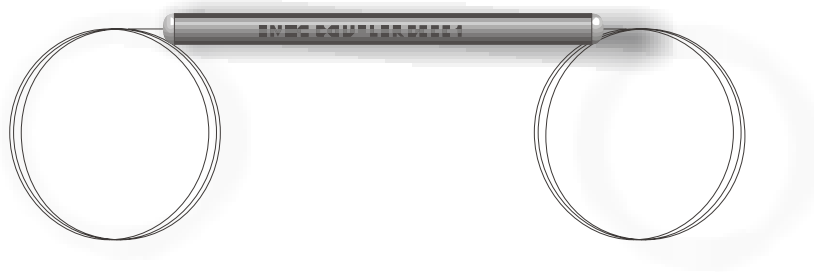




***Specification***  
of  
**SINGLE MODE SINGLE WINDOW WIDEBAND COUPLER(SWC)**  
**SWC-xxxxxxxxxUM Series**



**Universal Microelectronics**  
**Photonics Division**  
**Catalog 2008~ 2009**



## SINGLE MODE SINGLE WINDOW WIDEBAND COUPLER(SWC)

### Features

- Low Insertion Loss
- Low PDL
- Excellent Uniformity
- High Directivity
- Highly Stable and Reliable

### Applications

- Telecommunications
- Local Area Network (LAN)
- Passive Optical Network (PON)
- Cable TV
- Fiber sensors

### Product Characteristics Performance

Parameters	Premium	A Grade
Wavelength (nm)	1310± 40 or 1550± 40 or 1528~1568 or 1569~1610 or 1528~1610	
Uniformity (dB)(Max.) (CR:50/50)	0.6	1.0
Directivity (dB) (Min.)	55	
Operating Temperature	- 40°C ~ 85°C	

- Special dimension upon request.

### Coupling Ratios/ PDL/ Insertion Loss Chart

COUPLING RATIO(%)	Premium		A Grade	
	Max.PDL(dB)	Max. I. L.(dB)	Max.PDL(dB)	Max. I. L.(dB)
50/50	0.1/0.1	3.4/3.4	0.15/0.15	3.6/3.6
40/60	0.15/0.1	4.4/2.5	0.20/0.15	4.8/2.8
30/70	0.15/0.1	5.7/1.8	0.20/0.15	6.1/2.0
20/80	0.25/0.1	7.5/1.1	0.30/0.15	8.0/1.3
10/90	0.25/0.1	10.8/0.6	0.30/0.15	12.0/0.8
5/95	0.30/0.1	14.6/0.4	0.35/0.15	15.0/0.5
1/99	0.30/0.1	21.5/0.2	0.35/0.15	22.0/0.3

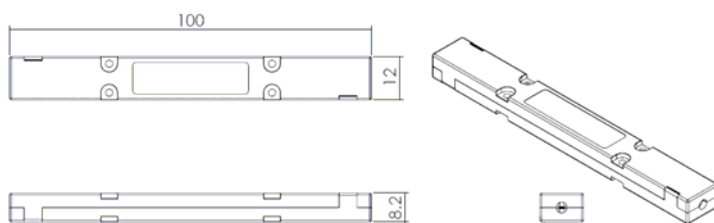
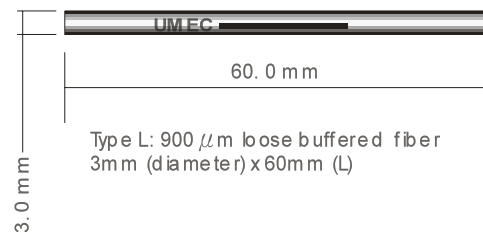
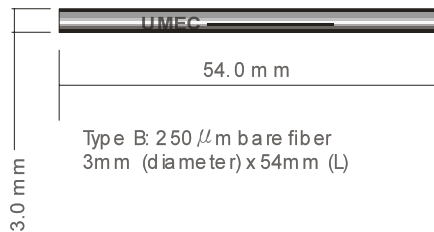
- Above values are referenced without connectors



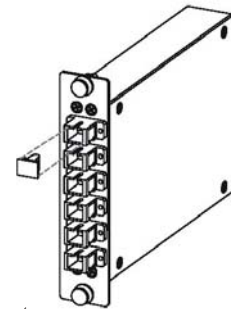
### Mechanical outline

Package type	Housing type	Dimension	Pigtail style
Type B	Steel tube	3mm(Ø) x 54mm (L)	250µm bare fiber
Type L	Steel tube	3mm(Ø) x 60mm (L)	900µm loose buffered fiber
Type R	Ruggedized plastic housing	100mm (L) x 12mm (W) x 8.2mm (H)	900µm loose buffered fiber
Type G	LGX compatible module	See below	Output port is adapter

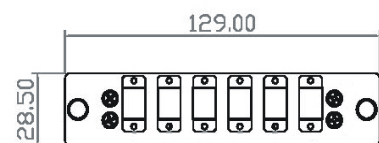
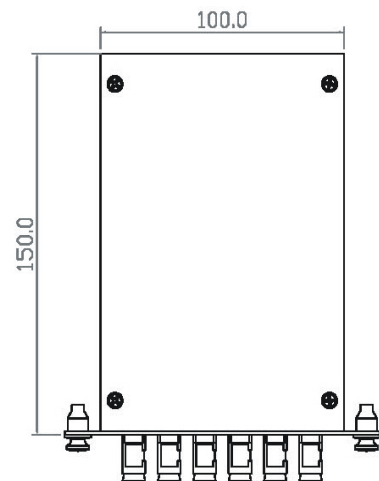
- The dimension of type G package will depend on output port number, below LGX compatible housing is just for reference.
- We also provide LGX compatible chassis, please see our chassis specification.



Type R Ruggedized plastic housing with 2mm/3mm buffered fiber  
100mm(L) x 12mm(W) x 8.2mm(H)



Type G: LGX compatible Housing with an adapter output





### Ordering Information

# SWC-X-X-XX-X-X-X-X-X-UM

