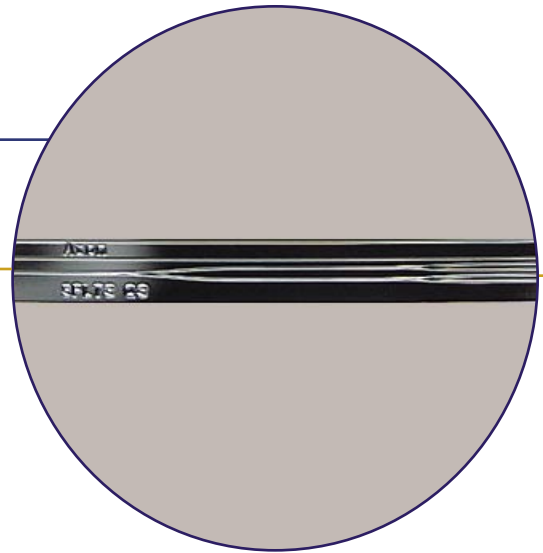


## Planar Waveguide Components

### PLANAR OPTICAL SPLITTER/COUPLER CHIP (APSPL-C0XXXXXX)

APSPL planar optical splitters/couplers are developed based on ANDevices' patent-pending CVD process. The high performance silica waveguides exhibit low insertion loss and low polarization dependent loss (PDL) over a wide wavelength range. The small footprint allows for a compact package. Additionally, the silicon substrate serves as an assembly platform to integrate with other active or passive optical devices.



#### Features

- High Channel Count
- Compact Design
- Wide Band
- Wide operating temperature
- Polarization maintaining

#### Applications

- Intensity coupling and splitting in FTTH, PON, etc.
- Wavelength combiner in multi-channel transmit side optical subassembly (TOSA)

#### Options

- Channel counts from 4, 8 to 16. 32 available upon request
- Customized chip size and topology for integration platform
- Quartz or Silicon Substrate

#### Optical Performance

Parameter	Specification						Units	Comments
	1x4		1x8		1x16			
Grade	A	B	A	B	A	B		
Operational Wavelength	1310 ± 40 and 1550 ± 40						nm	
Insertion Loss (IL) Maximum	≤7.0	≤7.2	≤10.3	≤10.7	≤13.8	≤14.2	dB	Worst Case
Uniformity	≤0.6	≤0.6	≤0.8	≤0.9	≤1.2	≤1.4	dB	Difference between best and worst IL's
Polarization Dependent Loss	Si: ≤0.3 ; Quartz: ≤0.2						dB	
Return Loss/Directivity	>55						dB	
Operation Temperature Range	-40 ~ 85						°C	
Storage Temperature Range	-40 ~ 85						°C	
Waveguide Pitch	250			127			um	
Polish Angle (θ)	-8, 0 or +8						deg	

#### Corporate Office

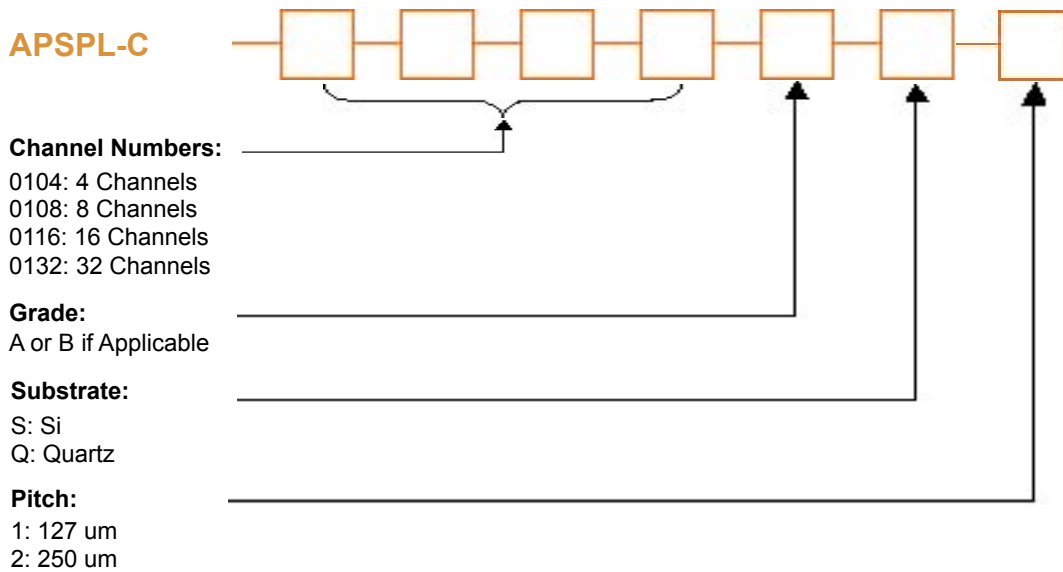
2933 Bayview Drive  
Fremont, CA 94538  
Tel: (510) 226-8900  
Fax: (510) 226-8333

sales@andevices.com  
www.andevices.com

## Physical Dimensions



## Ordering Information



**Example: APSPL-C0108AQ1: 1x8 grade A quartz optical splitter chip with waveguide pitch of 127  $\mu\text{m}$**

For more information on this product or other products now available from ANDeviCes, please contact us at [sales@andevices.com](mailto:sales@andevices.com)