



# Singlemode Tree and Star Couplers



## Features

- Low Excess Loss
- Uniform Power Splitting
- Rugged Package
- Excellent Environmental & Mechanical Stability

## Applications

- Long-haul Telecommunications
- Digital, Hybrid and AM-Video Systems CATV Systems
- High Speed Local Area networks
- Fiber Sensors

## Performance Specifications

Directivity (dB)	>55 dB
Operating Temperature (°C)	-20 ~ +70 (-40 ~ +85 available upon request)
Storage Temperature (°C)	-40 ~ +85
Fiber Type	Corning singlemode SMF-28, DS fiber or Flexcore
Fiber Pigtail Length (m)	1m or custom request
Port Configuration	1x4 to 32x32

### Singlemode Standard Tree/Star Couplers

Configuration Type	1x4/(4x4)	1x8/(8x8)	1x16/(16x16)	1x32/(32x32)
Maximum Insertion Loss (dB)	6.8	10.2	13.6	17.5
Uniformity (Max.) (dB)	0.7	1.0	1.2	1.4
PDL (Max.) (dB)	0.15	0.20	0.25	0.30
Operating Wavelength (nm)	850±10, 980±10, 1310±10, 1550±10, 1585±10 or custom wavelength			
Dimensions (mm)	D,S	D,S	E	E

### Singlemode Single Window Wideband Tree/Star Couplers

Configuration Type	1x4/(4x4)	1x8/(8x8)	1x16/(16x16)	1x32/(32x32)
Maximum Insertion loss (dB)	6.8	10.2	13.6	17.5
Uniformity (Max.) (dB)	0.8	1.2	1.6	2.0
PDL (Max.) (dB)	0.15	0.20	0.25	0.30
Operating Wavelength (nm)	1310 ±40, 1550 ±40, 1585±40, or custom wavelength			
Dimensions (mm)	D,S	D,S	E	E

Singlemode Dual Window Tree/Star Couplers				
Configuration Type	1x4/(4x4)	1x8/(8x8)	1x16/(16x16)	1x32/(32x32)
Maximum Insertion Loss (dB)*	7.6 (7.2)*	11.5 (10.8)*	15.5 (14.5)*	19.5 (18.5)*
Uniformity (Max.) (dB)*	1.6 (1.4)*	2.5 (2.1)*	3.4(2.8)*	4.1 (3.5)*
PDL (Max.) (dB)	0.15	0.20	0.30	0.50
Operating Wavelength (nm)	1310/1550 ± 40 or (*1310/1550 ±20) or custom wavelength			
Package Dimension	D,S	D,S	E	E

\* 1310/1550 ±20nm.

Note: All values referenced are without connector

## Ordering Information

Type	Grade	Wavelength	Coupling Ratio or Attenuation (dB)	Port	Package	Pigtail Style	Fiber Type	In/Out Connector
S W	P A	85=850nm 98=980nm 13=1310nm 15=1550 nm 16=1585nm 35=1310/1550nm 36=1310/1585nm	AV = Tree Coupler	0104=1x4 . . . . 0116=1x16 1616=16x16 3232=32x32	D=Package D E=Package E S=Package S	1=Bare Fiber 2=900um Jacket 3=3mm Cable	0=SMF 28 1=Corning Flexcore D=DS Fiber S=Special	0=None 1=FC/APC 2=FC/PC 3=SC/APC 4=SC/PC 5=ST 6=LC/Upc 7=LC/APC X=Special

\* **Type:** S -- Singlemode Standard Coupler  
W -- Singlemode Wideband Coupler

## Dimensions & Pigtail Style

### Package Dimensions:

Package S:  
9.2mm x 50.88mm x 88.9mm

Package D:  
11.6mm x 80mm x 120mm

Package E:  
14.5mm x 102 mm x 142mm

### Pigtail Style:

Package D, E: 3mm Cable or 900um Loose Tube

Package S: 250um Bare Fiber or 900um Loose Tube

