

## Single Mode Fused Coupler

Spec. Number	SR0048 REV01	N/A
Date	2016-11-24	2016-11-24
Part Number	SMFC5511E100110	NA

### Specifications

Type	1 ×2 1/99 Coupler
Parameter	
Operating wavelength (nm)	1527~1566
Insertion Loss(Over the whole wavelength range) (dB)	≤0.20@99% port, 18.5~20.5@1% port
Excess loss (dB)	≤0.15
Polarization Dependent Loss (dB)	≤0.05@99% port, ≤0.20@1% port
Wavelength dependent loss (dB)	≤0.10@99% port, ≤0.20@1% port
Temperature Dependent Loss (dB)	≤0.20
Directivity (dB)	≥55
Return loss (dB)	≥50
Optical Power (mW)	≤500
Fiber Type	Corning SMF-28
Operating temperature (°C)	-5~ +75
Storage temperature (°C)	-40 ~ +85
Dimensions (mm)	Φ3.0×L45

\*Above specifications are for devices without the connectors.

### Notes:

1. The wavelength dependent loss is the difference between maximum insertion loss and minimum insertion loss over the whole work wavelength range.
2. WDL@tap port is calculated as  $IL(\lambda_1, \text{fit curve}) - IL(\lambda_N, \text{fit curve})$ ,  $\lambda_1$  is the shortest wavelength,  $\lambda_N$  is the longest wavelength. Fit curve is obtained by using the functions of SLOPE and INTERCEPT in excel based on measured IL.
3. Temperature Dependent Loss is defined as the insertion loss variation over the whole working temperature range.
4. The 1000 hours reliability report for 85 °C, 85%RH or 75 °C,90%RH should be provided.
5. The tap fiber should be all colored black.

### Ordering Information:

SMFC	Wavelength	Port Type	Coupling Ratio	Package	Fiber Type	00	Pigtail Type	Length	Connector	Customer
	55=1527~1566nm	1=1*2	1=1/99	E= ( Φ3.0×L45 )	1=SMF-28e	00	1=250um bare fiber 2=900um loose tube 3=3mm loose tube 4=2mm loose tube	H=0.5m 8=0.8m 1=1.0m 5=1.5m 2=2.0m 3=3.0m 4=4.0m A=2.5m B=5.0m	0=None 1=FC/UPC 2=FC/APC 3=LC/UPC 4=LC/APC 5=SC/APC 6=SC/UPC	Customer