

DATASHEET

Simplex SM FO Pigtail-SC/APC 4.2mm G657A2 Ivory LSZH Dca

Make strongest Optical network Cabling System/FTTH



IL<0.3dB Max



OMC INDUSTRY CO.LIMITED



Simplex SM FO Pigtail-SC/APC 4.2mm G657A2

Description

The fiber optic pigtail is normally a tight/semi-tight buffered fiber cable with a connector pre terminated on one end and exposed fiber on the other. The end is stripped and fusion spliced to a single or multi-fiber trunk. When utilized properly, the fiber optic pigtail allows light signal transmission with minimal return loss and low attenuation. Make sure your network is reinforced with OMC's fiber pigtails, as ours are manufactured of superior quality materials.

This 9/125 OS2 single mode fiber optic cable is ideal for connecting 1G/10G/40G/100G/400G Ethernet connections. It can transport data for up to 10km at 1310nm, or up to 40km at 1550nm.

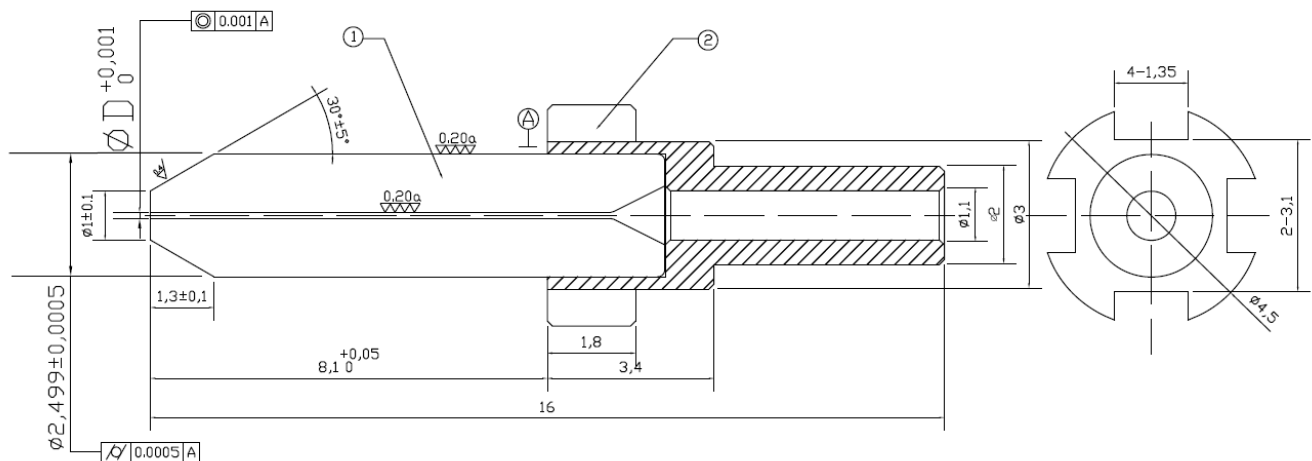
Products Materials

Ferrule



High quality SC SM APC Ceramic ferrule, Good concentricity<1.0um

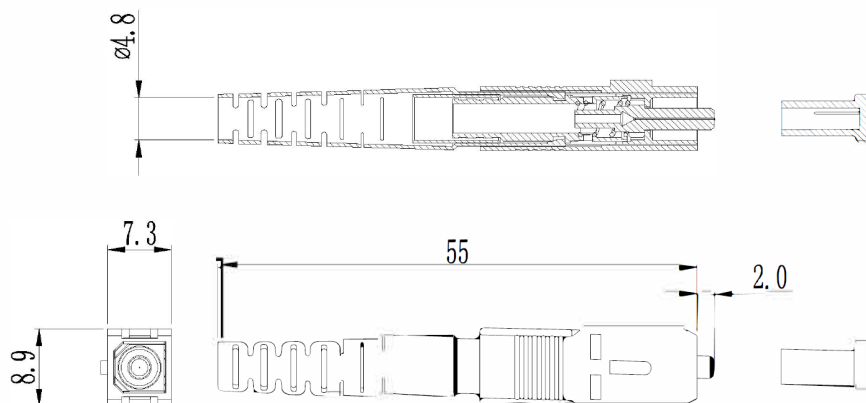
RoHS Certification



Connector

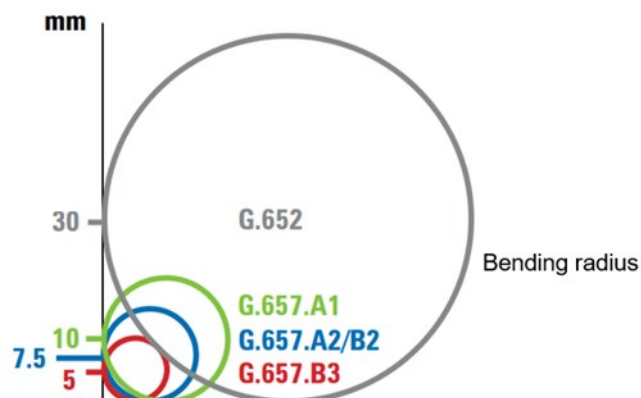
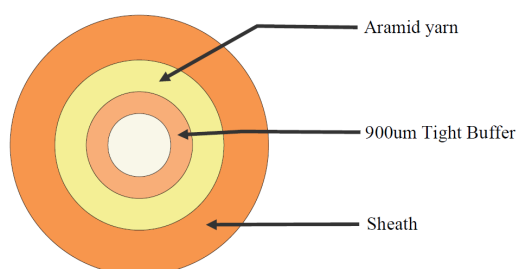


High Quality SC APC SM4.8mm Boot Connector meet and Compatible with many International Standard. Such as TIA/EIA, FOCIS10, GR-326 EIA/TIA-604-10, IEC61754-20 and JIS C5973.



Products Materials

Cable



Items		Description
Number of fiber		1F
Fiber type		G657A2
Diameter of mode Field		1310nm: 8.8+/-0.4um, 1550:9.8+/-0.5um
Cladding diameter		125+/- 0.7um
Buffer	Material	PVC
	Diameter	0.9±0.05mm
Strength member	Material	Kevlar yarn
Outer sheath	Material	LSZH
	CPR Level	Dca-s2d2a2
	Color	Ivory
	Diameter	4.2mm
Installation Temperature range (°C)		-10+60
Operation and transport temperature (°C)		-20+70
Min Bending Radius(mm)	Long term	10D
Min Bending Radius(mm)	Short term	20D
Min allowable Tensile Strength(N)	Long term	200
Min allowable Tensile Strength(N)	Short term	450
Crush Load (N/100mm)	Long term	100
Crush Load (N/100mm)	short term	500

Quality features:

YOFC or Hengtong or Fiberhome's G.657.A2 bend insensitive fiber

7.5mm minimum bend radius

Insertion loss and return loss testing

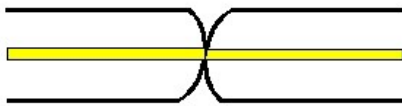


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Optical Specifications

Connector	SC	Polish	APC
Fiber Mode	9/125μm, G657A2	Jacket Color	Ivory
Cable OD	4.2mm	Wavelength	SM:1310/1550nm
Cable Structure	Simplex	Jacket Material	LSZH
Insertion loss	≤0.3dB(IEC Grade C)	Crush Resistance (N/100mm)	Long term 100; short term:500
Return loss	SM APC ≥ 60dB(min)	Interchangeability &Vibration	≤0.2dB
Tensile Strength (N)	Long term 150; short term:450	Opera- tion&Storage tem- perature	-45~85°C

Polishing Method



APC(8 Angled Polished connector)

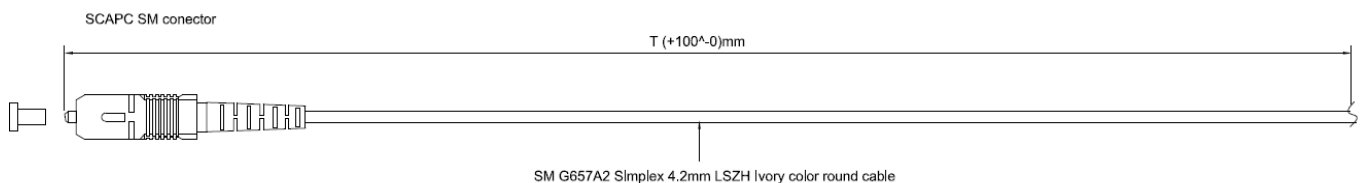
End-face Quality (SM)

Zone	Range (μm)	Scratches	Defects	Reference
A: Core	0 to 25	None	None	IEC 61300-3-35:2015
B: Cladding	25 to 115	None	None	
C: Adhesive	115 to 135	None	None	
D: Contact	135 to 250	None	None	
E: Rest of ferrule		None	None	



SM APC

Length Tolerance



Overall Length(L) (m)	length of tolerance (cm)
0<L<1	+5/-0
1<L<10	+10/-0
10<L<40	+15/-0
40<L	+0.5% x L/-0

Connector Interfaces

Compliance according to IEC 61754-4-4, IEC 61754-4-5 and IEC 61755-3

Parameters	Test procedure
ATTENUATION Reference source	IEC 61300-3-4 Method B
ATTENUATION Random mated connectors	IEC 61300-3-34
RETURN LOSS	IEC 61300-3-6 Method 1
REPETITIVITY	IEC 61300-2-2

Optical Specifications Standard

Parameters	Test procedure
Attenuation Coefficient	IEC 60793-1-40
Attenuation discontinuities	IEC 60793-1-40 Method C
Cable cut-off wavelength λ_{cc}	IEC 60793-1-44
PMD (Polarization Mode Dispersion)	IEC 60793-1-48

Mechanical parameters

Parameters	Test procedure
Stripping force stability of cabled optical fibres	IEC 60794-1-21 Method E5A
Tube kinking	IEC 60794-1-23 Method G7
Abrasion resistance of optical fibre cable markings	IEC 60794-1-21 Method E2B Method 2
Tensile performance	IEC 60794-1-21 Method E1
Crush test	IEC 60794-1-21 Method E3A
Impact	IEC 60794-1-21 Method E4
Repeated bending	IEC 60794-1-21 Method E6
Bend	IEC 60794-1-21 Method E11A
Torsion	IEC 60794-1-21 Method E7



Mechanical parameters

Parameters	Test procedure
VIBRATION (sinusoidal)	IEC 61300-2-1
CABLE RETENTION	IEC 61300-2-4
TENSILE STRENGTH OF COUPLING MECHANISM	IEC 61300-2-6
TORSION	IEC 61300-2-5
IMPACT	IEC 61300-2-12 Method C
SIDE LOAD	IEC 61300-2-42

Environmental parameters:

Parameters	Test procedure
EXTENDED LOW TEMPERATURE	IEC 61300-2-17
DRY HEAT	IEC 61300-2-18
CHANGE OF TEMPERATURE	IEC 61300-2-22
DAMP HEAT	IEC 61300-2-19
SALT MIST	IEC 61300-2-26
DUST	IEC 61300-2-27