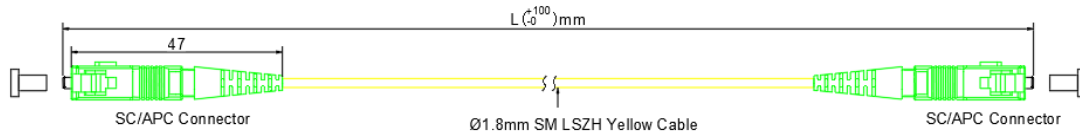


PRODUCT SPECIFICATIONS

The Customer's material P/N	
Product description	Patchcord SCAPC-SCAPC 1.8mm cable with G657A2 fiber

SCHEMATIC DIAGRAM



FEATURES

- Connector's design complies with IEC 61754-4 standard
- LSZH cable jacket
- Materials are compliant with RoHS 3 (2015/863), REACH (SVHC list release of January 15, 2019) and UL 94 V-0
- Qualified to Telcordia GR-326 and IEC 61300 standards

OPTICAL CHARACTERISTICS

Item	Parameter	Testing method
Insertion loss @ 1310nm and 1550nm	Against reference average $\leq 0.25\text{dB}$; Against reference max. $\leq 0.50\text{dB}$	IEC 61300-3-4
Return loss @ 1310nm and 1550nm	$> 60\text{dB}$	IEC 61300-3-6

FERRULE'S END-FACE GEOMETRY

Item	Parameter	Reference
Radius of curvature (mm)	5 to 12	IEC 61755-3-2
Fiber height (nm)	-100 to 100	
Apex offset (μm)	0 to 70	
Angle (deg)	7.5 to 8.5	

FERRULE'S END-FACE VISUAL QUALITY (using 400x microscope)

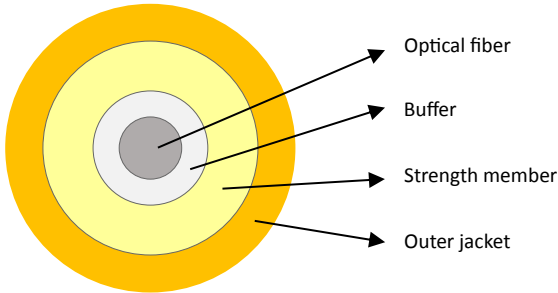
Zone	Range (μm)	Scratches	Defects	Reference
A: Core	0 to 25	$4 \leq 3\mu\text{m}$;	None	IEC 61300-3-35:2015
B: Cladding	25 to 115	No limit	No limit $< 2\mu\text{m}$; 5 from 2 to $5\mu\text{m}$; None $> 5\mu\text{m}$	
C: Adhesive	115 to 135	No limit	No limit	
D: Contact	135 to 250	No limit	None $> 10\mu\text{m}$	
E: Rest of ferrule		No limit	No limit	

CONNECTOR SPECIFICATIONS

Item	Parameter	Reference
Connector type	SC APC 8 degree	IEC 61754-4
Connector color	Green	
Connector boot length	32mm	
Connector boot type	Flexible	
Connector boot color	Green	

SC APC – SC APC 1,8mm Simplex

CABLE STRUCTURE



FIBER CHARACTERISTICS

Item	Parameter
Core count	1
Fiber type	Corning ClearCurve® LBL Optical Fiber
Mode-field diameter	8.6 ± 0.4µm @1310nm 9.6 ± 0.5µm @1550nm
Cladding diameter	125 ± 0.7µm
Primary coating diameter	242 ± 5µm
Core to cladding concentricity	≤ 0.5µm
Cladding non-circularity	≤ 0.7%
Coating-cladding concentricity	< 12µm
Dispersion	≤ 18ps/(nm.km) @1550nm ≤ 23ps/(nm.km) @1625nm
Fiber attenuation	≤ 0.35dB/Km @1310nm ≤ 0.20dB/Km @1550nm
Macrobend loss	R=7.5mm, 1turns: ≤ 0.4dB @1550nm R=7.5mm, 1turns: ≤ 0.8dB @1625nm

CABLE CHARACTERISTICS

Item	Parameter
Optical fiber	0.25mm Color: White
Buffer	Outer diameter: 0.6 ± 0.05mm Material: LSZH Color: White; Pantone:-; RAL: 9010
Strength member	Aramid yarn
Outer jacket	Thickness: 0.27 ± 0.02mm Outer diameter: 1.8 ± 0.05mm Material: LSZH Color: Yellow; Pantone:-; RAL: 1021
CPR Rating	Eca
Nominal weight	2.1 kg/km
Max. tensile strength	Short-term: 80N; Long-term: 40N
Max. crush resistance	Short term: 300 N/100mm ² Long term: 100 N/100mm ²
Min. bending radius	Dynamic: 15D Static: 7.5D
Temperature	Storage or transportation: -40 to 85°C Operation or installation: -25 to 70°C
Cable Printing:	Plus Corning Clearcurve SM G657A2 Optical Fiber MM/YYYY xxxxxM

SC APC – SC APC 1,8mm Simplex

PATCHCORD CABLE MECHANICAL & ENVIRONMENTAL PERFORMANCE

Parameter	Specification	Product performance
Resistance to Temperature Changes	IEC 60794-1-22 F1	Range:-25°C to +70°C ΔAttenuation: 0.5 dB (during and after test)
Permanent traction	IEC 60794-1-21 E1	Min. tested value: 5 daN ΔAttenuation: 0.05 dB (0,03 dB after test)
Short-term traction	IEC 60794-1-21 E1	Min. tested value: 15 daN ΔAttenuation: 0.05 dB (0,03 dB after test)
Static bending radius (no traction)	IEC 60794-1-21 E11	Max. tested value: 30 mm ΔAttenuation: 0.5 dB (during and after test)
Static bending radius (with traction)	IEC 60794-1-21 E18A	Max. tested value: 60 mm (5 daN) ΔAttenuation: 0.5 dB (during and after test)
Compression resistance	IEC 60794-1-21 E3	Min. tested value: 100 N/dm ΔAttenuation: reversible (0.03 dB after test)
Impact resistance	IEC 60794-1-21 E4	Min. tested value: 1 impact of 1 Nm ΔAttenuation: 0.05 dB after the test

PATCHCORD ASSEMBLY MECHANICAL & ENVIRONMENTAL PERFORMANCE

Parameter	Specification	Product performance
Vibration	IEC 61300-2-1	Range: 10 – 55Hz (1.5mm peak-to-peak) ΔAttenuation: 0.2 dB (during and after test) Return Loss: ≥ 60dB
Coupling mechanism strength	IEC 61300-2-6	Min. tested value: 40N during 120s ΔAttenuation: 0.2 dB (during and after test) Return Loss: ≥ 60dB
Cable retention	IEC 61300-2-4	Min. tested value: 50N during 120s ΔAttenuation: 0.2 dB (during and after test)
Torsion	IEC 61300-2-5	ΔAttenuation: 0.2 dB (during and after test)
Mechanical endurance	IEC 61300-2-2	Number of plug-unplug cycles: min. 50 ΔAttenuation: 0.2 dB (during and after test) Return Loss: ≥ 60dB
Cold	IEC 61300-2-17	Min. tested value:-40°C (C.O.) / -10°C (C.P.) ΔAttenuation: 0.5 dB (during and after test) Return Loss: ≥ 60dB
Dry heat	IEC 61300-2-18	Min. tested value: +80°C (C.O.) / +60°C (C.P.) ΔAttenuation: 0.5 dB (during and after test) Return Loss: ≥ 60dB
Change of temperature	IEC 61300-2-22	Range:-25°C to 70°C (C.O.); -10°C to 60°C (C.P.) ΔAttenuation: 0.5 dB (during and after test) Return Loss: ≥ 60dB