

SC 250 μ m/900 μ m Connector XP Fit Plus

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951-XXX-XXX

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Range Of Limitations

The Product Information found herein pertain to the SC XPfit Plus Connector, Part Number 318-XXX-XXX

Dimensions and Materials

Please refer to document EN09-161
 All the materials comply with RoHS

Typical End Face Geometries for APC

Sample ID	Type	PASS FAIL	Radius of Curvature (mm)	PASS FAIL	Fiber Height Spherical (nm)	PASS FAIL	Apex Offset (um)	PASS FAIL
1	APC	PASS	9.7	PASS	-14.2	PASS	40.16	PASS
2	APC	PASS	9.34	PASS	55.8	PASS	15.72	PASS
3	APC	PASS	8.98	PASS	-18.2	PASS	14.09	PASS
4	APC	Pass	8.57	PASS	-14.1	PASS	48.17	PASS
5	APC	PASS	9.09	PASS	-5.2	PASS	47.7	PASS
6	APC	PASS	9.78	PASS	-7.4	PASS	43.82	PASS
7	APC	PASS	8.96	PASS	-10.5	PASS	46.37	PASS
8	APC	PASS	9.35	PASS	-9.4	PASS	39.41	PASS
9	APC	PASS	9.59	PASS	-16.1	PASS	29.41	PASS
10	APC	PASS	9.27	PASS	-20.1	PASS	23.49	PASS

Typical End Face Geometries LC/PC

Sample ID	Type	PASS FAIL	Radius of Curvature (mm)		Fiber Height Spherical (nm)		Apex Offset (um)	
1	PC	PASS	13.91	PASS	-19.6	PASS	5.24	PASS
L2	PC	PASS	12.58	PASS	14.6	PASS	31.72	PASS

Optical Characteristics

The SENKO SC Connectors exhibit the following characteristics

Specification	Single mode	Multimode
Insertion loss	0.2dB typical (PC)	0.1dB typical
	0.3dB typical (APC)	
Return loss	≥ 55dB typical (PC)	≥35dB typical
	≥ 60dB typical (APC)	
Durability	< 0.1dB typical change, 500 matings	< 0.1dB typical change, 500 matings
Operating Temperature	-40°C to +75°C	-40°C to +75°C
Qualification	TIE/EIA 568-B.3	
Intermateability	IEC 61754-4	

Telcordia GR-326 service life test result, SC-UPC

XP Fit Plus SC Connector SM PC 900µm											
Sample No.		1	2	3	4	5	6	7	8	9	10
Initial IL (0.4dB)	WL1.31	0.4	0.25	0.23	0.36	0.33	0.25	0.08	0.35	0.18	0.27
	WL1.55	0.36	0.26	0.28	0.27	0.2	0.2	0.16	0.28	0.12	0.16
Final IL (0.3dB)		0.08	0.00	0.01	0.10	0.08	0.02	0.09	0.10	0.05	0.03
Final IL (0.3dB)		-0.01	-0.10	-0.09	0.00	0.01	-0.01	-0.03	-0.08	0.01	-0.05
PASS / FAIL		PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS

TIA/EIA 568-B.3 - Reliability Test Report SC-PC 900µm Connector

This Table shows the test condition and result, unless specified otherwise test is done at room temperature;

	Item	Condition	Specification	Sample Size	Result	Pass /Fail
1	Insertion Loss (FOTP-13)	WL: 1310nm, 1550nm	≤ 0.75 dB	50	IL Avg.: 0.21dB@1310nm 0.18dB@1550nm IL Max.: 0.39dB@1310nm 0.31dB@1550nm	Pass
2	Return Loss (FOTP-8)	WL: 1310nm, 1550nm	≥ 26 dB	50	RL Avg.: 54.7dB@1310nm 59.8dB@1550nm RL Min.: 49.2dB@1310nm 49.3dB@1550nm	Pass
3	Low temperature (FOTP-188)	0degC, 96hrs	Before testing IL ≤ 0.75 dB During Δ IL ≤ 0.3 dB After testing IL ≤ 0.75 dB RL ≥ 26 dB	8	Before testing IL Avg.0.25dB, Max.0.36dB During Δ IL Avg.0.09dB, Max.0.13dB After testing IL Avg.0.34dB, Max.0.4dB After testing RL Avg.48.2dB, Min.44.4dB	Pass
4	Temperature life (FOTP-4)	60degC, 96hrs	Before testing IL ≤ 0.75 dB After testing IL ≤ 0.75 dB RL ≥ 26 dB	8	Before testing IL Avg.0.24dB, Max.0.51dB After testing IL Avg.0.28dB, Max.0.56dB After testing RL Avg.47.6dB, Min.46.4dB	Pass
5	Humidity (FOTP-5)	40degC 93%, 96hrs	Before testing IL ≤ 0.75 dB During Δ IL ≤ 0.4 dB After testing IL ≤ 0.75 dB RL ≥ 26 dB	8	Before testing IL Avg.0.26dB, Max.0.38dB During Δ IL Avg.0.12dB, Max.0.16dB After testing IL Avg.0.22dB, Max.0.36dB After testing RL Avg.48.9dB, Min.47.5dB	Pass
6	Impact (FOTP-2)	8drops from 1.8m	Before testing IL ≤ 0.75 dB After testing IL ≤ 0.75 dB RL ≥ 26 dB	8	Before testing IL Avg.0.19dB, Max.0.33dB After testing IL Avg.0.18dB, Max.0.31dB After testing RL Avg.52.3dB, Min.51.9dB	Pass
7	Strength of coupling mechanism (FOTP-185)	Tensile load: 33N 5sec	Before testing IL ≤ 0.75 dB After testing IL ≤ 0.75 dB RL ≥ 26 dB	10	Before testing IL Avg.0.17dB, Max.0.21dB After testing IL Avg.0.17dB, Max.0.21dB After testing RL Avg.48.5dB, Min.47.1dB	Pass

TIA/EIA 568-B.3 - Reliability Test Report SC-PC 900µm Connector,
 (continued)

8	Durability (FOTP-21)	500 times mating	Before testing IL <=0.75dB After testing IL <=0.75dB RL>=26dB	8	Before testing IL Avg.0.33dB, Max.0.45dB After testing IL Avg.0.38dB, Max.0.53dB After testing RL Avg.46.6dB, Min.42.2dB	Pass
9	Cable retention (FOTP-6)	Tensile load: 2.2N, 5sec 0deg, 90deg	Before testing IL <=0.75dB After testing IL <=0.75dB ΔIL <=0.5dB RL >=26dB	8	Before testing IL Avg.0.3dB, Max.0.45dB After testing IL Avg.0.3dB, Max.0.45dB After testing ΔIL Avg.0.0dB, Max.0.0dB After testing RL Avg.51.0dB, Min.42.1dB	Pass
10	Flex (FOTP-1)	2.2N +/-90deg 100cyc	Before testing IL <=0.75dB After testing IL <=0.75dB RL >=26dB	8	Before testing IL Avg.0.17dB, Max.0.23dB After testing IL Avg.0.18dB, Max.0.23dB After testing RL Avg.47.2dB, Min.44.8dB	Pass
11	Twist (FOTP-36)	2.2N 220-280mm position +/-2.5rev 9cyc	Before testing IL <=0.75dB After testing IL <=0.75dB RL >=26dB	8	Before testing IL Avg.0.25dB, Max.0.39dB After testing IL Avg.0.2dB, Max.0.3dB After testing RL Avg.49.7dB, Min.47.0dB	Pass

Conclusion

“XPFit Plus SC Connector SM PC 900µm” successfully passed all of the TIA/EIA 568-B.3 tests.

Ordering Information

Part number	Description (all are for 900µm buffered fiber)	Color				
		Outer HSG	Inner HSG	900µm Boot	Stop Ring	Dust Cap
318-191-627	XPFit Plus SC, SM PC	Blue	White	White	White	Transparent
318-091-427	XPFit Plus SC, SC APC	Green	White	White	White	Transparent
318-291-727	XPFit Plus SC, MM 50/125	Black	Black	White	White	Transparent
318-391-927	XPFit Plus SC, MM 62.5/125	Beige	Black	White	White	Transparent
318-491-527	XPFit Plus SC, MM 50/125 10G OM3	Aqua	Black	White	White	Transparent

Part number	Description (all are for 250µm buffered fiber)	Color				
		Outer HSG	Inner HSG	900µm Boot	Stop Ring	Dust Cap
318-191-617	XPFit Plus SC, SM PC	Blue	White	White	White	Transparent
318-091-417	XPFit Plus SC, SC APC	Green	White	White	White	Transparent
318-291-717	XPFit Plus SC, MM 50/125	Black	Black	White	White	Transparent
318-391-917	XPFit Plus SC, MM 62.5/125	Beige	Black	White	White	Transparent
318-491-517	XPFit Plus SC, MM 50/125 10G OM3	Aqua	Black	White	White	Transparent

Note: Above are packaged 10 to a box. Ten (10) pieces is the minimum purchased quantity and quantities must be ordered in multiples of 10 connectors.

The above packaged quantities of 10 connectors are pre-assembled and attached to the wedge plate ready to be terminated using an assembly fixture base and fiber guide/holder. Each package of 10 connectors contains Step-By-Step installation instructions, one (1) Fixture Base and one (1) Fiber Guide/Holder which can be discarded after completing 10 XPFit Plus terminations. Each package of 10 connectors also contains 10 white boots used to complete the termination process resulting in superior fiber strain relief of the 900µm fiber.

Instructions

Termination Procedure is included with each shipment.

Shipping Information

All connectors are sealed with dust caps and packed in a secure fashion so as to prevent any damage during transit.

Related Documents

Drawing:	EN09-161
Termination Procedure:	ETP-1008-001-XX (SC-PC 900 μ m) ETP-1209-001-XX (SC-PC 250 μ m) ETP-1209-002-XX (SC-APC 900 μ m)

Product Guarantee

The buyer of this product should inspect the goods upon arrival, and within five (5) business days should notify SENKO of any conditions which may prevent the acceptance of this product. In the event of a claim, appropriate measures will be taken to investigate the cause. Claims must be made in accordance to the conditions stated in the Standard Terms and Conditions of Sale.

**Product specifications are subject to adjustments and improvements please contact a
SENKO sales office to confirm published values**