

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 S	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 SC/PC

Sample ID	Type	PASS FAIL	Radius of Curvature (mm)	PASS FAIL	Fiber Height Spherical (nm)	PASS FAIL	Apex Offset (um)	PASS FAIL
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 SC Connectors exhibit the following characteristics

Specification	Single mode	Multimode
Insertion loss	0.2dB typical, 0.5dB Max. (PC)	0.1dB typical, 0.3dB Max.
	0.3dB typical, 0.75dB Max. (APC)	
Return loss	≥ 55dB typical (PC)*	≥35dB typical* < 0.1dB typical change, 500 matings
	≥ 60dB typical (APC)*	
Durability	< 0.1dB typical change, 500 matings	
Operating Temperature	-40°C to +75°C	
Qualification	TIE/EIA 568-C.3	
Intermateability	IEC 61754-4	
Note	*At room temperature 23 +/-5°C	

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

UltraFit SC Connector SM PC 900um

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-C.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-171)	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)	-10degC, 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)	5drops from 1.5m	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: 40N 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-C.3 - Reliability Test Report SC-PC 900µm Connector

(continued)

8	Durability (FOTP-21)	500 times mating	Before testing IL $\leq 0.75\text{dB}$ After testing IL $\leq 0.75\text{dB}$ RL $\geq 26\text{dB}$	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: 5N, 5sec, 0deg Tensile load: 2N, 5sec, 90deg	Before testing IL $\leq 0.75\text{dB}$ After testing IL $\leq 0.75\text{dB}$ $\Delta\text{IL} \leq 0.5\text{dB}$ RL $\geq 26\text{dB}$	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)	2N +/-90deg 100cyc	Before testing IL $\leq 0.75\text{dB}$ After testing IL $\leq 0.75\text{dB}$ RL $\geq 26\text{dB}$	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)	2N 220-280mm position +/-2.5rev 9cyc	Before testing IL $\leq 0.75\text{dB}$ After testing IL $\leq 0.75\text{dB}$ RL $\geq 26\text{dB}$	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

“UltraFit SC Connector SM PC 900um” successfully passed all of the TIA/EIA 568-C.3 tests.

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.

Product Guarantee

The buyer of this product should inspect the goods upon arrival, and within five (5) business days should notify Yaax 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 Yaax sales office to confirm published values

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Range Of Limitations

The Product Information found herein pertain to the SC ULTRAFit Connector, Part Number YX-CNT-UF-SCA