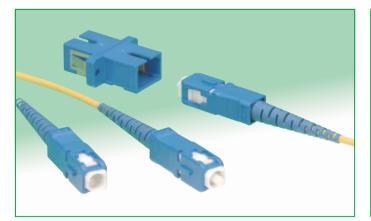
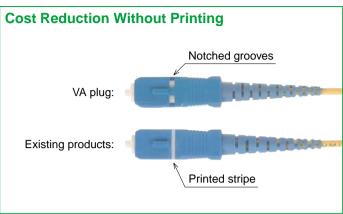
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# SC Optical Fiber Simplex VA Plugs

HSC (VA) Series





## Features

### **1. SC Optical Fiber Connectors**

Used as SC optical fiber connectors by Nippon Telegraph and Telephone Corporation (NTT). Meet requirements of JIS C 5973 (F04 optical fiber connectors) and IEC 61574-4

#### 2. Reduced cost

Permanent grooves on the plug's body replace the typical printed stripe, reducing the cost while retaining the ease of mating and identification with the corresponding adapter.

#### 3. RoHS Compliance

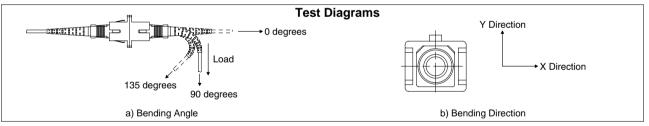
All components and materials comply with the requirements of EU Directive 2002/95/EC.

#### 4. Improvement of Cable Bending Characteristics

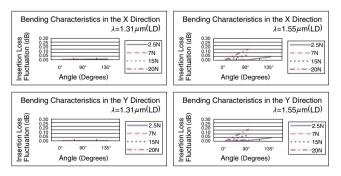
Cable bending characteristics meet requirements of Telcordia GR-326-CORE.

#### **Test requirements:**

- 1. Perform the bending test with an added load of between 2.5 N and 20 N, and measure the insertion loss fluctuation.
- 2. Bend as far as 135 degrees with a load of 2.5 N, and bend as far as 90 degrees with other loads.



#### Test Results (Typical Data)



vvavelengtn $\lambda = 1.31 \mu \text{m}$						vvavelengtn $\lambda = 1.55 \mu m$			
X Direction Unit: dB						X Direction			Unit: dB
	Angle Load	0°	90°	135°		Angle Load	0°	90°	135°
	2.5N	0.00	0.00	0.01		2.5N	0.00	0.00	0.04
	7N	0.00	0.00			7N	0.00	0.01	
	15N	0.00	0.00			15N	0.00	0.07	
	20N	0.00	0.00			20N	0.00	0.15	

Y Direction	on		Unit: dB	Unit: dB			
Angle Load	0°	90°	135°	Angle Load	0°	90°	135°
2.5N	0.00	0.00	0.00	2.5N	0.00	0.01	0.04
7N	0.00	0.00		7N	0.00	0.02	
15N	0.00	0.00		15N	0.00	0.08	
20N	0.00	0.00		20N	0.00	0.16	

## Applications

LAN, public communications lines, CATV, computerized transfer systems, measuring instruments and other applications where high reliability SC optical fiber connectors are required.

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## Product Specifications

Ratings Operating temperature range –	-40℃ to +75℃	Storage temperate range	–40℃ to +75℃
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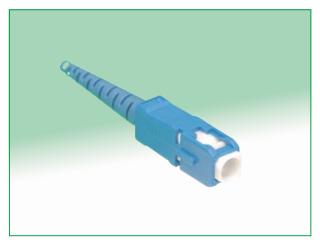
	Item		Test method (IEC 61300)	Specifications	
istics	Insertion Loss		Wavelength 1310nm (LD)	0.5dB max. (PC, AdPC)	
racteri	Insertion Loss	(GI)	Wavelength 1310nm (LED)	0.3dB max. (PC)	
Optical characteristics	Return Loss	(SM)	Weyelength 1010pm (LD)	22dB min. (PC)	
Optic		(GI)	Wavelength 1310nm (LD)	40dB min. (AdPC)	
	Engagement and		Measured with corresponding connector.	Engagement force: 19.6N max.	
S	Separation force		measured with corresponding connector.	Separation force: 19.6N max.	
characteristics	Cable retention		98N tensile load for one minute	Insertion loss fluctuation after test: 0.2dB max.	
acte	(Straight pull)		son tensile load for one minute	No visible damage, dislocation of clamp or cable.	
hara	Durability (cycles, mating/un-mating)		1000 times		
	Vibration		Frequency: 10 to 55Hz, single amplitude of 0.75mm,	Insertion loss fluctuation after test: 0.2dB max.	
anic			acceleration of 98.1m/s $^{2}$ , 30 minutes in each of the 3 axis.	No visible damage cracks or part dislocation.	
Mechanical	Shock		Acceleration of 981m/s <sup>2</sup> , 6 ms duration,	No visible damage cracks of part dislocation.	
Σ			sin half-wave waveform, 5 cycles in each of the 3 axis.		
	Cable Bending Characteristics		Telcordia GR-326-CORE 4.4.2.5	Insertion loss fluctuation during test: 0.5dB max.	
stics	Humidity		−10℃ to +65℃, humidity: 90% to 96%		
characteristics	(Temperature / humidity – cycles)		10 cycles		
arac	Change of temperature		−40°C to +75°C, 21 cycles	Insertion loss fluctuation after test: 0.3dB max.	
alc			(Complies with Telcordia standard GR-326-CORE)	No visible damage cracks or part dislocation.	
Environmental	Dry heat		168 hours at +85℃		
iron	Cold		168 hours at –25℃		
EnV	Salt mist		5% salt water solution for 48 hours	No corrosions	

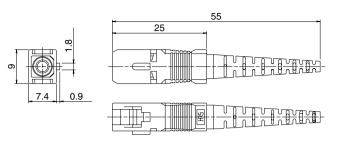
## Materials

Components	Material	Finish	Remarks
Body	Synthetic resin		UL94V-0
Plug frame	Synthetic resin		UL94V-0
Spring Stainless steel			
Stop ring	Synthetic resin		UL94V-0
Crimping ring	Brass	Nickel plated	
Hood	Synthetic resin		UL94V-0
Сар	Synthetic resin		UL94V-0

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## ■Plug Housing





Part number	CL No.	Fiber cable type	Boot color	Outer jacket attachment	RoHS
HSC-PH2-J1	CL704-0533-5		Blue		
HSC-PH2-J2	CL704-0545-4	¢2mm	Light purple		
HSC-PH2-J6	CL704-0547-0		White	Adnesive	YES
HSC-PH1.7-J1	CL704-0548-2		Blue	Adnesive	TES
HSC-PH1.7-J2	CL704-0549-5	<i>φ</i> 1.7mm	Light purple		
HSC-PH1.7-J6	CL704-0551-7		White		

# Crimp Tool

Part number	CL No.	Applicable connector		
HSC-T2	CL704-0028-2	HSC-PH2-**, HSC-PH1.7-**		