

SC-PC Connector

The connector comply with the IEC 60874 - 14 .

Characteristic :

1. Material ROHS:

1.1 SC/PC connector construction.

1.1.1 SC/PC connector material

. Ferrule & Flange	: Zirconia & Cu-Ni
. Housing	: P.B.T. 30% G.F. filled
. Nut	: P.B.T. 15% G.F. filled
. Spring	: Stainless steel
. Holder	: Cu-Ni
. Boot	: PP+TPR
. Dust cap	: PE
. Crimp	: Aluminum

2. SC/PC Connector Optical Characteristics

. Increase in insertion loss After 500 mating	: $\leq 0.2\text{dB}$
. Maximum insertion loss	: 0.3dB
. Optical return loss	: $\geq 45\text{dB}$ (PC Polishing) $\geq 50\text{dB}$ (SPC Polishing) $\geq 55\text{dB}$ (UPC Polishing)

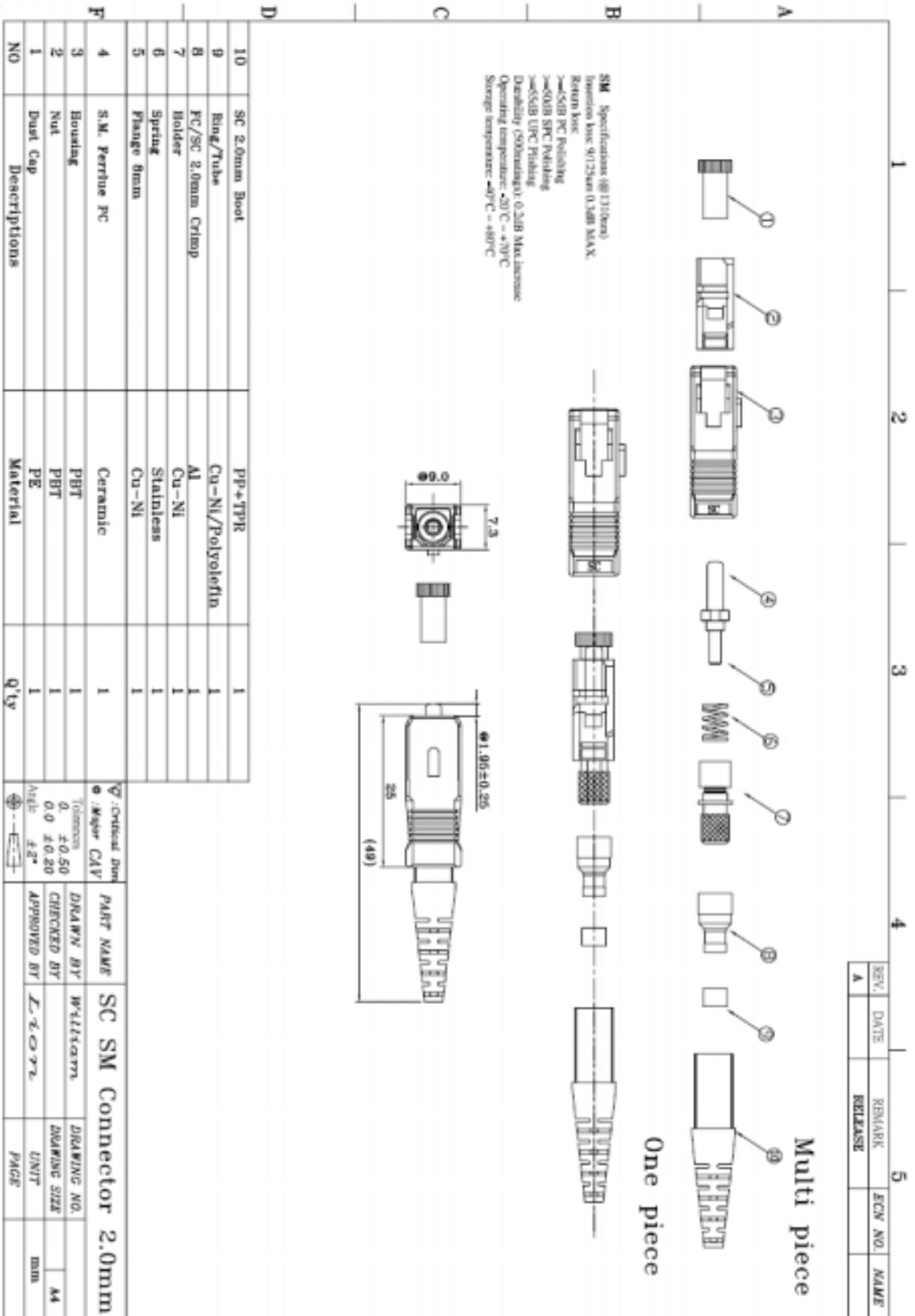
3. Mechanical Characteristics

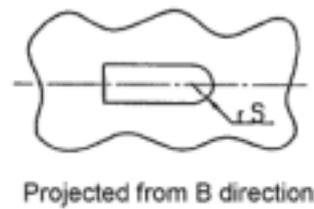
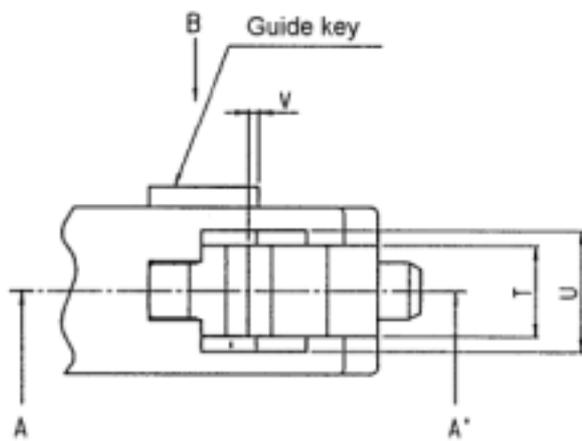
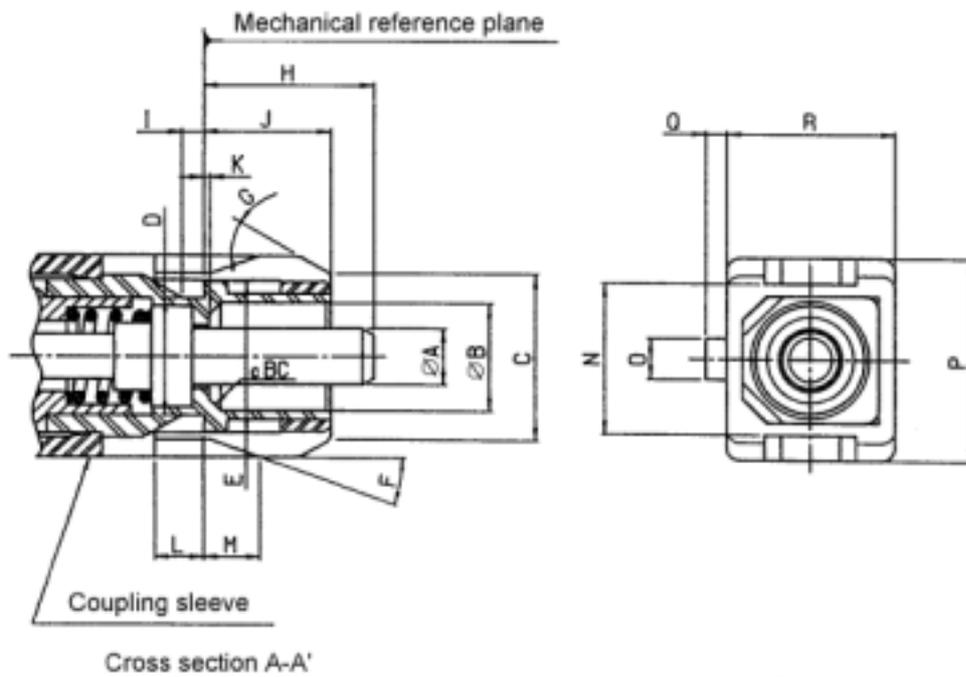
. Connection durability	: 500 Mating
. Pull-out strength	: $\geq 90\text{N}$

4. Temperature Range and Humidity

. Storage temperature	: -40 +80
. Operating temperature	: -20 +70
. Humidity (Non-condensing)	: 95% R.H.

Dimensions :



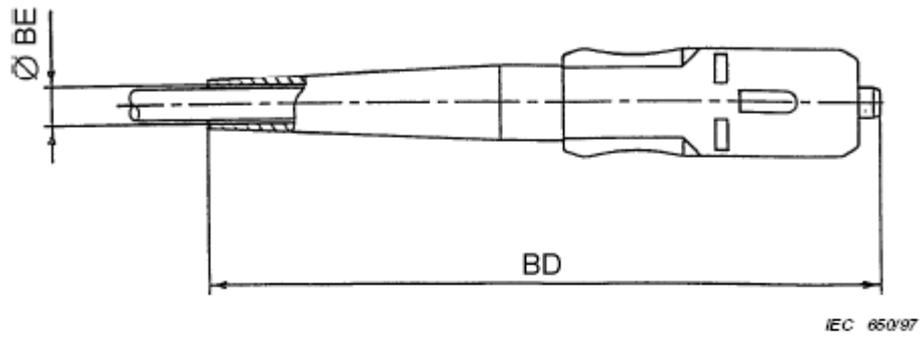


IG 04797

Reference	Dimensions		Notes
	Minimum	Maximum	
A	2,498 mm	2,500 mm	
B	4,8 mm	4,9 mm	
C	6,8 mm	7,4 mm	
D	4,9 mm	5,3 mm	
E	6,7 mm	6,8 mm	
F	19°	23°	
G	25°	35°	
H	7,15 mm	7,50 mm	1, 2
I	0,8 mm	1,2 mm	
J	5,3 mm	5,5 mm	
K	- 0,1 mm	0,05 mm	3
L	2,11 mm	2,5 mm	
M	2,0 mm	2,8 mm	
N	6,6 mm	6,8 mm	
O	1,6 mm	1,8 mm	
P	8,89 mm	8,99 mm	
Q	0,8 mm	1,0 mm	
R	7,29 mm	7,39 mm	
rS	0,8 mm	0,9 mm	radius
T	4,05 mm	4,15 mm	
U	5,4 mm	5,6 mm	
V	0 mm	0,5 mm	
cBC	0 mm	0,5 mm	chamfer

NOTES

- Ferrule compression force shall be from 7,8 N to 11,8 N, when the ferrule is compressed to a point where H is $7 \pm 0,1$ mm.
- This value shows the dimension after the ferrule is polished and in the unmated condition.
- The negative dimension refers to the position of the inside bottom plane left-direction relative to the mechanical reference plane.
- Where a tolerance of form is not specified, the limits of the dimensions for a feature control the form as well as the size.
- Where interrelated features of size (features shown with a common axis or centre plane) have no geometric tolerance of location or run out specified, the limits of the dimensions for a feature control the location tolerance as well as the size.
- Where perpendicular features (features shown at right angles) have no geometric tolerance of orientation or run out specified, the limits of the dimensions for a feature control the orientation tolerance as well as the size.



Reference	Dimensions mm		Notes
	Minimum	Maximum	
BD		60	
BE	2,2		1
BE	2,6		2
BE	2,9		3
BE	3,2		4

Plug dimension

PERFORMANCE REQUIREMENTS

Attenuation :

Typical insertion loss less than 0.30dB

Engagement and separation force

– Allowable engagement force: max. 19,6 N

– Allowable separation force: max. 19,6 N

Strength of coupling mechanism: 68,6 N; 50 N/min < load rate < 250 N/min

Maximum change in attenuation between initial, during and final measurement at 1550nm less than 0.2dB

Return Loss @ 1550nm after test: in origin class.

Vibrations:

Maximum change in attenuation between initial, during and final measurement at 1550nm less than 0.2dB

Return Loss @ 1550nm after test: in origin class.

Mechanical endurance: 500 cycles (at least 25 cleaning times during the whole test)

Maximum change in attenuation between initial, during and final measurement at 1550nm must be less than 0.2dB.

Return Loss @ 1550nm after test: in origin class

Drop (5times/1000mm height)

Maximum change in attenuation between initial, during and final measurement at 1550nm less than 0.2dB

Return Loss @ 1550nm after test: in origin class.

Resistance to weather

Cold: -10°C during 96h : Maximum change in attenuation between initial, during (at least 1h sampling) and final measurement at 1550nm must be less than 0.2dB

Return Loss @ 1550nm after test: in origin class.

Dry heat: +60°C during 96h: Maximum change in attenuation between initial, during (at least 1h sampling) and final measurement at 1550nm less than 0.2dB

Return Loss @ 1550nm after test: in origin class

Damp heat: +40°C and 90-95% HR during 96h: Maximum change in attenuation between initial, during (at least 1h sampling) and final measurement at 1550nm must be less than 0.2dB

Return Loss @ 1550nm after test: in origin class.

Change of temperature: (High temperature: 60 °C/Low temperature: -10 °C/ Duration of extreme temperature: 30 min/Changeover time: 0,5 min/ Number of cycles: 5)

: Maximum change in attenuation between initial, during (at least 1h sampling) and final measurement at 1550nm must be less than 0.2dB

Return Loss @ 1550nm after test: in origin class