



SMB 75



**SMB-75** ohms connectors are equivalent to the BT-43 series connectors and are popularly used in the telecommunication industry.

These connectors have quick insert and self locking arrangement for rugged usage. These are available in different mounting style and are best to be used for applicaions less than 4 GHz. All the center contacts of these connectors are crimped and captivated and the outer conductor could be of crimp or clamp version.

**TECHNICAL SPECIFICATIONS**

| ELECTRICAL            |                |
|-----------------------|----------------|
| Impedance             | 75 Ohms        |
| Frequency Range       | 0 – 4 GHz      |
| Voltage Rating        | 500 V rms.     |
| VSWR                  |                |
| Straight              | 1.25           |
| Right Angle           | 1.30           |
| Insulation Resistance | 500 M ohm Min. |
| Contact Resistance    |                |
| Centre Contact        | 4.0 milli ohms |
| Outer Contact         | 0.8 milli ohms |

| MATERIAL               |                  |
|------------------------|------------------|
| Body & Body components | Extruded Brass   |
| Centre Contact Male    | Extruded Brass   |
| Centre Contact Female  | Beryllium Copper |
| Outer Contact Female   | Beryllium Copper |
| Dielectric             | PTFE             |
| Gaskets                | Silicone Rubber  |
| Crimp Ferrule          | Annealed Copper  |

| ENVIRONMENTAL |                         |
|---------------|-------------------------|
| Vibration     | JSS 50101 - Test No. 23 |
| Temp. Range   | -65°C / + 165°C         |
| Shock         | JSS 50101 – Test No. 12 |
| Temp. Cycle   | JSS 50101 – Test No. 20 |

| MECHANICAL          |         |
|---------------------|---------|
| Engagement Force    | 40 Nca  |
| Disengagement Force | 8N Min. |

| FINISH                 |                      |
|------------------------|----------------------|
| Body & Body components | Nickel / Gold Plated |
| Centre Contacts        | Gold Plated          |
| Crimp Ferrules         | Nickel Plated        |
| Outer Contacts Female  | Gold Plated          |

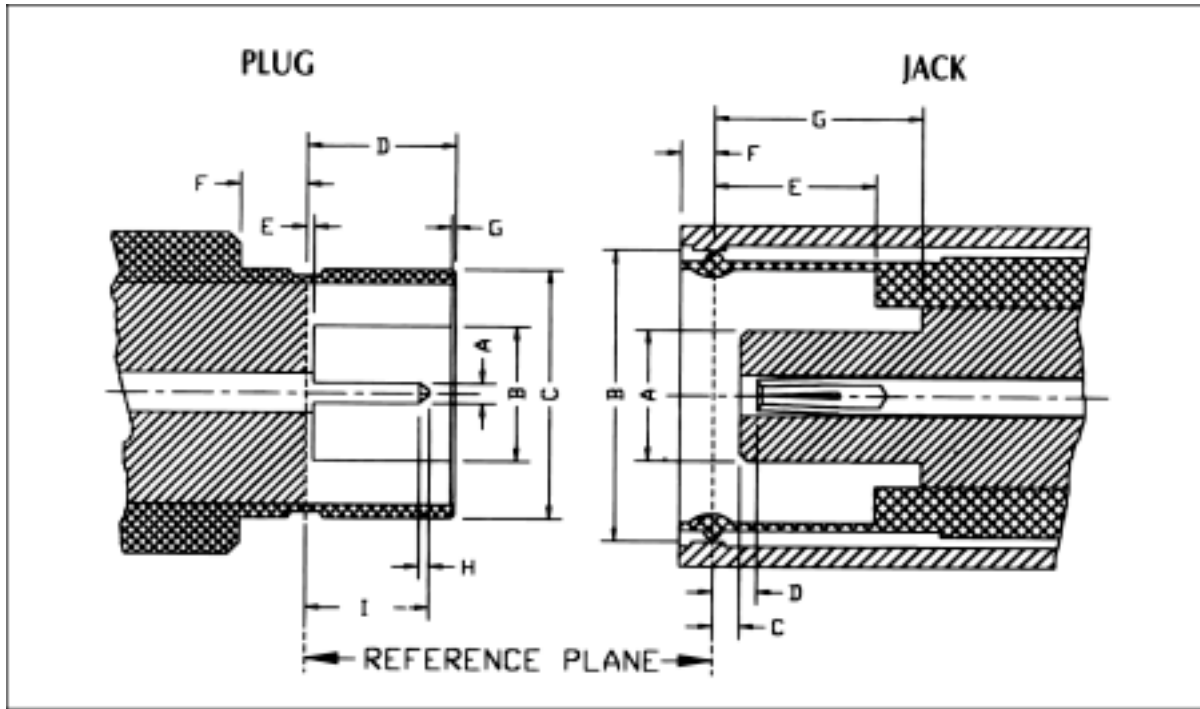


# Interface Dimensions – SMB-75 Ohms Series

PLUG

JACK

SMB 75



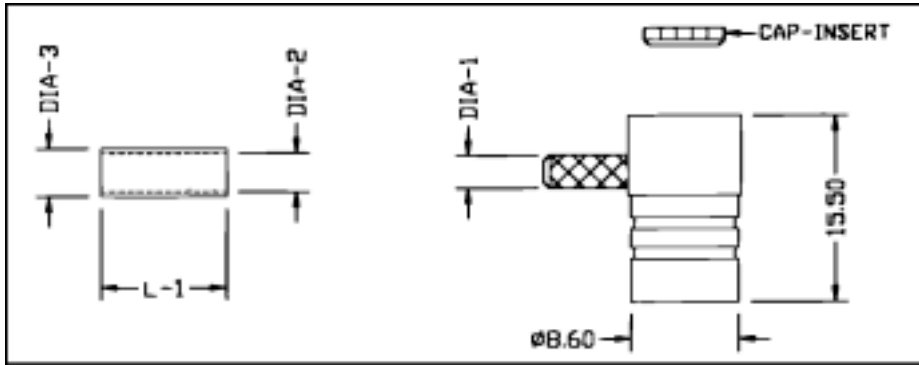
| LTR<br>(dim. of) | PLUG |      | JACK |      |
|------------------|------|------|------|------|
|                  | MIN  | MAX  | MIN  | MAX  |
| A                | 0.48 | 0.53 | -    | 3.33 |
| B                | 3.35 | -    | 6.70 | 6.90 |
| C                | 6.20 | 6.25 | 0.18 | -    |
| D                | 3.33 | 3.58 | 0.18 | -    |
| E                | -    | 0.18 | 3.58 | -    |
| F                | 1.65 | -    | -    | 2.20 |
| G                | 0.00 | 0.30 | 3.58 | -    |
| H                | 0.25 | -    | -    | -    |
| I                | -    | 2.97 | -    | -    |

ALL DIMENSIONS ARE IN MM



Right Angle Jacks

SMB 75

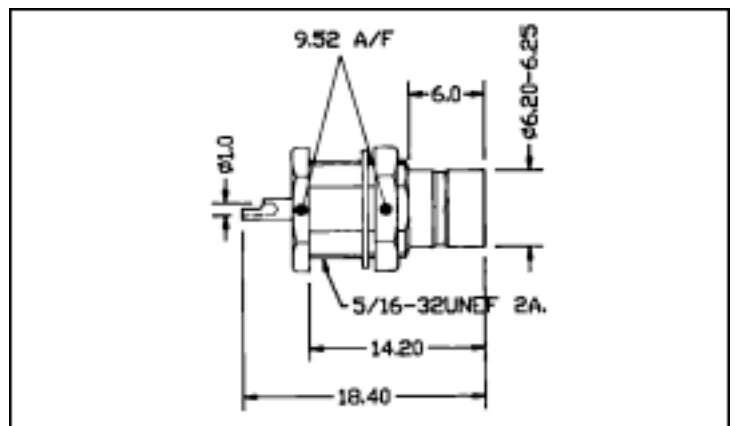


| Order Code  | Cable Group | Dia - 1 | Dia - 2 | Dia - 3 | Dia - 4 |
|-------------|-------------|---------|---------|---------|---------|
| SC11-A19-75 | RG 179 B/U  | 2.70    | 3.20    | 4.00    | 10.00   |
| SC11-A24-75 | BT 3002     | 3.50    | 4.40    | 5.40    | 10.00   |

For Cable Assembly Refer K-07

Bulk Head Receptacle

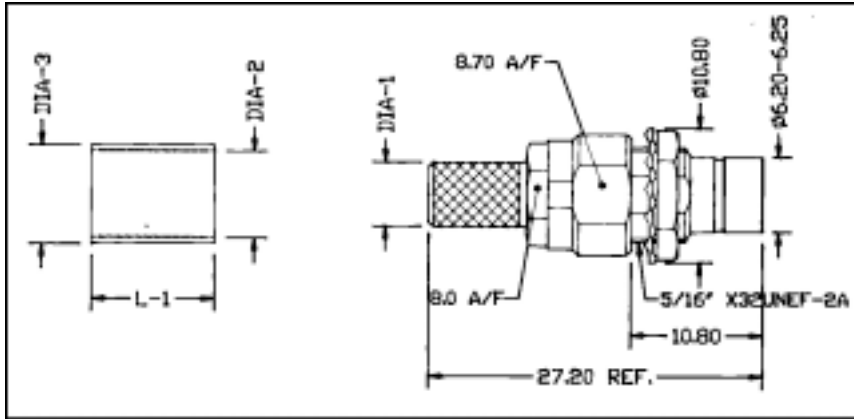
| Order Code  | Mounting Details |
|-------------|------------------|
| SC11-F01-75 | MH - 03          |





**Straight Plugs**

**SMB 75**

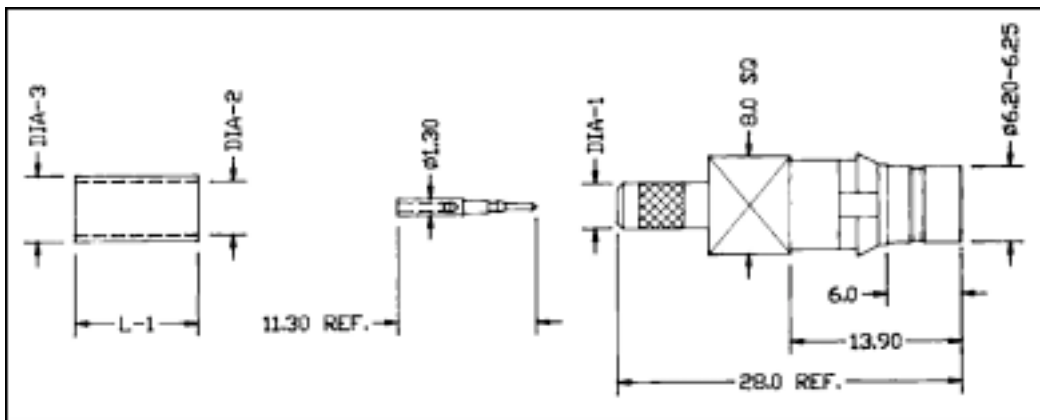


| Order Code | Cable Group | Dia - 1 | Dia - 2 | Dia - 3 | Dia - 4 |
|------------|-------------|---------|---------|---------|---------|
| SC11-MB 01 | RG 179 B/U  | 2.70    | 3.20    | 4.00    | 10.00   |
| SC11-MB 04 | BT 2003     | 5.35    | 7.20    | 8.20    | 10.00   |
| SC11-MB 05 | RG 59 B/U   | 5.35    | 6.50    | 7.50    | 12.50   |
| SC11-MB 24 | BT 3002     | 3.50    | 4.40    | 5.40    | 10.00   |

For Cable Assembly Refer K-08

Mounting Details MH - 03

**Straight Plugs**



| Order Code | Cable Group | Dia - 1 | Dia - 2 | Dia - 3 | Dia - 4 |
|------------|-------------|---------|---------|---------|---------|
| SC11-M 02  | BT 3002     | 3.50    | 4.40    | 5.40    | 10.00   |
| SC11-M 05  | BT 2003     | 5.35    | 7.20    | 3.20    | 10.00   |
| SC11-M 15  | RG 59 B/U   | 5.35    | 6.50    | 7.50    | 12.50   |
| SC11-M 19  | RG 179 B/U  | 2.70    | 3.20    | 4.00    | 10.00   |

For Cable Assembly Refer K-09



CONTENTS

SEARCH

PREVIOUS

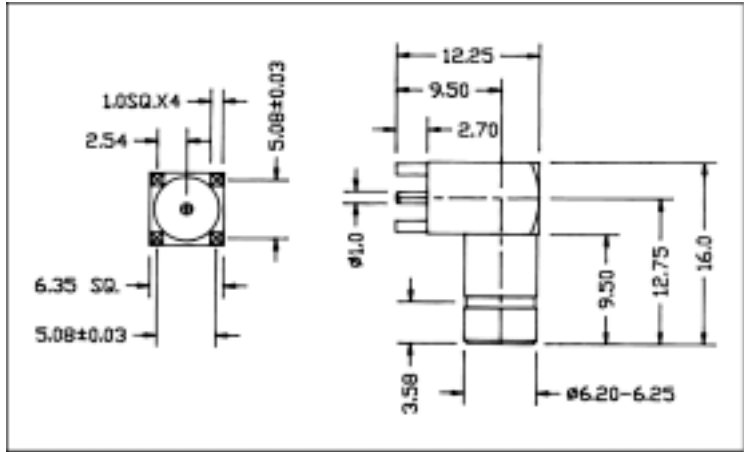
NEXT

PCB MOUNT

SMB 75

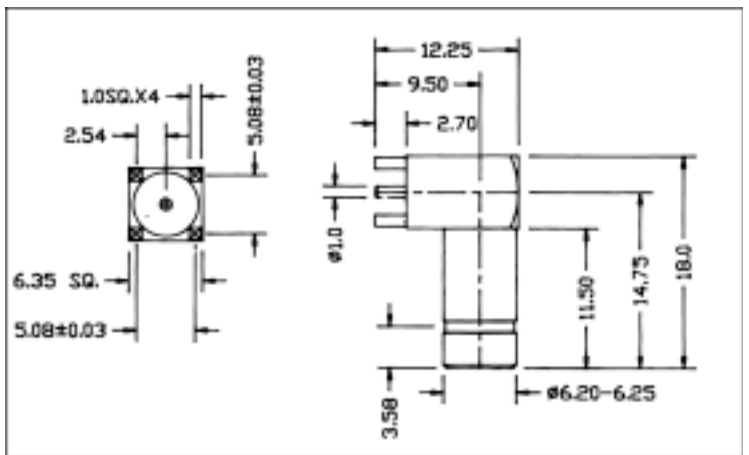
Right Angle Plug

| Order Code | Mounting Details |
|------------|------------------|
| SC11-MA 02 | MH-01            |



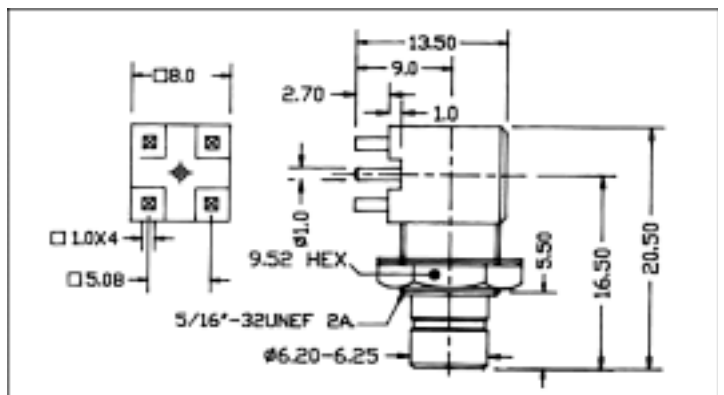
Right Angle Plug

| Order Code | Mounting Details |
|------------|------------------|
| SC11-MA 03 | MH-01            |



Right Angle Plug

| Order Code  | Mounting Details |
|-------------|------------------|
| SC11-MA B03 | MH-01            |

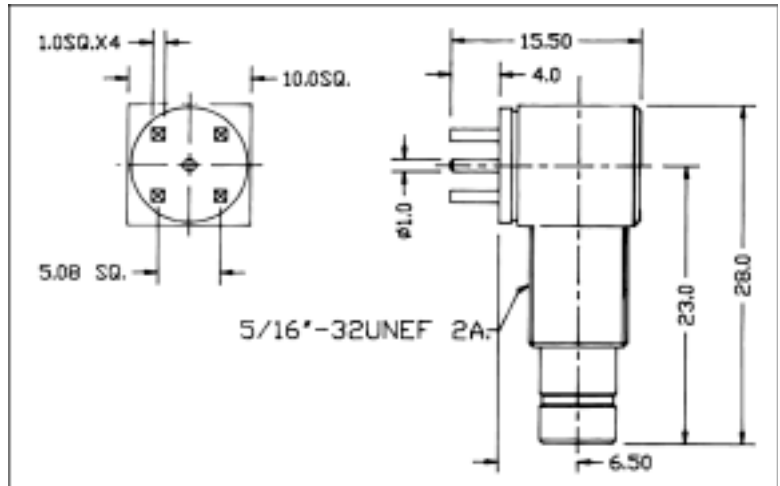




PCB MOUNT

Right Angle Plug

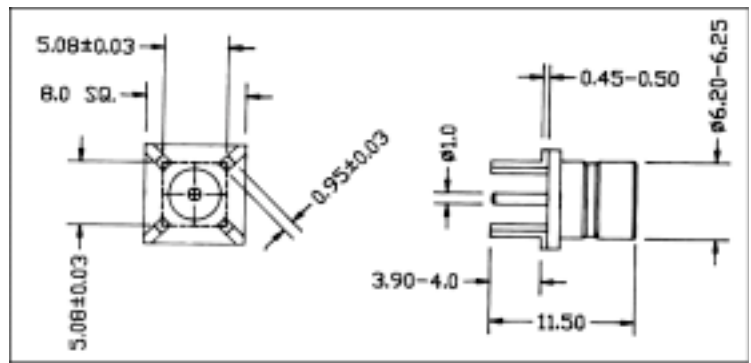
| Order Code  | Mounting Details |
|-------------|------------------|
| SC11-MA B05 | MH-01            |



SMB 75

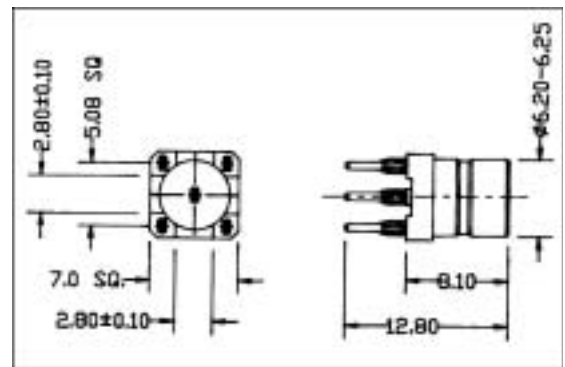
Straight Plug

| Order Code    | Mounting Details |
|---------------|------------------|
| SC11-PM 07-75 | MH-01            |



Straight Plug  
PCB Press Fit

| Order Code   | Mounting Details |
|--------------|------------------|
| SC11-PM 07-P | MH-07            |



Technical Specification

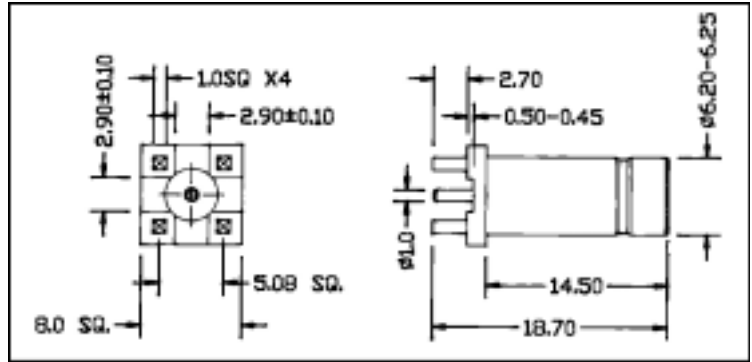
|                    |                  |                        |                      |
|--------------------|------------------|------------------------|----------------------|
| Frequency Range    | 0-4 GHz          | Outer Contact Material | Extruded Brass       |
| Voltage Rating     | 350 V            | Centre Contact         | Extruded Brass       |
| Engagement Force   | < 40 N           | Press Fit Material     | Cu – Alloy HV200     |
| Mating Cycles      | > 500            | Press Fit Pin Finish   | 1.25 µm Ni + 3 µm Sn |
| Temperature Rating | -55°C to + 155°C | Dielectric             | PTFE                 |



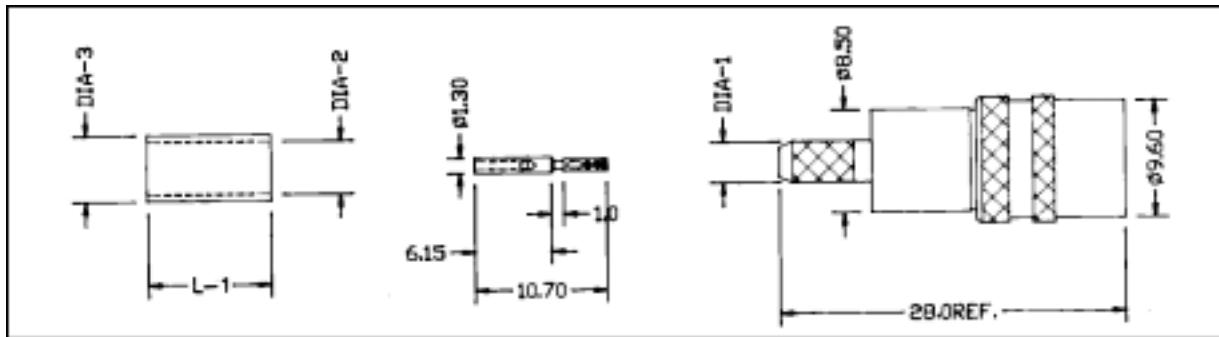
**Straight Plug  
PCB Mount**

SMB 75

| Order Code    | Mounting Details |
|---------------|------------------|
| SC11-PM 09 75 | MH-01            |



**Straight Jacks**

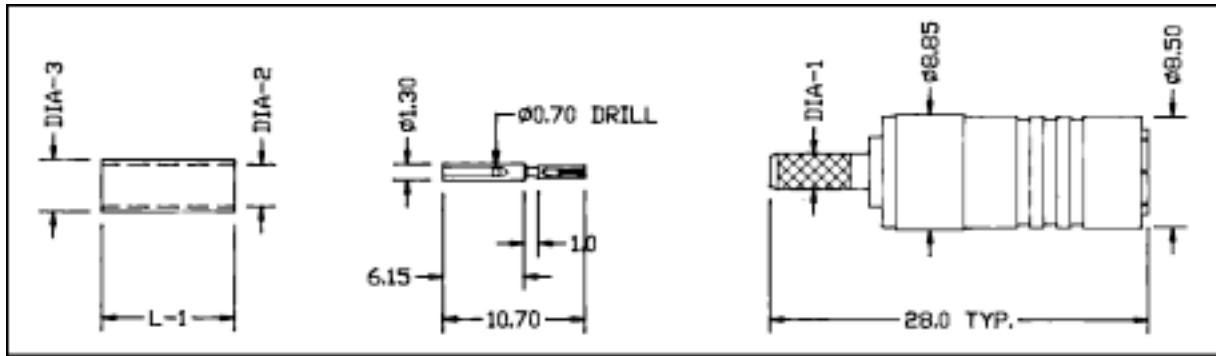


| Order Code | Cable Group | Dia - 1 | Dia - 2 | Dia - 3 | Dia - 4 |
|------------|-------------|---------|---------|---------|---------|
| SC11-SR 12 | RG 59 B/U   | 5.35    | 6.50    | 7.50    | 12.50   |
| SC11-SR 14 | BT 3002     | 3.50    | 4.40    | 5.40    | 10.0    |
| SC11-SR 44 | RG 179 B/U  | 2.70    | 3.20    | 4.0     | 10.0    |
| SC11-SR 84 | BT 2003     | 5.35    | 7.20    | 8.20    | 10.0    |
| SC11-SR 94 | BT 2002     | 3.65    | 5.50    | 6.35    | 12.50   |
| SC11-SR 95 | BT 2001     | 3.65    | 4.80    | 5.80    | 10.0    |



**Straight Jacks**

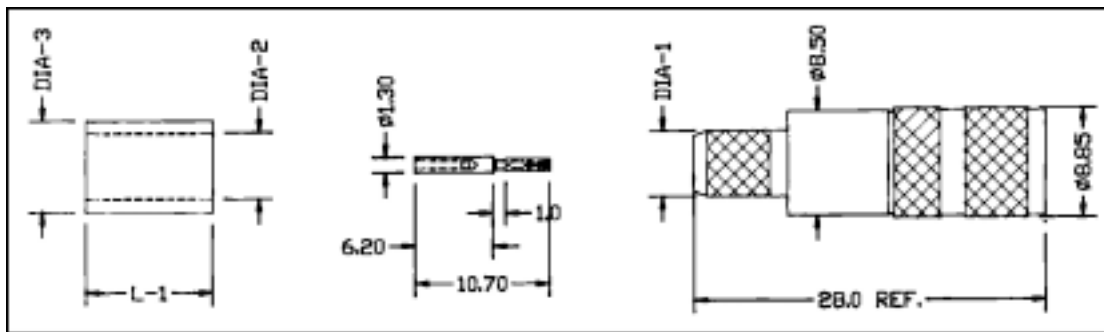
**SMB 75**



| Order Code | Cable Group | Dia - 1 | Dia - 2 | Dia - 3 | L - 1 |
|------------|-------------|---------|---------|---------|-------|
| SC11-SR 24 | BT 3002     | 3.50    | 4.40    | 5.40    | 10.0  |
| SC11-SR 34 | RG 179 B/U  | 2.70    | 3.20    | 4.0     | 10.0  |
| SC11-SR 74 | BT 2002     | 3.65    | 5.50    | 6.35    | 12.50 |

For Cable Assembly Refer K-11

**Straight Jacks**



| Order Code | Cable Group | Dia - 1 | Dia - 2 | Dia - 3 | L - 1 |
|------------|-------------|---------|---------|---------|-------|
| SC11-SR 54 | BT 2003     | 5.35    | 7.20    | 8.20    | 10.0  |
| SC11-SR 64 | RG 59 B/U   | 5.35    | 6.50    | 7.50    | 12.50 |

For Cable Assembly Refer K-12

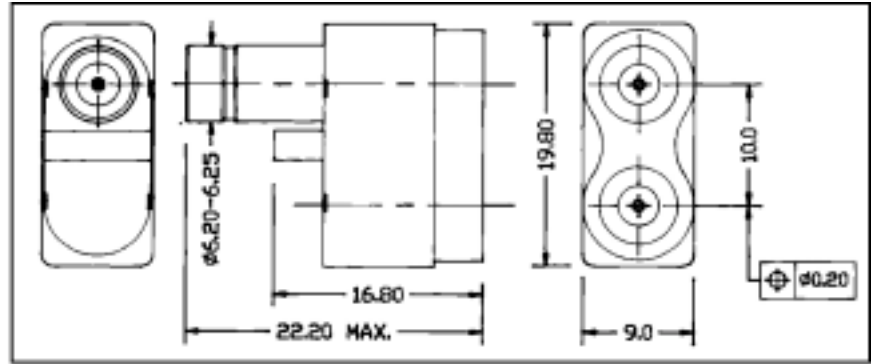


U-Link With Monitor

SMB 75

Order Code

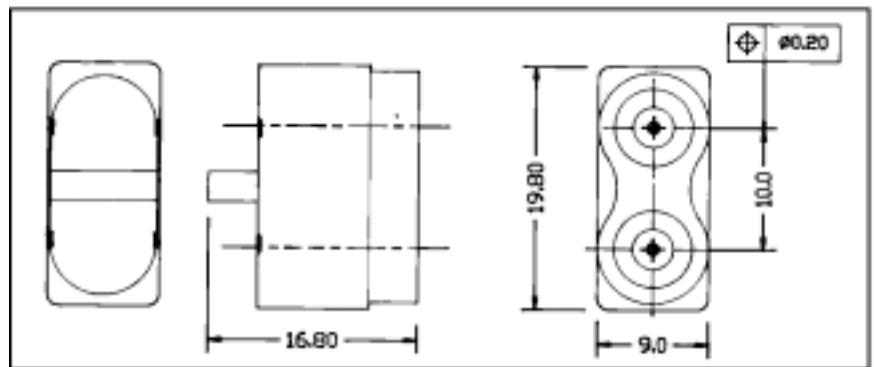
SC11U-05



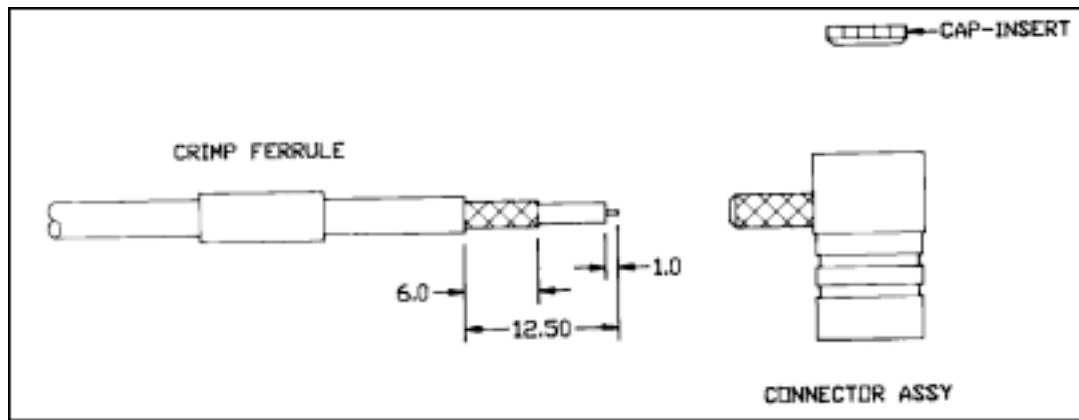
U-Link With Monitor

Order Code

SC11U-03

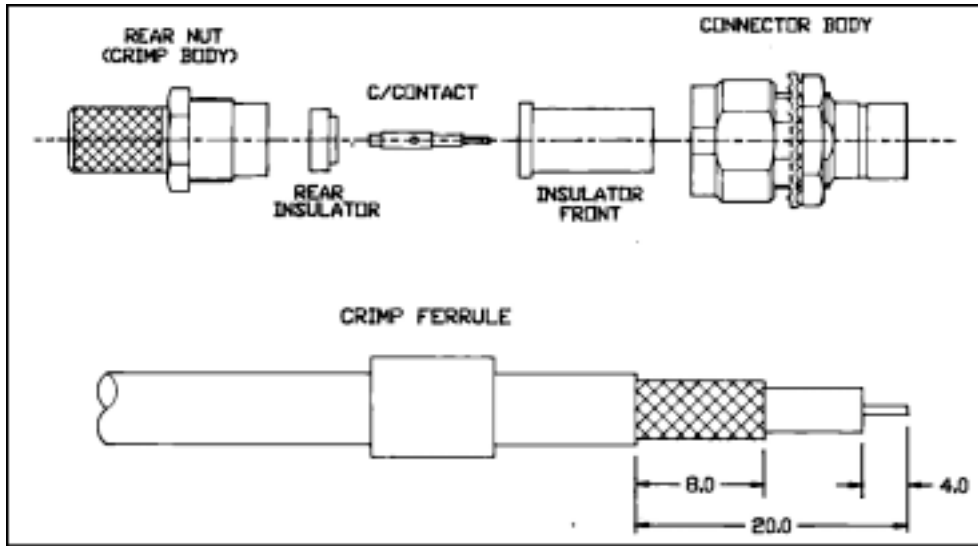


## CABLE ASSEMBLY DETAILS



K 07

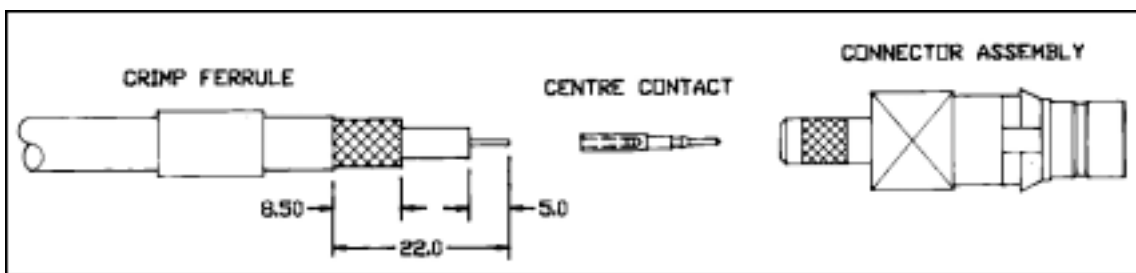
1. Slide the crimp ferrule into the cable.
2. Strip the cable as per dimensions shown in figure.
3. Insert the cable into the body, solder the centre conductor of the cable and centre contact.
4. Slide the ferrule until it butts against the body and crimp the ferrule.
5. Fit the cap.



SMB 75

K 08

1. Slide the Crimp Ferrule over the cable.
2. Strip the Cable as per dimensions shown above.
3. Insert the cable into the rear nut (crimp body) slide rear insulator & C/Contact over the centre conductor of the cable and insert the assembly into rear nut and crimp or solder the centre contact.
4. Slide the crimp ferrule until it butts against the rear nut (crimp body) and crimp the ferrule.
5. Slide the front insulator into the front side of the centre contact and tighten the entire assembly with the connector body.

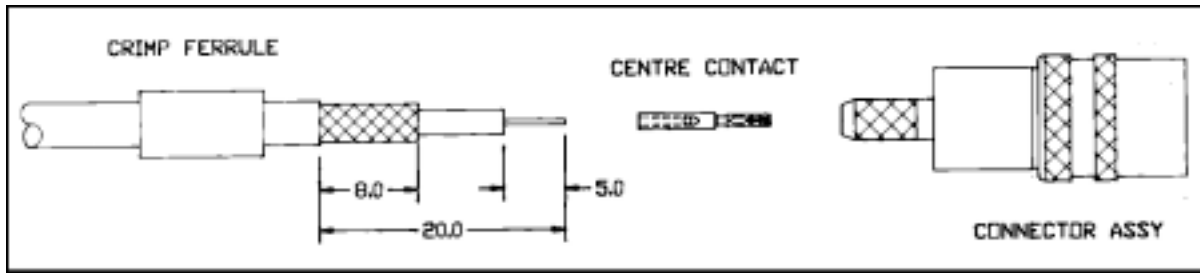


K 09

1. Slide the Crimp Ferrule over the cable.
2. Trim the cable as per the dimensions shown above.
3. Fit the centre contact over the centre conductor and crimp or solder firmly to the cable.
4. Slide the connector assembly into cable until the centre contact gets locked in the position.
5. Slide crimp ferrule forward till it butts against connector assembly and crimp.

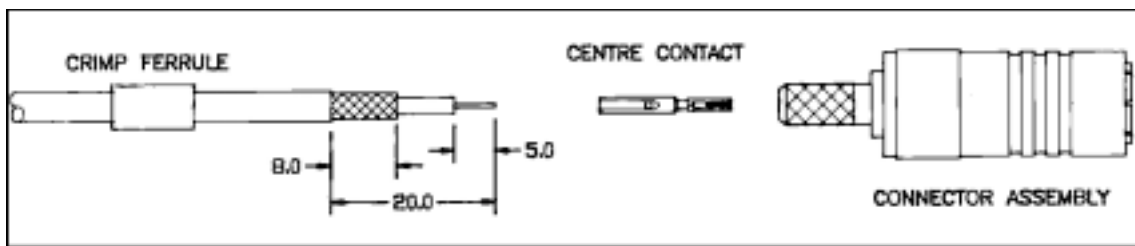


SMB 75



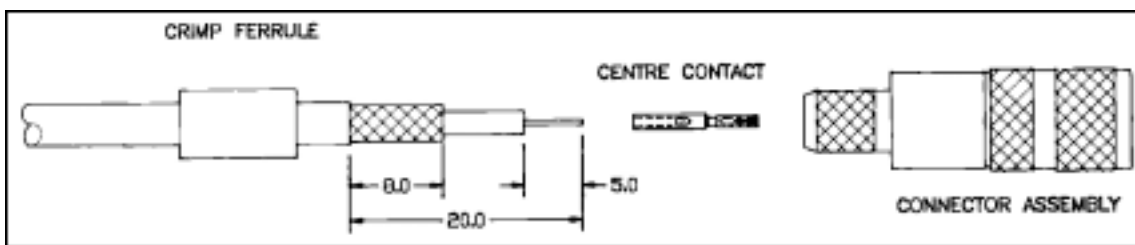
K 10

1. Slide the Crimp Ferrule over the cable.
2. Strip the Cable as per dimensions shown in figure.
3. Fit the centre contact over the centre conductor of cable and solder and solder or crimp the centre contact firmly to the cable.
4. Insert the sub-assembly into the connector assembly and slide the crimp ferrule until it butts against the connector assembly and crimp the ferrule.



K 11

1. Slide the Crimp Ferrule over the cable.
2. Strip the Cable as per dimensions show in figure
3. Fit the centre contact over the centre conductor of cable and solder or crimp the centre contact firmly to the cable.
4. Insert the sub-assembly into the connector assembly and slide the crimp ferrule until it butts against the connector assembly and crimp the ferrule.



K 12

1. Slide the Crimp Ferrule over the cable.
2. Strip the Cable as per dimensions show in figure
3. Fit the centre contact over the centre conductor of cable and solder or crimp the centre contact firmly to the cable.
4. Insert the sub-assembly into the connector assembly and slide the crimp ferrule until it butts against the connector assembly and crimp the ferrule.