

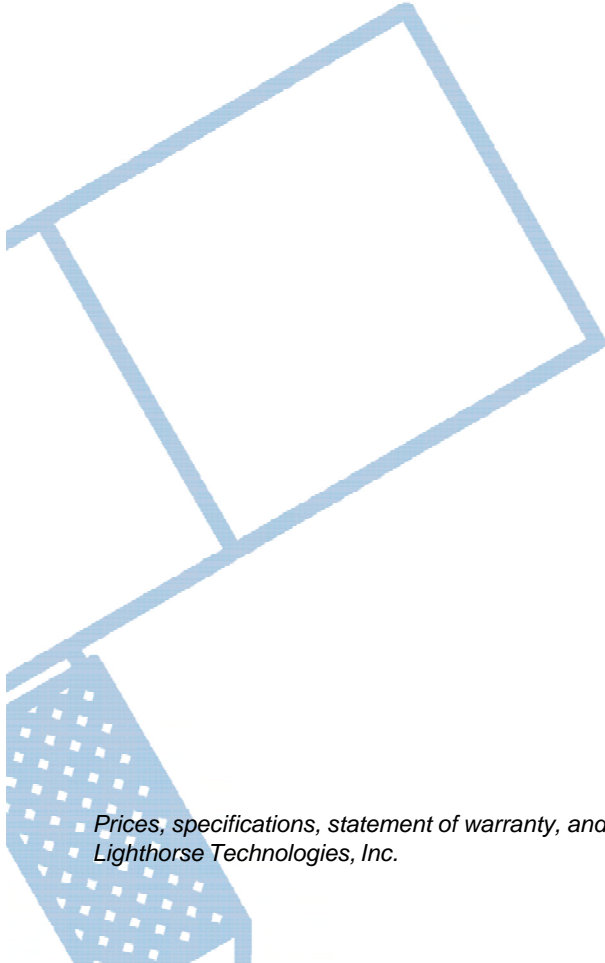
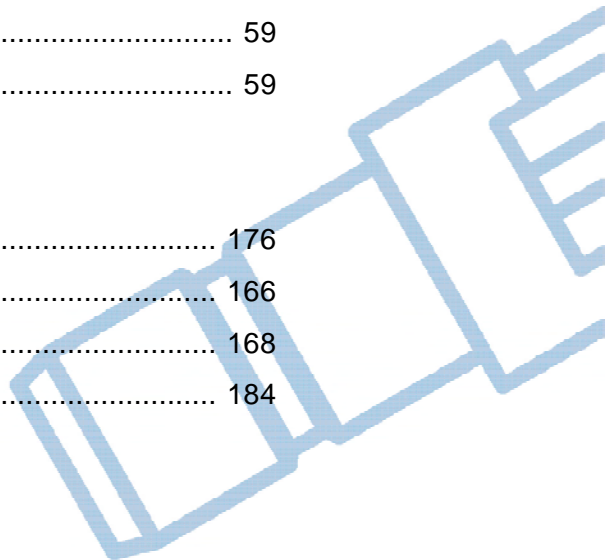


## SSMB Connectors

|                      |    |
|----------------------|----|
| Specifications ..... | 57 |
| Flexible Cable ..... | 58 |
| Bulkhead .....       | 59 |
| PCB Mount .....      | 59 |

## Other Information

|                             |     |
|-----------------------------|-----|
| Assembly Instructions ..... | 176 |
| Cable Assembly .....        | 166 |
| Cable Information .....     | 168 |
| Numerical Index .....       | 184 |



*Prices, specifications, statement of warranty, and other terms and conditions are subject to change without notice by Lighthouse Technologies, Inc.*

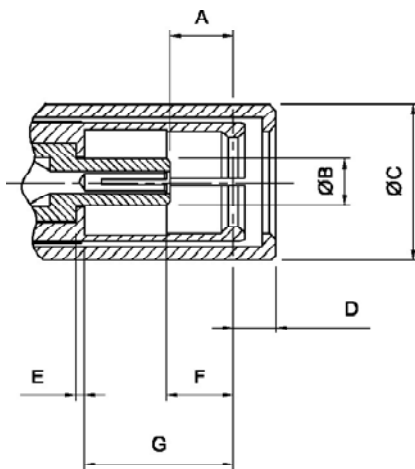


SSMB connectors are microminiature devices that provide repeatable electrical performance from DC to 3 GHz. The standard mating design for SSMB series connectors are similar to SMB and SMC but with size reduced approximately one-third. This makes them ideal for use in confined areas where the use of wrenches is not practical. They are lightweight, easy to connect and disconnect, vibration-proof and highly reliable. They are best suited for use with cables in the range of .070" to .120" diameters, such as RG 178, RG 174 and RG 316. The plugs have female contacts while the jacks have male contacts. Because of their small size and tight tolerance, finishes other than gold plating are not recommended.

SSMB connectors have gained wide acceptance and usage in military radio systems, where small size is needed for miniaturization but ruggedness and reliability are very important.

## Interface Mating Dimensions

### PLUG



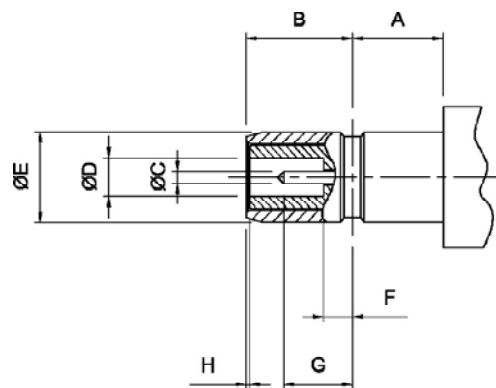
| Letter | Minimum | Maximum |
|--------|---------|---------|
| A      | 0.84    | -       |
| B      | -       | 1.35    |
| C      | -       | 4.83    |
| D      | -       | 1.78    |
| E      | 0.00    | 0.00    |
| F      | 0.84    | -       |
| G      | 3.10    | -       |

DIMENSIONS ARE IN MILLIMETERS

### JACK

| Letter | Minimum | Maximum |
|--------|---------|---------|
| A      | 1.91    | -       |
| B      | 3.10    | -       |
| C      | 0.36    | 0.38    |
| D      | 1.37    | -       |
| E      | -       | 2.67    |
| F      | -       | 0.84    |
| G      | 1.91    | -       |
| H      | 0.00    | 0.00    |

DIMENSIONS ARE IN MILLIMETERS





*ELECTRICAL RATINGS*

|  |                       |                      |
|--|-----------------------|----------------------|
| <b>Impedance</b>   | 50 ohm                |                      |
| <b>Frequency Range</b>   | DC to 3 GHz           |                      |
| <b>Dielectric Withstanding Voltage</b> (at sea level, in V rms, 50 Hz) | 500 max               |                      |
| <b>Working Voltage</b> (at sea level, in V rms, 50 Hz)                 | 250 max               |                      |
| <b>Insulation Resistance</b>   | 1000 M $\Omega$ min   |                      |
| <b>RF Leakage</b>  | -70 dB min @ 2-3 GHz  |                      |
| <b>VSWR</b>  | <i>Straight</i>       | <i>Right Angle</i>   |
|  | 1.22 max @ 0-1.0 GHz  | 1.50 max @ 0-1.0 GHz |
|  | 1.35 max @ 0-3.0 GHz  | 1.63 max @ 0-3.0 GHz |
| <b>Contact Resistance</b>  | <i>Center Contact</i> | <i>Outer Contact</i> |
|  | 5 m $\Omega$ max      | 2.5 m $\Omega$ max   |

*MECHANICAL RATINGS*

|                                       |   |
|---------------------------------------|---|
| <b>Mating</b>                         | Snap-on coupling                            |
| <b>Durability</b>                     | 500 matings max                             |
| <b>Engagement/Disengagement Force</b> | 6 lbs max engagement/1 lb min disengagement |
| <b>Contact Captivation</b>            | 2 lbs min axial force                       |
| <b>Temperature Range</b>              | -55°C to +155°C                             |

*MATERIALS*

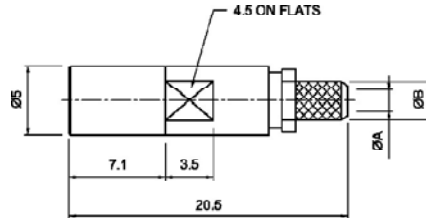
|                       |               | <i>Material</i>               | <i>Plating</i> |
|-----------------------|---------------|-------------------------------|----------------|
| <b>Connector Body</b> |               | Brass per QQ-B-626            | Gold/Nickel    |
| <b>Center Contact</b> | <i>Male</i>   | Brass per QQ-B-626            | Gold           |
|                       | <i>Female</i> | Beryllium Copper per QQ-C-530 | Gold           |
| <b>Insulator</b>      |               | Teflon                        | None           |
| <b>Gasket</b>         |               | Silicone Rubber               | None           |
| <b>Crimp Ferrule</b>  |               | Annealed Copper per WW-T-799  | Same as body   |



## Straight Crimp Plug

| Part Number       | Cable Type             | Dimension |         |
|-------------------|------------------------|-----------|---------|
| LTI-SSBSM11GT-XXX | RG-316,174,188;Q1,D316 | A: 1.6    | B: 2.8  |
| LTI-SSBSM11GT-XXX | RG-178,196             | A: 1.0    | B: 1.95 |

TO CREATE COMPLETE PART NUMBER: Fill in Cable Type where XXX is.  
See Part Numbering Chart on page 3 for more info.

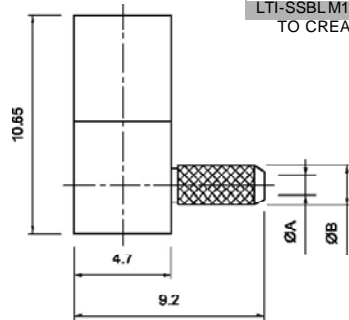


ASSEMBLY INST.: Page 176  
Recommended Stripping DIMS:  
Page 172, Line 40

## Right Angle Crimp Plug

| Part Number       | Cable Type             | Dimension |         |
|-------------------|------------------------|-----------|---------|
| LTI-SSBLM11GT-XXX | RG-316,174,188;Q1,D316 | A: 1.6    | B: 2.8  |
| LTI-SSBLM11GT-XXX | RG-178,196             | A: 1.0    | B: 1.95 |

TO CREATE COMPLETE PART NUMBER: Fill in Cable Type where XXX is.  
See Part Numbering Chart on page 3 for more info.

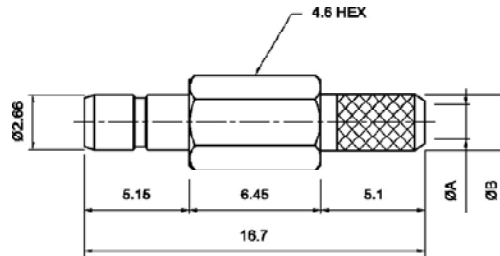


ASSEMBLY INST.: Page 177  
Recommended Stripping DIMS:  
Page 172, Line 40

## Straight Crimp Jack

| Part Number       | Cable Type             | Dimension |         |
|-------------------|------------------------|-----------|---------|
| LTI-SSBSF11GT-XXX | RG-316,174,188;Q1,D316 | A: 1.6    | B: 2.8  |
| LTI-SSBSF11GT-XXX | RG-178,196             | A: 1.0    | B: 1.95 |

TO CREATE COMPLETE PART NUMBER: Fill in Cable Type where XXX is.  
See Part Numbering Chart on page 3 for more info.

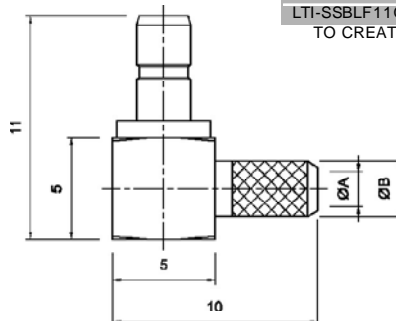


ASSEMBLY INST.: Page 176  
Recommended Stripping DIMS:  
Page 172, Line 40

## Right Angle Crimp Jack

| Part Number       | Cable Type             | Dimension |         |
|-------------------|------------------------|-----------|---------|
| LTI-SSBLF11GT-XXX | RG-316,174,188;Q1,D316 | A: 1.6    | B: 2.8  |
| LTI-SSBLF11GT-XXX | RG-178,196             | A: 1.0    | B: 1.95 |

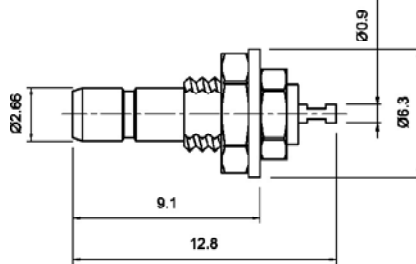
TO CREATE COMPLETE PART NUMBER: Fill in Cable Type where XXX is.  
See Part Numbering Chart on page 3 for more info.



ASSEMBLY INST.: Page 177  
Recommended Stripping DIMS:  
Page 172, Line 40



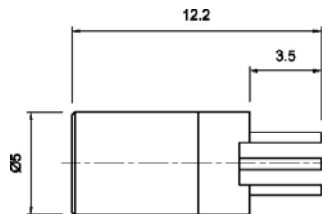
## Rear Mount Bulkhead Jack With Solder Cup Termination



| Part Number    | M.H. |
|----------------|------|
| LTI-SSBSF43RGT | 2    |

MOUNTING HOLE (M.H.): Page 174

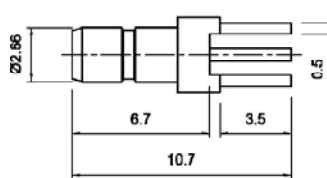
## Vertical PCB Thru Hole Plug



| Part Number   | M.H. |
|---------------|------|
| LTI-SSBSM54GT | 19   |

MOUNTING HOLE (M.H.): Page 174

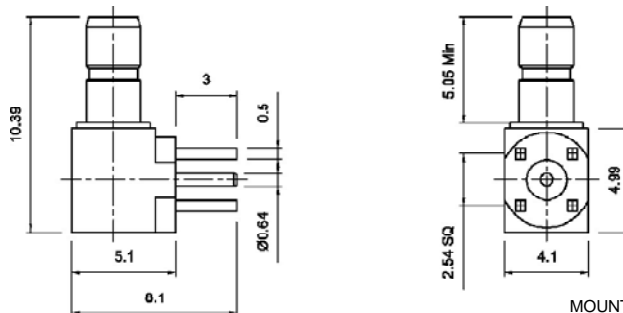
## Vertical PCB Thru Hole Jack



| Part Number   | M.H. |
|---------------|------|
| LTI-SSBSF54GT | 19   |

MOUNTING HOLE (M.H.): Page 174

## Right Angle PCB Thru Hole Jack



| Part Number   | M.H. |
|---------------|------|
| LTI-SSBLF54GT | 19   |

MOUNTING HOLE (M.H.): Page 174