

## SMA Male to SMA Male Cable RG-142 Coax

The SMA male to SMA male cable using RG-142 coax, part number SCA45142, from Fairview Microwave is in-stock and ships same day. This Fairview SMA to SMA cable assembly has a male to male gender configuration with 50 ohm flexible RG-142 coax. Fairview Microwave's flexible RF cable assemblies are ideal for applications where tight bends and continual flexure are required. The SCA45142 SMA male to SMA male cable assembly operates to 12.4 GHz. The double shielding of this Fairview cable assembly provides excellent shielding effectiveness. The SMA male to SMA male cable using RG-142 coax, part number SCA45142, from Fairview Microwave is in-stock and ships same day. This Fairview SMA to SMA cable assembly has a male to male gender configuration with 50 ohm flexible RG142 coax. Fairview Microwave's flexible RF cable assemblies are ideal for applications where tight bends and continual flexure are required. The SCA45142 SMA male to SMA male cable assembly operates to 12.4 GHz. The double shielding of this Fairview cable assembly provides excellent shielding effectiveness.

Custom versions of most RF cable assemblies can be built and shipped same day. Custom cable assembly lengths can be obtained by specifying the desired length on the web site at time of order or by contacting a sales representative. Other RF cable assembly value added services including connector orientation or clocking, heat shrink booting and labeling are also available. RF testing can also be performed to document the electrical performance of your cable assembly.

Custom versions of most RF cable assemblies can be built and shipped same day. Custom cable assembly lengths can be obtained by specifying the desired length on the web site at time of order or by contacting a sales representative. Other RF cable assembly value added services including connector orientation or clocking, heat shrink booting and labeling are also available. RF testing can also be performed to document the electrical performance of your cable assembly.

### Electrical Specifications

Description	Min	Typ	Max	Units
Frequency Range	DC		12.4	GHz
VSWR			1.3:1	
Velocity of Propagation		69		%
Group Delay		1.45 [4.76]		ns/ft [ns/m]
Capacitance		29 [95.14]		pF/ft [pF/m]

### Performance by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency	1	2	3	6		GHz
Insertion Loss (Typ.)	0.13	0.19	0.24	0.35		dB/ft
	0.43	0.62	0.79	1.15		dB/m

Electrical Specification Notes:  
 RF Shielding > 85 dB (up to 6 GHz).  
 Insertion loss does not include the loss of the connectors.  
 Insertion loss is estimated as 0.05 x sqrt(fGHz) dB per connector.



### Configuration:

- SMA Male
- SMA Male
- RG-142

### Features:

- Max Frequency 12.4 GHz
- 69% Phase Velocity
- Double Shielded
- FEP Jacket
- Max Frequency 12.4 GHz
- 69% Phase Velocity
- Double Shielded
- FEP Jacket

### Applications:

- General Purpose
- Laboratory Use
- General Purpose
- Laboratory Use

Fairview Microwave  
 301 Leora Ln., Suite 100  
 Lewisville, TX 75056  
 Tel: 1-800-715-4396 / (972) 649-6678  
 Fax: (972) 649-6689  
[www.fairviewmicrowave.com](http://www.fairviewmicrowave.com)  
[sales@fairviewmicrowave.com](mailto:sales@fairviewmicrowave.com)

**Mechanical Specifications**
**Cable Assembly**

Length\* 0 in [0 mm]

**Cable**

Cable Type	RG-142
Impedance	50 Ohms
Inner Conductor Type	Solid
Inner Conductor Material and Plating	Copper Clad Steel, Silver
Dielectric Type	PTFE
Number of Shields	2
Shield Layer 1	Silver Plated Copper Braid
Shield Layer 2	Silver Plated Copper Braid
Jacket Material	FEP, Tan
Jacket Diameter	0.195 in [4.95 mm]
One Time Minimum Bend Radius	1.18 in [29.97 mm]
Repeated Minimum Bend Radius	1.97 in [50.04 mm]

**Connectors**

Description	Connector 1	Connector 2
Type	SMA Male	SMA Male
Configuration	Straight	Straight
Impedance	50 Ohms	50 Ohms
Contact Material & Plating	Brass, Gold	Brass, Gold
Dielectric Type	PTFE	PTFE
Body Material & Plating	Brass, Ternary Alloy	Brass, Ternary Alloy
Coupling Nut Material & Plating	Brass, Ternary Alloy	Brass, Ternary Alloy
Hex Size	5/16 inch	5/16 inch
Torque	5 in-lbs 0.57 Nm	5 in-lbs 0.57 Nm

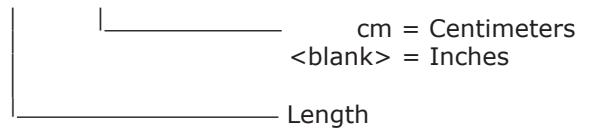
**Compliance Certifications** (see [product page](#) for current document)

**Plotted and Other Data**

Notes:

**How to Order**

Part Number Configuration:

**SCA45142 - xx uu**

 Example: SCA45142-12 = 12 inches long cable  
 SCA45142-100cm = 100 cm long cable

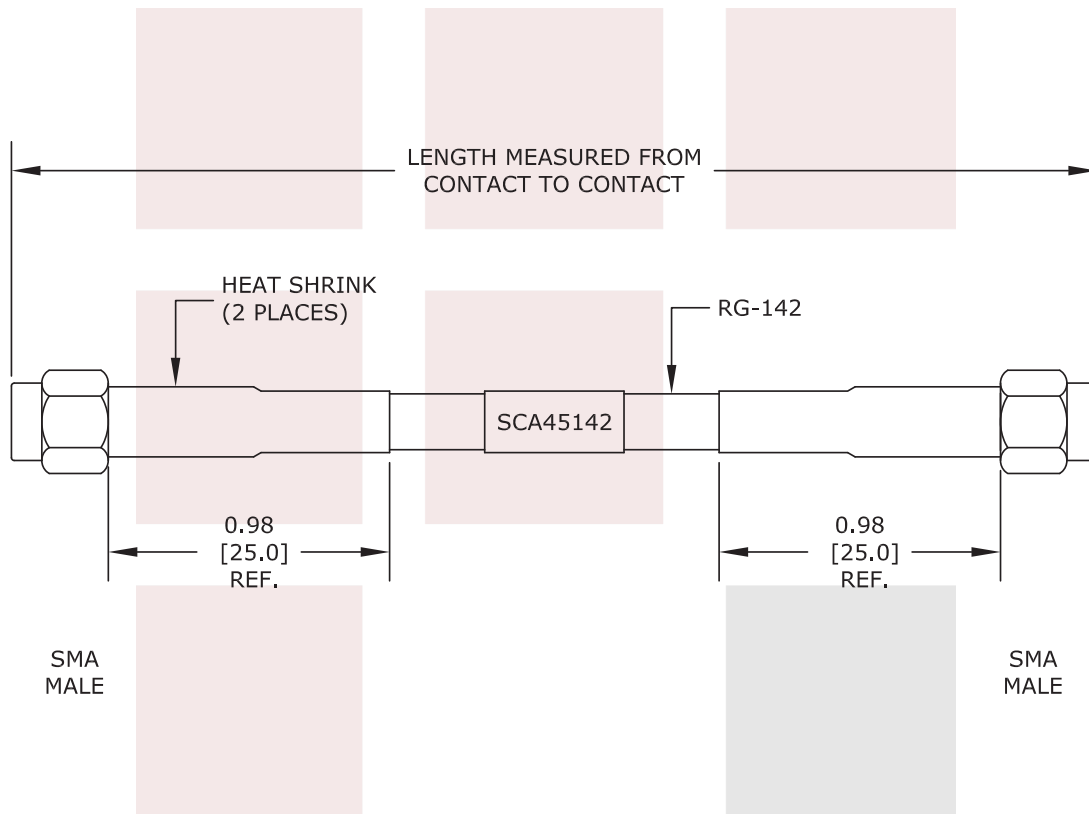
SMA Male to SMA Male Cable RG-142 Coax from Fairview Microwave has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99% availability and are part of the broadest selection in the industry.

Click the following link to obtain additional part information: [SMA Male to SMA Male Cable RG-142 Coax SCA45142](#)

URL: <https://www.fairviewmicrowave.com/sma-male-sma-male-cable-rg142-coax-sca45142-p.aspx>

The information contained in this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part, in order to implement improvements. Fairview Microwave reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Fairview Microwave does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Fairview Microwave does not assume any liability arising out of the use of any part or documentation.





STANDARD TOLERANCES	
.X	±0.2
.XX	±0.1
.XXX	±0.05

\*STANDARD TOLERANCES APPLY ONLY TO DIMENSIONS IN INCHES

<b>FAIRVIEW MICROWAVE INC.</b> ALLEN, TX 75013 WWW.FAIRVIEWMICROWAVE.COM		NOTES: 1. UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE NOMINAL. 2. ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE AT ANY TIME. 3. DIMENSIONS ARE IN INCHES [mm].			
TITLE SMA Male to SMA Male Cable RG-142 Coax		DWG NO SCA45142		CAGE CODE 3FKR5	
CAD FILE	101816	SHEET	SCALE	N/A	SIZE A 41742