



We offer the popular RG142 cable sets with a variety of connectors like SMA, N, TNC, BNC, Quick Lock.

**QUICK TURNAROUND**

- Stock of imported M17/60-RG142 cable
- MIL-PRF-39012 Conformant SMA (M), N(M) straight connectors in stock

**APPLICABLE MIL-STANDARDS**

- MIL-C-17 (listed as M17/60-RG142)
- MIL-PRF-39012 for connectors

**PHYSICAL & MECHANICAL SPECS OF CABLE**

Inner Conductor	Silver Covered Copper Clad Steel Diameter 0.94mm, (0.037 inch)
Dielectric	PTFE, Diameter 2.95mm (0.116 inch)
Shield	Silver Covered Copper Diameter 4.2 mm (0.165 inch)
Jacket	FEP, Diameter 5.0 mm,(0.196 inch)
Temp.	-40°C ~ +180°C

**ELECTRICAL SPECIFICATIONS**

Impedance	50Ω
Frequency	DC - 6 GHz
Capacitance	105 pF/meter 32 pF/feet
Weight	0.075 Kg/m

**Attenuation & Power Handling Vs Frequency**

Frequency (MHz)	100	400	1000	1500	2000	2500	3000	6000
Attenuation dB/100 feet	3.8	8.5	14.9	18.9	22.2	25.6	28.3	42.7
Power (Watts)	1250	650	380	320	270	230	210	150

**Ordering Codes Description**

RG142 -  $\square \square$  (Length) -  $\square (\square / \square)$  (Connector 1) -  $\square (\square / \square)$  (Connector 2) -  $\square$   
**L L 1 2 3 1 2 3 U**

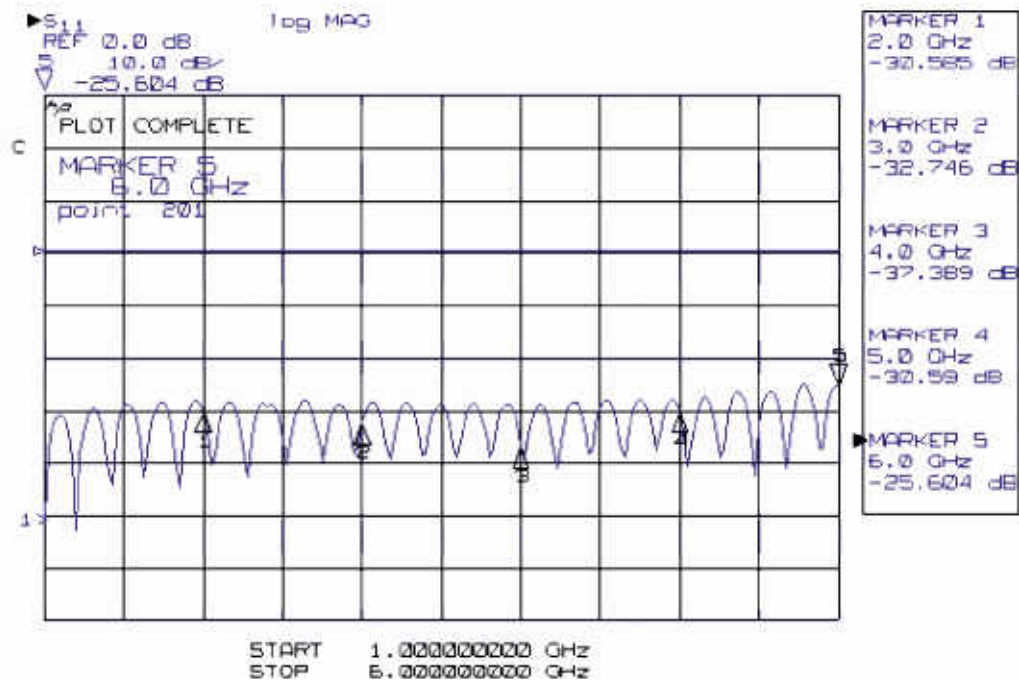
<b>LL</b>	Length	0.5 = 0.5 ; 1 = 1
<b>1</b>	Connector Series	SMA = SMA ; N = N ; BNC = BNC ; TNC = TNC
<b>2</b>	Male/Female Designator	Male = M ; Female = F
<b>3</b>	Orientation of Connector	ST = Straight ; RA = Right Angle
<b>U</b>	Unit of Length	M = Meter ; F = Feet ; I = Inch

*2 meter cable set with SMA (Male) on both sides = RG142-2.0-SMA(M/ST)- SMA(M/ST)-M*

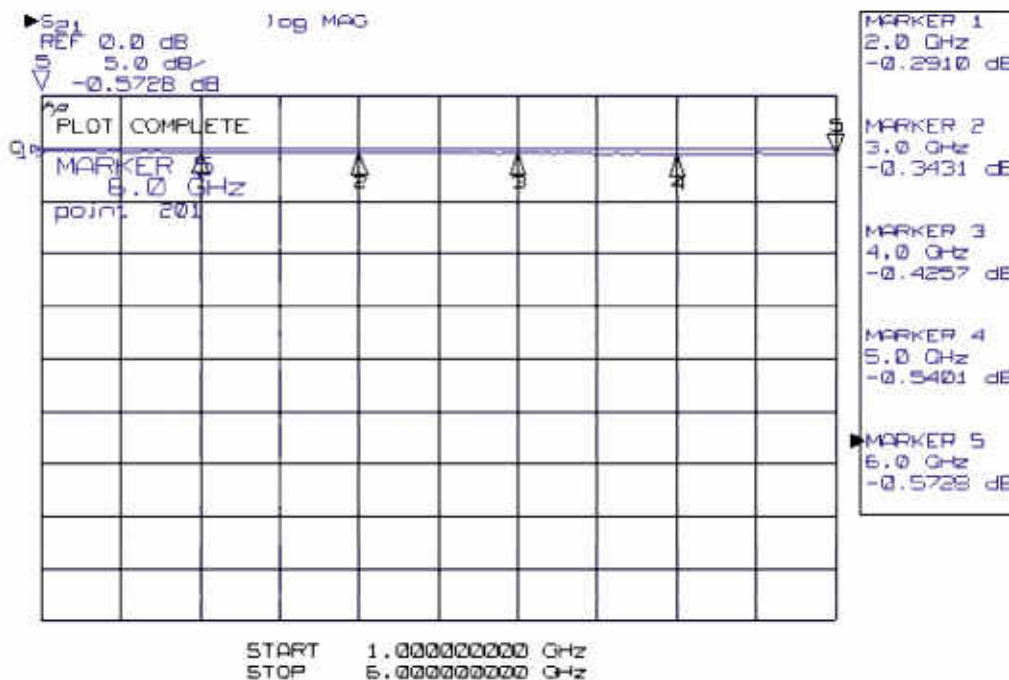
Shown trademarks are property of their respective owners.

While the information contained herein in this catalog, has been carefully compiled to the best of our knowledge, nothing is intended as representation and warranty on our part; and no statement shall be construed as recommendation to infringe any of existing patents. We accept no liability of whatsoever for any faults and errors in the information contained herein. Contents of this catalogue and specifications of the products, are subject to change without notice due to continuous improvements.

**Return Loss Plot of 0.5 meter Cable Set of RG142  
with SMA Male Straight Connector on both ends**



**Insertion Loss Plot of 0.5 meter Cable Set of RG142  
with SMA Male Straight Connector on both ends**



Shown trademarks are property of their respective owners.

While the information contained herein in this catalog, has been carefully compiled to the best of our knowledge, nothing is intended as representation and warranty on our part; and no statement shall be construed as recommendation to infringe any of existing patents. We accept no liability of whatsoever for any faults and errors in the information contained herein. Contents of this catalogue and specifications of the products, are subject to change without notice due to continuous improvements.

### Connector Specifications

Specifications	SMA Connectors	N Connectors	TNC Connectors
Outer Conductor	Brass, Gold plated	Brass Alloy, Ni plated	Brass, nickel alloy plated
Center Conductor	Brass, Gold Plated	Brass, Gold Plated	Brass, Gold Plated
Insulation	PTFE	PTFE	PTFE
Gaskets	Silicon Rubber	Silicon Rubber	Silicon Rubber
Impedance	50 Ω	50 Ω	50 Ω
Frequency range	DC- 18 GHz	DC to 11 GHz	DC to 11 GHz
Mating/Unmating	500 operations	500 operations	500 operations
Vibration	As per MIL-STD-202, method 204, test condition D		
Mechanical Shock	As per MIL-STD-202, method 213, test condition I		
Thermal Shock	As per MIL-STD-202, method 107, test condition B		
Humidity	As per MIL-STD-202, method 106		
Temp. Cycle	As per MIL-STD-202, method 102A, test condition C		

### Cable Set Ordering Codes

Part Number	Conn 1	Conn 2	Len	Insertion Loss (dB) Typical							
				0.1 GHz	0.4 GHz	1 GHz	1.5 GHz	3 GHz	4 GHz	6 GHz	
<b>SMA(Male) Straight - SMA(Male) Right Angle (DC - 6 GHz)</b>											
RG142-1.0-SMA(M/ST)-SMA(M/RA)-M	SMA(M) ST	SMA(M) Rt	1 m	0.16	0.33	0.56	0.71	1.06	1.24	1.55	
RG142-2.0-SMA(M/ST)-SMA(M/RA)-M	SMA(M) ST	SMA(M) Rt	2 m	0.30	0.61	1.06	1.34	1.98	2.34	2.96	
RG142-5.0-SMA(M/ST)-SMA(M/RA)-M	SMA(M) ST	SMA(M) Rt	5 m	0.67	1.46	2.57	3.19	4.80	5.61	7.19	
RG142-1.0-SMA(M/ST)-SMA(M/RA)-F	SMA(M) ST	SMA(M) Rt	1 feet	0.07	0.14	0.21	0.26	0.39	0.46	0.57	
RG142-2.0-SMA(M/ST)-SMA(M/RA)-F	SMA(M) ST	SMA(M) Rt	2 feet	0.11	0.22	0.36	0.44	0.68	1.79	0.99	
<b>SMA(Male) Straight - SMA(Male) Straight (DC - 6 GHz)</b>											
RG142-1.0-SMA(M/ST)-SMA(M/ST)-M	SMA(M) ST	SMA(M) ST	1m	0.15	0.32	0.55	0.69	1.03	1.22	1.54	
RG142-2.0-SMA(M/ST)-SMA(M/ST)-M	SMA(M) ST	SMA(M) ST	2m	0.29	0.60	1.04	1.31	1.96	2.32	2.94	
RG142-5.0-SMA(M/ST)-SMA(M/ST)-M	SMA(M) ST	SMA(M) ST	5m	0.65	1.45	2.51	3.17	4.75	5.62	7.14	
RG142-1.0-SMA(M/ST)-SMA(M/ST)-F	SMA(M) ST	SMA(M) ST	1 feet	0.06	0.13	0.20	0.25	0.37	0.45	0.56	
RG142-2.0-SMA(M/ST)-SMA(M/ST)-F	SMA(M) ST	SMA(M) ST	2 feet	0.10	0.21	0.35	0.43	0.65	0.78	0.98	
<b>N (Male) Straight - N (Male) Straight (DC - 6 GHz)</b>											
RG142-1.0-N(M/ST)-N(M/ST)-M	N(M)ST	N(M)ST	1 m	0.17	0.35	0.59	0.73	1.08	1.28	1.59	
RG142-2.0-N(M/ST)-N(M/ST)-M	N(M)ST	N(M)ST	2 m	0.31	0.63	1.08	1.38	1.99	2.39	2.99	
RG142-3.0-N(M/ST)-N(M/ST)-M	N(M)ST	N(M)ST	3 m	0.67	1.98	2.59	3.20	4.85	5.69	7.21	
RG142-1.0-N(M/ST)-N(M/ST)-F	N(M)ST	N(M)ST	1 feet	0.08	0.16	0.25	0.30	0.44	0.52	0.65	
RG142-2.0-N(M/ST)-N(M/ST)-F	N(M)ST	N(M)ST	2 feet	0.13	0.24	0.39	0.48	0.70	0.82	1.03	
<b>TNC (Male) Straight - TNC (Male) Straight (DC - 4 GHz)</b>											
RG142-1.0-TNC(M/ST)-TNC(M/ST)-M	TNC(M)ST	TNC(M)ST	1 m	0.18	0.36	0.59	0.72	1.07	1.27	1.58	
RG142-2.0-TNC(M/ST)-TNC(M/ST)-M	TNC(M)ST	TNC(M)ST	2 m	0.31	0.64	1.05	1.37	1.91	2.31	2.85	
RG142-3.0-TNC(M/ST)-TNC(M/ST)-M	TNC(M)ST	TNC(M)ST	3 m	0.68	1.47	2.50	3.18	4.82	5.60	7.17	
RG142-1.0-TNC(M/ST)-TNC(M/ST)-F	TNC(M)ST	TNC(M)ST	1 feet	0.08	0.17	0.27	0.33	0.48	0.56	0.7	
RG142-2.0-TNC(M/ST)-TNC(M/ST)-F	TNC(M)ST	TNC(M)ST	2 feet	0.12	0.25	0.41	0.51	0.74	0.87	1.09	

Shown trademarks are property of their respective owners.

While the information contained herein in this catalog, has been carefully compiled to the best of our knowledge, nothing is intended as representation and warranty on our part; and no statement shall be construed as recommendation to infringe any of existing patents. We accept no liability of whatsoever for any faults and errors in the information contained herein. Contents of this catalogue and specifications of the products, are subject to change without notice due to continuous improvements.