# RF, Microwave, and mmWave Interconnects 50 Ohm Hermetic Coax Cable Assemblies



# **GRF02-0024**

# Male to Female SMA Assembly

- RG 174 or RG 316 Cable
- Precision-Grade Connectors
- Flexible cable

# **SMA JUMPER ASSEMBLY**

RF cable assembly has male SMA connector on one end and female SMA hermetic jam-nut on the other end. Two 50 ohm cable types, RG174 and RG316, are available. RG174 coax cable has black PVC jacket rated to 85°C and RG316 cable has tan FEP jacket rated to 200°C. SMA connector outer body is stainless steel with passivated finish. Hermetic Jam-nut connector is stainless steel with passivated finish. Center contact is copper alloy and gold plated.

# **PART NUMBER**

GRF02-0024-01-+

**01**: RG174 50 ohm cable **02**: RG316 50 ohm cable

Replace ◆ with length in one inch increments, 3 inch minimum

#### **SPECIFICATIONS**

- Frequency range: RG174: DC - 1 GHz RG316: DC - 3 GHz
- VSWR: 1.30:1 maximum
- Impedance: 50 ohm nominal
- Insertion Loss:
  See Insertion Loss table



TOLERANCE IS: +1.80/-0.00 FOR "L" LESS THAN OR EQUAL TO 60.00 INCHES +3%/-0.00 FOR "L" GREATER THAN 60.00 INCHES

## **INSERTION LOSS (IL)**

	Connector IL (dB)	Cable IL (dB/ft)
RG174: 1 GHz	.500	.320
RG316: 3 GHz	.500	.580

#### Calculate Insertion Loss (IL)

Multiply cable length in inches times the Cable IL from table. Add this to connector IL from table. Connector IL includes both connectors.

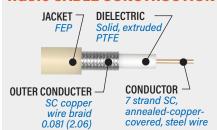
### **RG174 CABLE CONSTRUCTION**



#### WEIGHT

	Weight	
Connectors	0.289 oz	
Coax Cable	.0095 lb per foot	

#### **RG316 CABLE CONSTRUCTION**



WEIGHT	
	Weight
Connectors	6.0775 oz
Coax Cable	1.22 lb per 100 ft