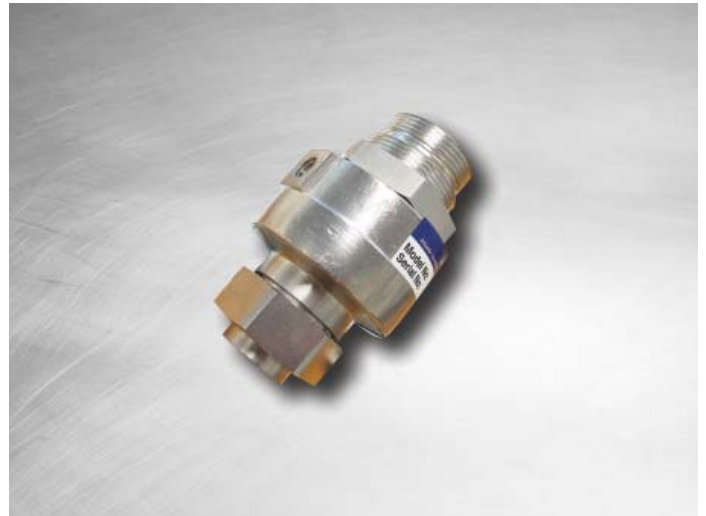


# AirGuard QWS/GT Series

RF surge protection for coaxial applications

- **Multi application and maintenance free**
- **Low passive intermodulation (PIM)**
- **Weatherproof and corrosion resistant**
- **120kA surge current rated**
- **.82 to 2.2GHz**
- **No discrete components to fail**
- **Passes dc current**



**The QWS/GT Series (Wideband Quarterwave Tubeless Stub)** of surge protection devices prevent surges and transient overvoltages. The QWS/GT Series uses an innovative "tubeless" design to achieve W-I-D-E-B-A-N-D performance. This compact unit has a high transient current capability with extremely low Passive Intermodulation (PIM).

**Typical applications for the QWS/GT Series** include the protection of cellular, PCS and even 3G frequencies. It is also ideal as a single stock item device that can be used in any system up to 2,200MHz with outstanding performance.

**Receivers and transmitters** are particularly vulnerable to damage from the effects of lightning. Their remote locations (height above ground) and physical construction make them vulnerable to lightning activity. The use of semiconductors and integrated circuits in transmitters and receivers has

rendered them particularly prone to damage from these disturbances.

**Excellent performance levels** are achieved using a tuned cavity and no discrete components to offer extremely high surge current capability in a rugged, economic, compact enclosure to produce superior surge suppression.

**The AirGuard Series provides a wide range of connector** types including BNC, TNC, N-type, SMA and UHF to suit all application requirements. In addition, bulkhead mounting options are provided where insertion into a panel is preferable. The GT and RGT Series are available with a wide choice of voltages: 90V, 145V, 230V, 350V, 470V 600V, 800V or 1,000V.

**Complete facility/site protection** can be achieved by using MTL Surge

Technologies' wide range of AC and DC power surge protection devices to prevent surges entering equipment via their power supply. The ZoneMaster range of protectors combine a high level of protection and when used in conjunction with the ZoneBarrier data protection modules, provide the highest level of site protection available.

**RF Coax  
Protection**

# Specification

All figures typical at 77°F (25°C) unless otherwise stated

## Maximum discharge current

60kA (8/20ms), 10 times

## Maximum power rating (VSWR)

1.15:1

## Frequency Range

.82 to 2.2GHz

## Peak Pulse Current (8/20µs)

120kA

## Impedance

50 Ω

## RF Power Handling

2kW rms/25kW peak

## Passes DC

65Adc/15A maximum

## Low Passive Intermod

(2 x 43dBm)

> -150dB (3rd order)

> -173dB (5th order)

Model	Mounting Connector	Second Connector	Impedance (Ω)
RF51041	7/16 Female Bulkhead	7/16 Male	50
RF51042	7/16 Female Bulkhead	7/16 Female	50

## Optimum Performance Frequencies

Frequency (GHz)	VSWR	Insertion Loss (dB)	Protection Level Current
0.82 to 2.2	1.05:1 to 1.15:1	0.05 to 1.10	120kA

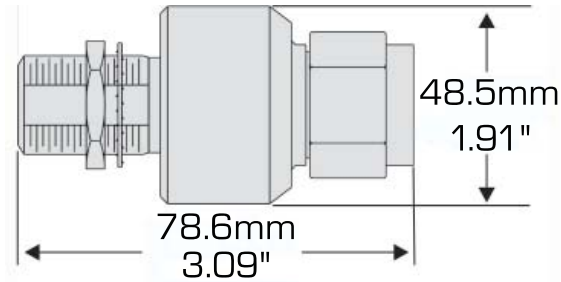
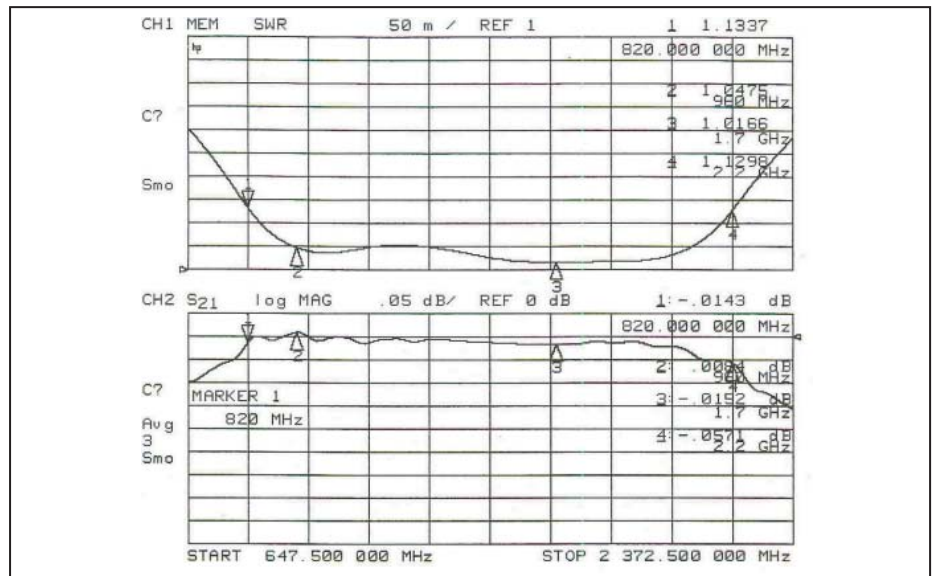


Figure 1 Dimensions (dimensions vary depending on type of connector)

## To order specify -

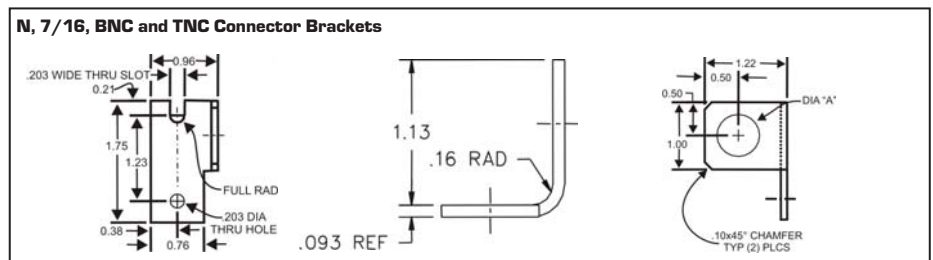
Order by module, as listed in the specification table.

Note: In accordance with our policy of continuous improvement, we reserve the right to change the product's specification without notice.



## Brackets

Model	Connectors	Diameter
RF51074	7/16 DIN	1.146" (2.91cm)



For more information please contact your local MTL sales office:

**The Americas:** +1 800 835 7075  
**UK:** +44 (0)1582 723633  
**Singapore:** +65 6 487 7887  
**The Netherlands:** +31 (0)481 450250  
**Italy:** +39 (0)2 6180 2011  
**Australia:** +61 (0)8 9455 2994  
**India:** +91 (0)44 450 1660

Local sales office information is also available on our web site at:  
[www.mtlsurge.com/support/distribution/index.htm](http://www.mtlsurge.com/support/distribution/index.htm)