MTL AirGuard WQWS range

RF surge protection for coaxial applications

- **Multi application**
- **Low passive intermodulation (PIM)**
- **Weatherproof**
- **60kA to 100kA of surge current rated**
- **0.82 to 0.97GHz and 1.7 to 2.2GHz**
- **No discrete components to fail**
- **Nickel plated for corrosion resistance**

The WQWS range (Wideband Quarterwave Tubeless Stub) of surge protection devices prevent surges and transient overvoltages. The WQWS range 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 WQWS range 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 range 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 ranges are available with a wide choice of voltages: 90V, 145V, 230V, 350V, 470V 600V, 800V or 1,000V.

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

Powering Business Worldwide

Eaton Electric Limited,
Great Marlings, Butterfield, Luton
Beds, LU2 8DL, UK.
Tel: + 44 (0)1582 723633 Fax: + 44 (0)1582 422283
E-mail: mtlenquiry@eaton.com
www.mtl-inst.com

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SPECIFICATION

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

Maximum discharge current
60kA- 100kA (8/20µs)
7/16: 60kA (10/350µs)
N: 30kA (10/350µs)

Maximum power rating (VSWR)
1.15:1

Frequency Range
0.82 to 0.97GHz and 1.7 to 2.2GHz

Peak Pulse Current (8/20µs)
N type- 60kA
7/16- 100kA

Impedance
50 Ω

Model	Mounting connectors	Second connector	Impedance (Ω)	Surge current
RF51037	7/16 Female	7/16 Male	50	100kA

Optimum performance frequencies

Frequency	VSWR (GHz)	Insertion loss (dB)
0.82 to 2.2	1.05:1 to 1.15:1	0.05 to 0.10

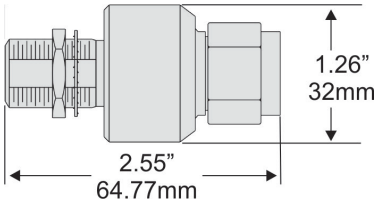
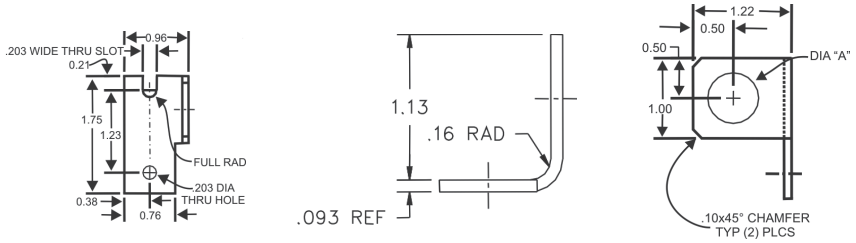


Figure 1 - Dimensions (dimensions vary depending on type of connector)

Brackets

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

N, 7/16, BNC and TNC Connector Brackets



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EUROPE (EMEA):
+44 (0)1582 723633
mtlenquiry@eaton.com

THE AMERICAS:
+1 800 835 7075
mtl-us-info@eaton.com

ASIA-PACIFIC:
+65 6645 9864 / 6645 9865
sales.mtlsing@eaton.com