

AirGuard GT-E Series

Broadband surge protection for multi-disciplined wireless sites.

- **Weatherproof**
- **Rugged construction**
- **Economic protection**
- **Versatile up to DC - 6GHz**
- **Allows DC/LF injection**
- **Multiple strike capability**



The GT Series of surge protection devices prevent surges and transient overvoltages. The GT Series provides economic and robust protection in a versatile broadband package that avoids having to stock multiple frequency products. Ideal for a multi-disciplined wireless project, this series of surge protectors provides the right product at any site, particularly when space is at a premium.

Typical applications for the GT-E Series include the protection of radio telemetry systems, mobile communications base stations, and other high-speed communications operating up to 6GHz where high induced voltages may be present.

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 high energy gas discharge tubes to offer high surge current capability in a rugged, economic, compact enclosure to produce superior surge suppression.

The use of gas tube technology in surge protection applications is a mature and well proven technology. When used in RF coax applications, this technology provides broadband, low cost solutions while still maintaining high surge current capacity.

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, bulk-head 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 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

20kA (8/20µs)

Maximum power rating (VSWR)

1.25:1

Frequency Range

DC to 6GHz

Impedance

50Ω

Temperature Range

-40°F to +194°F
-40°C to +90°C

Dust & Waterproof

IP67

Salt Fog

MIL-STD-202-101 D/B

Temperature Shock

MIL-STD-202-107 D/B-1

Vibration

MIL-STD-202-204 D/D

Shock

MIL-STD-202-213/A

Model	Connectors	Frequency Range (GHz)	VSWR	Insertion Loss (dB)	Peak Pulse Current (8µs x 20µs)	Impedance (Ω)
RF51054AE	N(f) Bulkhead to N(f)	DC - 6	1.25:1	.15	20kA	50
RF51055AE	N(m) to N(f)	DC - 6	1.25:1	.15	20kA	50
RF51058AE	N(f) Bulkhead to SMA(f)	DC - 6	1.25:1	.15	20kA	50
RF51058AE-SP	N(f) Bulkhead to SMA(f)*	DC - 6	1.25:1	.15	20kA	50

*Cable included (see figure 2 below)

Gas-Tube Voltage (Voltage should be defined by maximum RF power)

Parameter	Gas-Tube Voltage
Gas-Tube Voltage Rating	90
Maximum RF Watts	30
kA Transient Current for 8 x 20µs pulse	20
V dynamic at 2kA 8/20µs	644
Let-through Energy in µJ	500

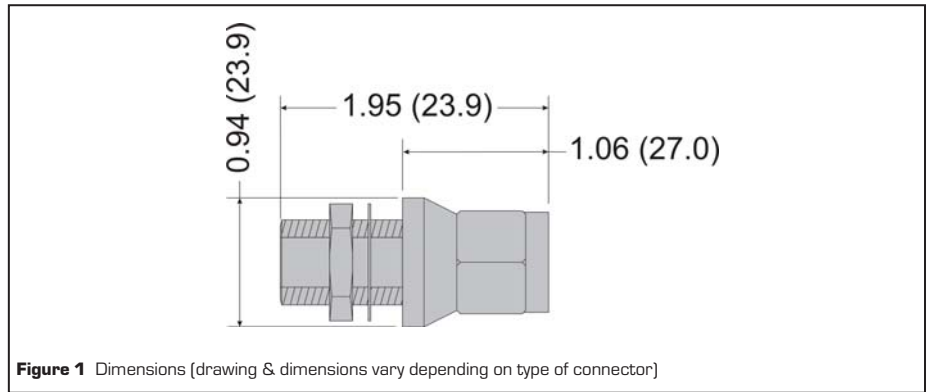


Figure 1 Dimensions (drawing & dimensions vary depending on type of connector)

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

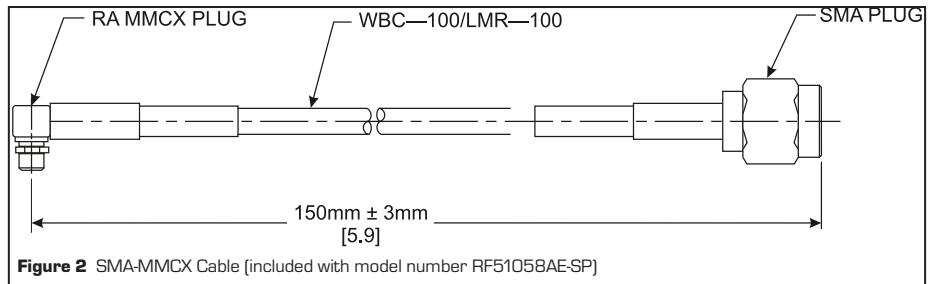
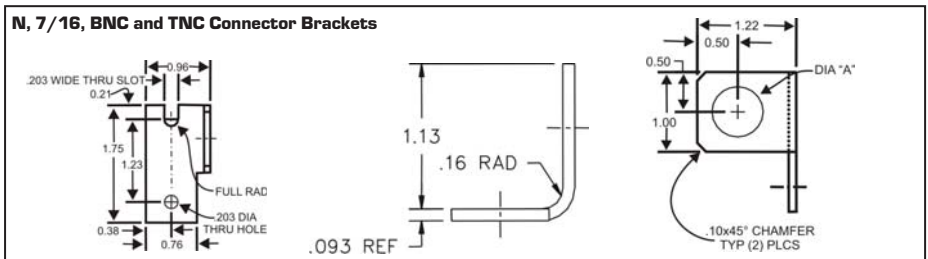


Figure 2 SMA-MMCX Cable (included with model number RF51058AE-SP)

Brackets

Model	Connectors	Diameter
RF51075	N	0.630" (1.6cm)
RF51077	BNC/TNC	0.505" (1.28cm)



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